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Master Thesis
**Fragmentation and Repair of Social Space-The
Renovation of Dalian Dongguan Street**

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Abstract

The old streets of the city are the recorders of urban history and the witnesses of urban development. However, in the process of rapid social development, many old streets have become the neglected factor, accumulating many problems at multiple levels. They are constrained by the early planning idea, economy, construction and other conditions of the restriction. In the past, residential constructions often only catered to the social status quo and people's living needs, which was inconsistent with the rapid development of modern city. A lot of attention was paid to the physical level construction, neglected the social level problems. This caused the loss of regional spirit and culture characteristics. In recent years, the reconstruction of old urban street has become a hot issue, and attract more and more social attention. More and more people are discovering that it is unrealistic to solve the problems of the old community with a one-size-fits-all approach. In the process of dealing with the problem of renewal, it is necessary to analyze and solve the problem with multiple perspectives. This thesis takes a representative historic old street—Dongguan Street in Dalian as the research object. It combines urban renewal, sociological theory and other multidisciplinary theories. Excavate the problems existing in the physical and social space of the area, proposing corresponding strategies and targeted solutions. The hope is to strike a perfect balance between old style and modern standards, and meet the needs of multiple parties. This thesis is divided into 7 chapters (the last chapter is conclusion), offering a path for the renovation of Dongguan Street from background introduction, theoretical summary, methodology, research, transformation strategy, reconstruction design, etc. In the process, methods such as field observation, literature review, archival research, document and media collection, qualitative semi-structured interviews, questionnaire surveys were used. Among them, the space of the old street was understood as two aspects of physical space and social space. Based on the idea of sustainable utilization and development, we attach importance to the continuation of regional spiritual culture, traditional history and residents' needs. At present, the method of space reconstruction is used as a means to solve problems

through reasonable design strategies and achieve the goal of coordinated development of physical space and social space. The topic of this thesis is based on the hot issues of the city and the internship experience in Dalian Land Space Planning and Design Co. Ltd. According to the research theory of sociology, it analyzes the changes in population composition, residents' activities, and changes in regional social functions, etc. Based on surveys and qualitative semi-structured interviews, it summarizes the impact of social space reconstruction. Dynamically protect social space, and strive to reintegrate the old physical space environment into modern life. Realize the common needs of urban organic renewal and harmonious social development. Activate the unique collective memory of the city, continue its own cultural value and regional characteristics to bring a sense of belonging and happiness to local residents. Focus on the relationship between man and land.

Key words

Old street, Physical space, Social space, Spatial reconstruction, Sociological research

Chapter 1 Introduction

In this chapter, it mainly explains the choice of research topics, background, research purposes, and research objects. Based on internship experience, I chose Dongguan Street as my research object. Take the physical space and social space of the street as two important research points. Do a brief introduction to the basic situation, historical evolution and development of Dongguan Street. Explain the importance of this street to Dalian.

1.1 Background

In September 2015, Habitat Three listed "sustainable cities and communities" in the 11th Sustainable Development Goals (SDGs). China has also issued a number of policies and guidelines on communities, gradually moving into the urban and community renewal planning stage from the perspective of spatial governance. China's urban development has also undergone a transformation from political life to economic life to cultural life (Bian 2020). In 2020, China's urbanization rate has exceeded 60% (National Bureau of Statistics 2021). According to research, the period of urbanization rate from 30% to 70% is a period of rapid urbanization and rapid changes in urban structure. The drastic changes can inevitably lead to urban structural adjustment and urban change (North 1979). According to the law of urban development, China has entered an important period of urban renewal, which has shifted from large-scale incremental construction to stock quality improvement and incremental structural adjustment. Mobilize residents to participate, transform project generation, provide financial support, increase market participation, integrate utilization of stock resources, implement the main responsibilities of all parties, and increase government support (General Office of the Ministry of Housing and Urban-Rural Development 2021). Long-term extensional urban construction methods have led to some problems such as the degradation of the quality of our old cities, the complexity of the social structure, and the deterioration of the quality of life. Currently, only 38% of urban residents in China have overall happiness, and overall

happiness is low. With the transformation of the main contradictions in our country, the improvement of urban quality guided by the new guidance of meeting the needs of a better life and solving unbalanced development has become an important part of the urban renewal (Urban Development and Planning Conference 2019). Chinese old community renewal methods are diverse, but the overall situation is still at a stage where functional transformation is the mainstay and the comprehensive revitalization of the community is supplemented. With the change of urban development: from economic focus and incremental orientation, to the improvement of a better quality of life that emphasizes social construction as the core. The perspectives of the comprehensive rejuvenation of old communities are more diverse, the focus of spatial reconstruction is different. The trend of differentiation and renewal is becoming more and more obvious. Liaoning province¹ has the goal of improving the living environment with the declared purpose of ‘enhancing the people’s sense of gain and happiness’(Department of Housing and Urban-Rural Development of Liaoning Province 2021). Facing the current situation of the obsolete and aging urban infrastructure, it is more necessary to rely on urban renewal to achieve green, transformation and high-quality development. For example, solve the problem of long-term disrepair, make up for the shortcomings of supporting infrastructure, improve the living comfort of residents, improve the overall environment of old communities, and improve public service facilities. Preserve the collective memory of the residents, continuously enhance the residents' sense of gain, happiness and security(Dalian Urban Construction Bureau 2021). Near-term vision: The basic people's livelihood security standards will be improved, the grass-roots social governance capabilities will continue to increase, and the quality of basic social services will continue to be optimized. Pay attention to special groups and improve residents' satisfaction (Dalian Municipal Committee of the Communist Party of China 2021). In terms of specific implementation, the emphasis is placed on "repairing urban functions and improving environmental quality". It is clearly proposed that "the protection of historical culture, to better continue the historical context, and to show

¹ A province in the northeastern region of China, Dalian is currently under its jurisdiction.

the city style. We will encourage small-scale and progressive renovation of old urban areas to protect the traditional urban pattern and texture" (Ministry of Housing and Urban-Rural Development guidelines on strengthening ecological restoration and urban repair work 2020). From the perspective of the government, transformation is a rare opportunity to systematically reinforce and construct more civilized social public goods (public policies, public services, and public facilities); from the perspective of the market, the transformation of spatial entities is more direct, and more truly improves quality and value; from the perspective of the public, renewal is the driving force for social change and progress.

The physical aspect of the old street is a static relic from the perspective of urban development. It is also a living historical and cultural region, which not only carries the daily life of the city, but also reflects the social and historical evolution process. At the same time, it is an important part of a city and plays a great role in the development of the city. Dongguan Street has witnessed the historical development of Dalian and also represented the glory of Dalian in the past. Its streets have clear spatial boundaries. Social factors such as activity types, culture and customs are relatively concentrated in the street. Many aspects such as the unique block culture can be said to be an important research object. Today's Dongguan Street after more than a hundred years of ups and downs, the quality of construction is in jeopardy. Most of the buildings in this area have a structure of brick with wood. The corrosion of wooden structures is serious. Because of the lack of municipal and public maintenance, the overall material and environmental quality has dropped drastically, falling into a vicious circle. As an integral part of the urban center of Dalian, the decline of Dongguan Street has also hindered the development of Dalian. The aging of the spatial structure and the physical decline of the downtown area of Dalian are caused. The city is developing rapidly, and it is very precious to have such a relatively complete "Dalian memory" in the center of the city. However, there is a conflict between the protection of historical buildings and the renewal of the overall appearance of the city. The restoration of historical buildings and the development of cultural blocks will also have a choice of social benefits... facing the dual pressure of

upgrading and the regional culture vitality. The dislocation between the rapid quality improvement (gentrification) of urban space and the actual needs of the community; population mobility brings about the alienation of regional interpersonal relationships; the rapid creation of regional micro-spaces and the homogenization of social public spaces are also worthy of attention. Disciplines such as urban planning, sociology, and economics provide important opportunities for solving different problems in urban renewal. In recent years, many Chinese scholars have also put forward a variety of urban renewal theories. Seek to respect the regional, spiritual and cultural characteristics to carry out the research on the restructuring strategy of the physical space. To provide more theoretical support for street renewal. Between the urban spatial form reshaped by the old city reconstruction and its social influence. There is also a social space formed by the interaction of social relations, social behavior patterns, social cultural habits and physical space. In terms of logical relations, transformation triggers the process of social space reconstruction by changing the form of physical space. And then produced effects and influences on the social level. At present, the social nature of urban space has attracted more and more attention from scholars. Spatial has also become a new dimension of social analysis. Regional planning update is not only an internal subject, but also a wide range of interdisciplinary social issues (Bian 2021). To achieve progress and reforms in this field, it is necessary to break through deeper institutional barriers, which requires more extensive disciplinary cooperation and discussion (Yin 2021). Eventually, it will meet the social and economic development, restore or restructure the area. Prevent it from losing its charm (including livability, cultural taste, ecology, convenience, safety) and competitiveness (vitality innovation, suitability for business).

1.2 Research purposes

Ask six basic questions:

- (1) What is the theory of the transformation of old communities?
- (2) Why should the old community be changed?
- (3) What will the old community change? What are the elements?

(4) How to change the old community? Who are the initiators of the demand?

(5) What principles should be followed in the transformation of old communities?

In the process of rebuilding the old streets, the attention paid to sociology is not enough. Lack of the understanding of the internal factors of change and research on the interaction between space and people. People are the creator and user of space, which is the most important part of the elements. Buildings and Spaces form streets through human activities. In many ways, it is necessary to consider issues from a human perspective. This thesis aims to systematically investigate the relationship between traditional space, development and people's life interaction activities. Through the analysis of the traditional block representation in the transition, the neighborhood communication and daily life in the space. In the context of multi-disciplinary collaborative application, based on the research of residents, sociology is applied in the renewal of old residential areas in the city. Pay more attention to the interaction between space and people, the basic needs of residents, and the daily neighbourhood life of residents in traditional neighborhoods. Try to analyze the traditional space from the character of space, study the most reasonable renovation plan, and avoid homogeneity. Expand the research perspective of residential area planning, so that the social living space of the residents and the living space are compatible with each other. Committed to protecting the history and culture of the city. Consider the future sustainable development of the land. Enhance the happiness, sense of participation and social identity of regional residents. At the same time, I hope that in the future, the transformation of Dongguan Street can provide some reference for other projects.

1.3 Research objects

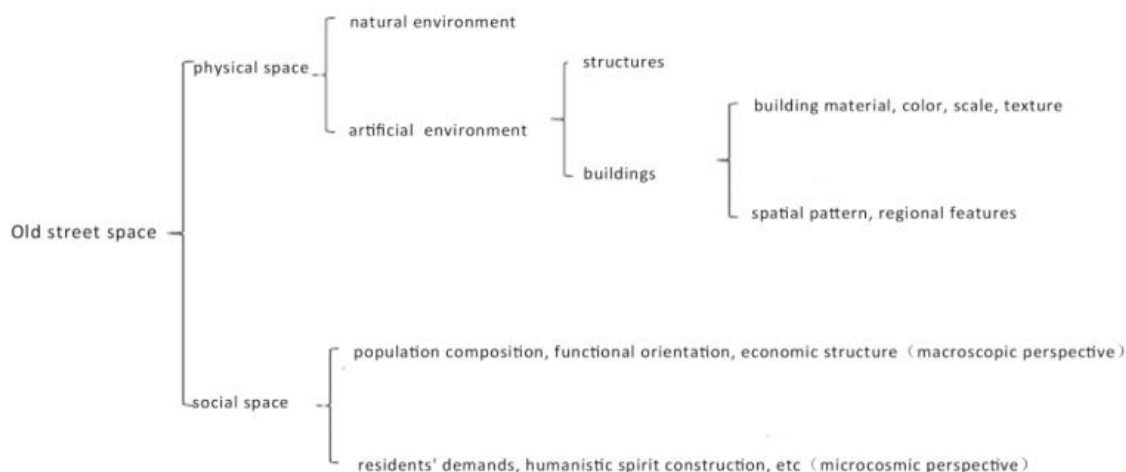
In this thesis, the old street (Dongguan Street) that needs to be renewed as the main research object. All research activities are carried out in this area.

More specifically, What is different from the past is Dongguan street will be investigated both in physical and social terms/from a physical and a social point of view. Think the problems from another perspective.

The Dongguan Street project includes physical space and social space from a macro perspective. By studying the values of these two aspects, the spatial reconstruction of the old street is carried out. On the one hand, it can meet the realistic demands of the contemporary society for the physical space environment, on the other hand, it can avoid the destruction of the regional and cultural values caused by the practice. Meet the needs of the residents, and retain the collective memory of the residents. Improve the overall quality of the area(Dalian Land Space Design Co., Ltd 2021).

Obtain the demands of social space in the old street through sociological research methods, and guide the development direction of spatial reconstruction strategies. Regulate restructuring activities from a macro perspective and seek a balanced strategy. Comprehensive urban planning, architectural design, and urban sociology three disciplines theories, from the perspective of urban sociology to examine the shortcomings of the current reconstruction activities. Look for a restructuring strategy that fits the sustainable development of the old street.

Chart.1 Research objects



Source: Author self-painted

Clarify the space of the old city as the research object, using reconstruction as a means to examine the changing characteristics of the old city from the perspective of sociology. Through urban renewal theory, sociology and other related theories. Seek new ways to look at the space of old street. Sort out the relationship between physical space and social space. Looking for commonalities and characteristics, the purpose is to solve the space problems more comprehensively and effectively. The research focus

on old street from objects to people. Interpret the changes in old street and their residents' needs from the perspective of social space theory. Explore appropriate strategies through related theoretical research and investigation. By cultivating community spirit and promoting social communication, the residents' sense of belonging to the city is enhanced. The goal of improving the living environment is achieved from the source.

The thesis is formed by three main sections divided in 7 Chapters. The first section (chapter 1 to chapter3) introduce the topic: it focuses on a literature review theoretical discussion, examining the physical space, social space constitution and connection of the old city. The appropriate research methodology was selected. The second, research topic-Dalian Dongguan Street. Investigates, analyzes, summarizes the conditions of its basic blocks and residents. Understand the demands and reform directions of residents in this area (chapter 4).The third is the final solution direction-combined with the obtained analysis results to guide the reconstruction strategy of the old city, carry out targeted special design, give suggestions. The overall idea of satisfying the construction of regional culture, alleviating the interest demands of the residents, realizing sustainable development(chapter 5-6). Chapter 7 is conclusion. It is the influence analysis and summary of dongguan Street project.

1.4 Research significance

This area is chosen for investigation because Dongguan Street is very important to Dalian in terms of geographical location, history and culture. Dongguan Street has witnessed the history of Dalian, experienced the continuous development, and brought together the memories and moved by countless old people in Dalian. As the main birthplace of "Hainan diu"² immigrant culture, from food, commerce to living customs have become the cultural soil of Dalian today. At the same time, Dongguan Street, as the rising place of Dalian's national industry and commerce, was once prosperous and made great contributions to the economic development of Dalian as a famous commercial block. Now it's more like an abandoned area. Improve the voice

² "Hainan Diu" refers to people whose ancestral home is Shandong province and lived in Dalian.

of regional residents. The renovation can give new life to the block. Raise the attention to vulnerable communities and groups, and respond to the mainstream values of urban development; The update issue has never been a simple matter of physical space update and functional replacement.

As a relatively stable and independent spatial system in the urban space, historical blocks can still maintain the original unified spatial structure, friendly spatial atmosphere, and pleasant spatial scale during the long-term development of the city. The inner space must contain some unique organizational laws, social networks, and principled orders. In the past, the research on historical districts mainly focused on the description of the architectural style and features, but the research on the essential spatial organization law was insufficient. This resulted in a series of conflicts and contradictions based on the protection and renewal of historical blocks. This is what the transformation of Dongguan Street hopes to avoid.

Facing the complexity of the social network in the old neighborhoods, the old neighborhoods are also experiencing dynamic changes brought about by modern lifestyles. We have to be changed and updated in order to provide residents who work and live in the old city with the provision that can promote them. A place for neighbors to communicate with each other so that they can strengthen their neighbors' feelings, satisfy their spiritual needs and strengthen their cohesion. At the same time, the public space in the urban traditional residential areas and streets is the most basic and smallest unit of public space for people to communicate. It provides space for people to exchange emotions, enhance feelings, and relieve stress. It also creates a high-quality city for the city. The environment provides the platform. We must see that the changes in the lifestyles of citizens in modern society have led to changes in the main body and content of activities in the public space of traditional settlements. This has triggered the conflict between the citizens' public life needs and the traditional urban fabric. We must realize that in the renewal and transformation of the old city, it is necessary to rethink the public space of the neighborhood at the neighborhood level and re-understand the characteristics of the regional social space network.

1.5 Dalian and Dongguan Street Overview

The urban space of Dalian was first formed in the coastal plain, and then the circle expanded, with the new city surrounding the old city. Form a group development model. The internal spatial structure of the city is constantly adjusted with the positioning of the city's functions and urban planning. Environmental factors bring development opportunities while forming constraints. Political factors dominate the evolution of urban spatial structure; economic factors and social factors have an increasing proportion of influence. The continuous economic development is the direct driving force for the continuous expansion of urban space. The original industries and residences in the central area were at a disadvantage in land competition and moved to the periphery. Tertiary industries such as finance occupy the city center in competition. The upgrading of the urban industrial structure has caused changes in the internal structure of the city. In the process of change, due to land prices and other factors, legacy areas have also been abandoned. Before the reform and opening up, the citizens of Dalian were in a passive position in the dual structure of government and citizens; the influence on urban space was in an obvious weak position. After the reform and opening up, residents have more opportunities to participate and the right to speak, which has affected the changes in the urban spatial structure today. With the development of society, the once forgotten area in the city center has once again ushered in development opportunities.

After recent years of construction, people began to use "Dalian has grown taller and fatter" to describe the changes in urban space. On the one hand, the central area of Dalian has expanded rapidly, and high-rise buildings have sprung up. On the other hand, low-rise buildings are constantly being demolished. In the city center with dense high-rise buildings, looking around, people only saw a low block, which has a huge visual contrast and impact. More importantly, let people know that this is a city with a history, and a city with a walking scale. Compared with the main road and road network in the new city. The narrow roads and dense road network of Dongguan Street are more suitable for people to read the city on foot. The overall spatial texture

is the historical traces left by the development of Dalian over the past century. The stacking of spatial symbols and living customs in various historical periods finally constitutes the current style of Dongguan Street.

Fig. 1 Fig.2 Dongguan Street is hidden among the high-rise buildings in the city



Source: <https://3g.k.sohu.com/t/n503549881?serialId=4038343dc2a42648b62a2ef48c056d00>

It has undergone various divisions, constructions and transformations. However, its spatial texture, structure and hierarchy have basically continued. From an urban perspective, the spatial texture and structure of Dongguan Street are irreplaceable. The ability to protect the space to repair itself. When Dongguan Street became the foil for the tall buildings in the city, the charm of style and appearance ceased to exist.

The reason to choose: Dongguan Street is the palm print of Dalian. Everything and fireworks in the street are the breath and life of the city, as well as a microscopic historical scene. Dongguan Street was supposed to be a historical and cultural block that represented excellent traditional culture, but now it has become a synonym for "dirty, poor, and backward" and has been criticized by everyone.

The importance of this region to the city will be confirmed from the aspects of geographical location, history and culture. The destiny of Dongguan Street, the Qilu culture³ contained in it, the historical heritage of the multicultural collision between Chinese and Western cultures has a profound impact on the construction of Dalian's cultural space and the future development of the city. As a component of the central district of Dalian, the decline of Dongguan Street has also hindered the development of Dalian from the perspective of urban development, resulting in the aging of the spatial structure and material decline of Dalian's central urban area. This has also

³ Regional cultural name. Its basic spirit is self-improvement, patriotism, selflessness, diligence and wisdom.

attracted the attention of all sectors of society. Dongguan Street is an important urban stock asset with superior geographical location and high land value. It accommodates the floating population and the bottom dwellers.

In Dongguan Street, the residents are suffering from difficult living conditions. In the process of rapid urbanization, the existence of Dongguan Street has its inevitable factors. Compared with the gentrified urban space, Dongguan Street provides some functions that are neglected by the existing urban planning. For local residents, this is a community that has been familiar with since childhood, with close social relations, its value is far from that a set of demolition and resettlement houses in the suburbs can be exchanged hastily; for migrant workers, it is convenient for transportation, low cost of living, and gatherings of fellow residents. The best living choice with perfect service facilities.

The government pays great attention to the region, and its attitude towards reform is very positive. It is also hoped that the transformation of the district will lead to a new round of development of the city as a whole.

Geographical situation

Fig.3 The location of Dalian in China and Liaoning Province Fig.4 Location of Dongguan Street in Dalian



Source: The author redraws from Baidu Map

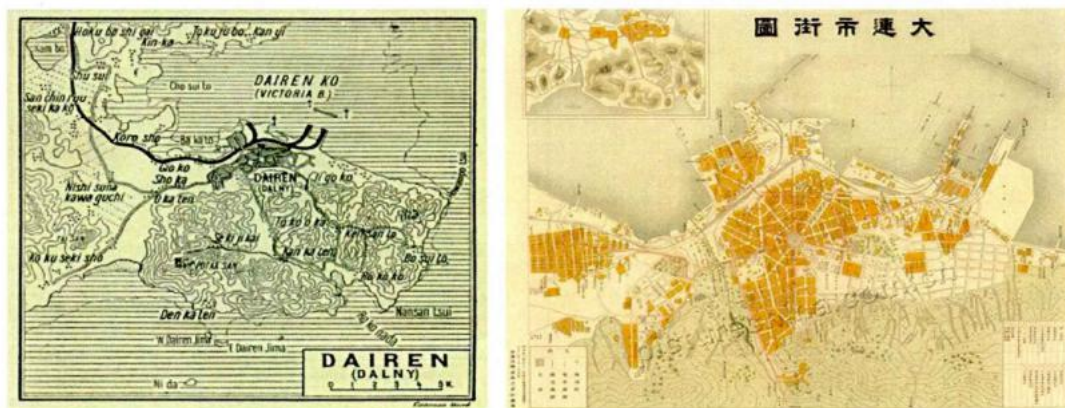
Dalian, located in the northeast of China. It is the city with the fastest economic growth and development speed in Northeast China. It is an important economic, trade, port, industrial and tourist city on the east coast of China. Dalian has been planned by Japan and Russia in history. ⁴The idea of the garden city⁵ popular in Europe at that

⁴ Due to historical reasons, Dalian was forced to lease to Russia and Japan. Russian occupation in 1899; Japanese occupation in 1905.

⁵ At the end of the 19th century, British social activist Howard put forward the idea of urban planning,

time was well applied to the planning of Dalian, which has a good integrity and continuity. It has set the tone for future urban construction planning and has had a profound impact. During this period, the development of some regions approached maturity and formed a certain scale. Dongguan Street was one of them. Historically, the city map of Dalian has been divided into three main areas according to the east-west direction. The eastern half was the European area, the middle was the administrative area, and the west was the Chinese area. This idea of zoning had also continued to form the residential tradition of Dalian. The Chinese lived in the west. In this context, Dongguan Street have become a major gathering area for Chinese people. Dalian's unique geographical environment, historical background has created a very regional characteristics of Dalian's humanistic style, Dalian is a multi-cultural coastal city. Dongguan Street is located in the downtown area of Dalian. It is one of the representative areas of the old city of Dalian, and it is also a popular old residential area in Dalian.

Fig. 5 Dalian City Planning in Historical Period Fig. 6 Dalian City Planning in Historical Period



Source: http://blog.sina.com.cn/s/blog_73ca904a0101e9d2.html

The Characteristics of the reconstruction of old blocks in Dalian in different periods
 1949-1965: During the planned economy period, the physical environment was planned and constructed during extreme repetitions. Industrial construction dominates city construction; make full use of it, gradually transform it, and strengthen maintenance.

an ideal city that has the advantages of both city and country.

1966-1976: The development of the city has twists and turns in the political struggle. Fragmentation of urban construction.

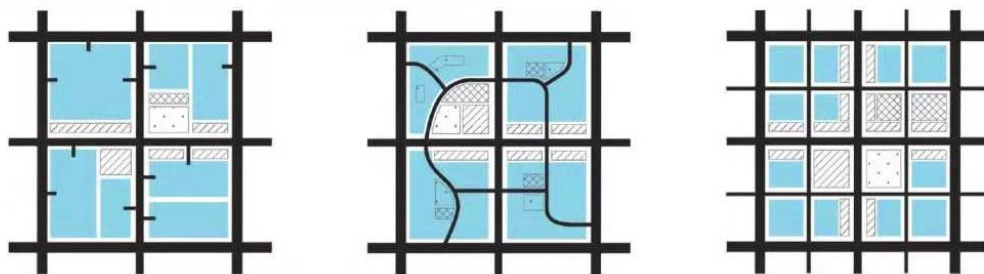
1978-late 1980s: During the period of economic transformation, plans were restored and system reforms were carried out. Renew and rebuild according to the overall plan.

1990-2000: During the period of economic transformation, real estate development and operation are the leading renewal. The pursuit of maximum economic returns; too large-scale, simplistic and high-speed.

2000-2010: Rapid urbanization and integration, diversified transformation and renewal period. Renewal and transformation are still more inclined to the physical environment. Still focusing on the pursuit of economic returns; integrated and integrated urban development concepts; bottom-up demands are beginning to emerge.

2010 to present: The transformation and renewal of people's needs in the return of the quality era. Proceeding from the needs of people, the goal is to improve development sustainability and livability. Create a social management model of sharing, co-construction and co-governance.

Fig.7 Street network revolution



Source: Research on the Planning of Residential Districts in Urban Blocks, Xue, 2016.

Dongguan Street is one of the few historical and cultural districts in Dalian. The number of historical buildings is large, the scope is wide, and the pattern of streets and lanes is basically unchanged. It retains the traditional living space of old Dalian in an authentic way, recording the development history of the city of Dalian. However, most of the buildings in this area are dilapidated, there is a big gap in maintenance and quality. The layout is not systematic, the overall regional development is stagnant. It is in sharp contrast with the surrounding area. Affect the living quality of residents and the overall urban outlook.

Fig. 8 The range of Dongguan street

Fig.9 The range of Dongguan street

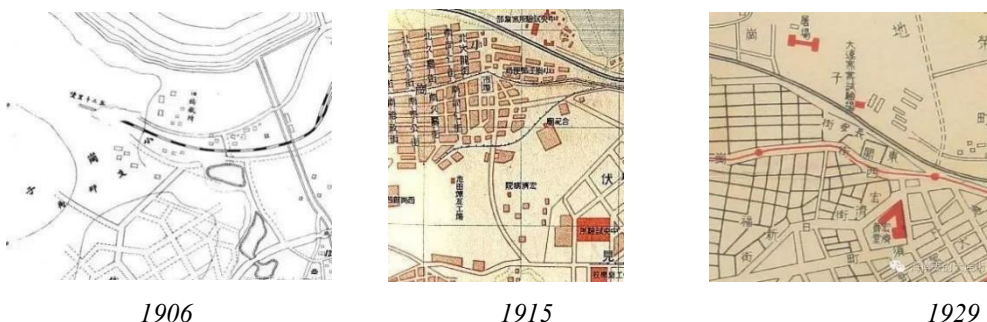


Source: <https://mp.weixin.qq.com/s/FexOglfM2QFb0Gt1F747JQ>

The total land area of the Dongguan Street is 77,800 square meters. Due to historical issues, the entire block has been gradually reduced, and some buildings have been damaged or demolished. The overall building density of the block is 0.43, and the plot ratio is 0.75. In terms of land use types, the main types of land use are residential land and public facility land, of which residential land accounts for approximately 64% of the total land use, while public facility land accounts for approximately 21% (Dalian land survey data 2019).

The historical evolution

Fig. 10 Fig. 11 Fig. 12 Historical development map



Source: <https://mp.weixin.qq.com/s/DuJw0DyWVe5sGIdKjL2XNw>

At the end of 1905, the embryonic form of Dongguan Street was completed. But in a strict sense, Dongguan Street was a very short street at that time. Dalian people and immigrants opened shops, markets, and barber shops here, spreading the block. In 1908, there were more than 1,200 merchants on Dongguan Street with tens of thousands of residents. Grocery households on Dongguan Street accounted for 2/3 of the world in 1920 (Dalian Business Directory 1985).

Fig.13 Fig. 14 Fig. 15 Historical development map



1941



1943



1980

Source: <https://mp.weixin.qq.com/s/DuJw0DyWVe5sGIdKjL2XNw>

The area around Dongguan Street in Xigang in the 1930s was particularly densely populated, with the population already accounting for half of the city's population. Commercial exchanges are well developed.

Fig.16 History photo

Fig.17 History photo

Fig.18 History photo



Source: https://www.thepaper.cn/newsDetail_forward_1553694

In the late Qing Dynasty(around 1898), the ruling period of Czarist Russia took shape. There is an uplifted small mound in the north of Beijing Street to the west of the Qingniwa Bridge in Dalian. The common people call it "Xiaogangzi". The Czarist Russian colonists designated the Xiaogangzi area as the "China Zone". Exclusively for Chinese residents. Later, more Chinese came to make a living in Shandong and Hebei, and more people became a city. It was still used during the Japanese colonial rule and was used for business here. The development has taken shape, with open-air markets, hospitals, theaters, monasteries, police stations, playgrounds, oil workshops and other living supporting facilities. It has become a complete Chinese residential community.(Dalian's "Xigang Literature and History Materials 1990) . For example, the earliest charity organizations in Dalian, the earliest photo studios and other shops were established, Dongguan Street developed into a trend of spread. The residents who lived here had a certain social position at the time. Due to the increasing population, the original plan can no longer meet its development, so an expansion plan for marching into the ideal big city was established. After the founding of China, it became a residential area. This bustling old street began to show signs of decline.

After the reform and opening up, the market economy has developed rapidly and commercial facilities have been updated. The original small shops in the street have been impacted by the wave of reform and opening up and the changes of the times; the infrastructure in the block is imperfect and the houses are aging, causing the living environment to continue to deteriorate; Coupled with the wave of layoffs in the 1990s, various factors have caused the vitality of Dongguan Street to disappear and gradually decline. From this point on, the region goes downhill. In 2009, the Xigang market caught fire, this century-old street was completely in decline and downfall. With the rapid development of the city, Yuetai House residential area, Wanda Building, Runde Center and other office buildings in the surrounding ground. Dongguan Street is interspersed with skyscrapers and bustling streets in the city. This is gradually replaced by modern commercial facilities and market-oriented models in Qingniwa, and the flourishing commercial prosperity has gradually become a memory. Because of the region's excellent geographical location and extreme environmental conditions. Since 2015, there has been a sound of transformation. The government plans to renovate the area in stages, first focusing on the central area (the area with the worst environmental conditions). But all of this has not gone smoothly. There were many different voices. Many residents are reluctant to move. It has been shut down for a long time. It is hoped to find a compromise way to satisfy both residents and developers, and finally achieve the desired transformation effect. In July 2019, the Bureau of Natural Resources announced for the first time the planning and design positioning of the Dongguan Street. The image is positioned as "old Dalian film, the new city living room", the function is positioned to take history and culture as the soul, give full play to the unique value of Dongguan Street, realize the organic combination of cultural heritage and urban functions. The first bid for the site was opened in 2020, but it was forced to suspend due to too few applicants. The bid be opened again in 2021, Vanke company won this project in 2021 and will cooperate with the government to complete the transformation. Because of its superior location, convenience, and high land value. Facilitated the government's promotion of enterprises as the dominant transformation method. It is BOT(Build-Operate-Transfer)

mode. Government-led, undertaking by enterprises, and participation by residents. That means during the cooperation period, the Project Company shall be responsible for the investment, financing, construction, operation, maintenance and handover of the Project. After the end of the cooperation period, the Project Company will transfer all assets and relevant rights to the designated agency of Xigang District Government. Social capital also has reasonable interest guarantee. Government-led: The municipal government guides policies, the Municipal Renewal Bureau is responsible for project approval. The district government is the main body of responsibility, the district renewal bureau is responsible for organizing the renewal and implementation. Streets and social organizations actively cooperate to maintain normal order. Enterprise undertaking: The project company is responsible for contributing funds to improve the environmental quality of the buildings, streets, and public spaces in the Dongguan Street plot. It is responsible for operations and subsequent management. Resident participation: Actively put forward suggestions and expectations, actively cooperate with the work to proceed smoothly. The advantage of this model is that the planning is controllable; the cost is controllable; the project advancement speed is controllable. The government guarantees its minimum rate of return. Once the standard cannot be reached within the concession period, the government should give special compensation. BOT advantage: Solve the problem of funding gap. The government reduces the energy involved in infrastructure construction and allows professional people to do professional things. In terms of risks, it reduces the government's debt burden. Enterprises can also reduce project risks, make full use of project flexibility, and guarantee a higher return on investment for project income. In March 2021, Dalian News and Media Group held the Dongguan Street Project Fair, hoping to carry out in-depth cooperation. The government, the market elite and society are working together to push the project forward.

Historical and cultural values

Dongguan Street is the birthplace of Dalian national business. It began to develop in the late 1920s, and the mid-1930s was the most prosperous period of development. During this period, many ethnic businesses were born.

Fig.19 Xiaogangzi Market



Fig.20 Hongji Shantang

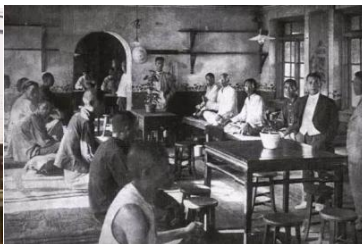


Fig.21 Hu Shi gave a speech on the New Culture Movement



Source: <https://www.thepaper.cn/newsDetail>

Dongguan Old Street used to be inhabited by many historical celebrities, and left many traces of their lives. Liu Changchun ⁶spent his teenage years in Dongguan Street. In 1907, the brothers Zhou Wenfu and Zhou Wengui established the "Zhou Jialu"⁷ in Xiaogangzi District. After hard work, the Zhou brothers used a few tools to start the rushing era of Dalian's national industry, starting from manufacturing and repairing horse-drawn carriage parts. This historical data record is included in the novel "Zhou Jia Lu". In 1909, Ito Hirobumi, a modern Japanese politician, once watched the scenery here. In the 1920s, Wang Jingwei ⁸visited here. In 1924, Hu Shi⁹ accepted an invitation to give a speech in Dalian. At 4 o'clock in the afternoon on July 30, Hu Shi was at the Chinese Youth Club in Dalian, giving a speech on the topic "New Culture Movement"¹⁰ that was the most concerned by the world at that time. Therefore, Dalian has suffered from colonial rule but never cut off the baptism of Chinese civilization. Dalian's Chinese culture has never been broken (Wu 2013).

Dongguan Street was the first place where the voice of communism sounded in the Dalian area, leaving behind many old traces of modern Chinese celebrities, as well as the trajectory of Dalian's progressive youth fighting. It was the place where important events in China's red culture took place.

Street texture and enclosed courtyard space in the area were unique. There was a courtyard in the gate of the neighborhood pattern, and the courtyard was in the shape of "回" or "口". There were streets outside, narrow streets and lanes, the road texture

⁶Chinese sprinter, the first Chinese Olympic athlete .

⁷The predecessor of Shunxing Iron Works, the first general machinery manufacturing plant.

⁸ Politicians, successively held positions such as Chairman of the National Government and Chairman of the Military Committee.

⁹ One of the founders and leaders of the New Culture Movement.

¹⁰ It was a cultural movement that promoted democracy and science that began in 1915, and it attracted many new intellectuals from that time.

remained intact and clear. The whole adopted the form of grid and space enclosure.

At the beginning, a large number of Shandong laborers gathered in Dongguan Street, which merged Shandong dialect with Dalian's local language, and under the influence of Japan and Russia, forming the Dalian dialect of today. Many foods in Dalian also start here.

Dalian Dongguan Street is currently the largest and most complete existing cultural area of "Crossing the Guandong" in our country. It is one of the representative areas of the old city of Dalian. It houses the old memories of Dalian for centuries and bears the mission of improving the city's taste. Dongguan Street records the childhood of the city of Dalian.

Collection of materials related to Dongguan Street(secondary data)

The daily life of the residents in the neighborhood.

Fig. 22 Fig. 23 Fig. 24 Children activities in Dongguan street



Source: <https://mp.weixin.qq.com/s/8jfdZNWsazaDAeKVITNHaaA>

Fig. 25 Fig. 26 Fig. 27 Residents activities in Dongguan street



Source: <https://mp.weixin.qq.com/s/8jfdZNWsazaDAeKVITNHaaA>

Fig.28 Video materials of Dongguan Street

Fig.29 Newspaper of Dongguan Street



Source: <https://mp.weixin.qq.com/s/RzOF8uTaDacPZmHVmD0R8Q>

Source: <https://mp.weixin.qq.com/s/DuJw0DyWVe5sGIdKjL2XNw>

Chapter 2 Literature Review

The purpose of this chapter is to study and analyze related vocabulary and theoretical concepts. Through the case study of the reconstruction of the old street, it provides reference for the subsequent strategic research and design of Dongguan Street. It is convenient to sum up a suitable renewal strategy based on the actual situation in China. Learn the advantages and abandon the disadvantages. Hope to serve for the final strategy research and design.

2.1 Related glossary

The old street

"a collection of the overall functional state of the old residential monomer and its living environment in a certain natural regional space, social and economic form and use time" (Wang 1998).

The "Technical Standards for the Comprehensive Reconstruction of Old Urban Residential Areas" (T/CSUS 04-2019) issued by the China Society for Urban Science in 2019 adopted the term "urban old residential areas" and defined it as "built and used within the limits of urban built-up areas. Residential and living settlements with poor environmental quality, insufficient supporting facilities, imperfect building functions, hidden dangers, high energy and water consumption.

A product of specific historical conditions. In the era of relatively backward economic development, low-standard housing, which was built in large numbers to quickly solve people's housing problems, is now difficult to adapt to the constantly improving living needs of the people (Wu 2021).

Old street reconstruction

The concept of redevelopment refers to "the redevelopment of old, decaying parts of the city. In order to radically improve the conditions of work, living and rest. The purpose of meeting the social, political, economic and spiritual needs of the people." It should also include the adjustment of urban structure, the improvement of functional system, the coordinated development of economy and society, the

protection of history and culture (Urban and Rural Planning Law 2019). The renewal of the old street mainly includes three aspects: 1. Transformation, redevelopment. It refers to an aspect of the environment that is more completely eviscerated. The purpose is to open up space and add new content to improve environmental quality. 2.Rehabilitation refers to the reasonable adjustments and utilization of the existing environment, usually only partial adjustment or minor changes. 3.Conservation, refers to maintaining the existing structure, generally not allowed to change (Wu 1994).

Space reconstruction

Social spatial structure is the manifestation of social stratification in urban space. Many factors, such as class position, occupation status, education level, economic income, power and so on, lead to different social positions of different classes in social space (Blau&Duncan 1967; Featherman 1975).The research significance of social stratification for urban space not only stays in the simple classification and statistics, but also lies in the relationship between social stratification structure and the social action pattern resulting from it.

Physical space of the old settlement

It refers to the space occupied by the natural environment (green space, parks, etc.), various buildings (residential buildings, commercial houses, etc.), and various facilities(municipal infrastructure, community service facilities, etc.) to understand the space of urban old residential areas (Cong 2010).

Social space of old settlement

The space where all kinds of people gather in the old settlements and their interactions overlap; the main body is the people with different characteristics, mainly due to the different characteristics of occupation, economic level, ethnicity, race, family structure, living habits, consumption level, etc. The social group that gathers together also includes the social activities of the group (Li 2015).

2.2 Related Theoretical Research

Theory and practice of urban renewal

From the 18th to the 19th centuries, the British society launched a continuous and

fierce reform debate to solve the problems of the living environment and contradictions. Howard's urban thoughts were gradually brewing in this context. Pursued a high degree of harmony and symbiosis among people, city and the environment. From the original intention, the garden city was not only a pure human settlement goal, but also a means of improving society (Howard 1903). The plan included vast open spaces to provide slum dwellers with the best urban and rural life. He wrote "Smoke-free and slum-free urban agglomeration" on the chart. He believed that planning was not recognized as a construction tool, but was carefully portrayed as an opening tool.

Fig.30 Garden city concept map

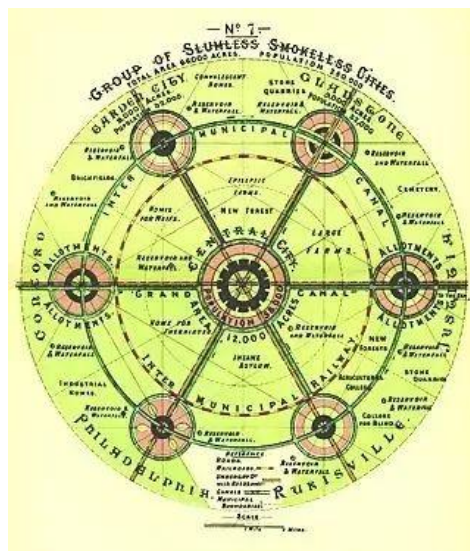
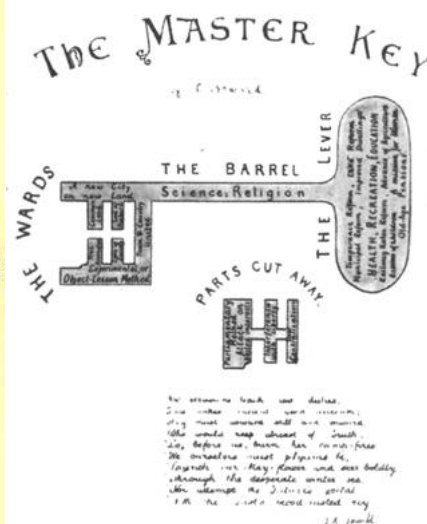


Fig.31 The master key of garden city



Source: <https://news.sina.cn/2015-05-06/detail-icpkqez3152493.d.html?from=wap>

With the exception of a few late Medieval colonial cities, the cities formed between 500 and 1500 AD were not really planned. They began to develop where cities were needed and were built directly by citizens. These cities, although not planned and built in accordance with the law, constantly adjusting and adapting the physical environment to the urban function in the process of development. The city was not an end in itself, but a tool formed by use.

The city beautiful movement, which emerged in the 1890s and 1900s, advocated the planning and construction of urban space from an aesthetic point of view. Its contents include: civic art, civic design, civic reform and civic improvement.

Organic decentralization believed that urban renewal was not only the transformation

of physical space, but also the rational evacuation and distribution of functions through organic evacuation (Saarinen 1934).

There should be a mixture of multiple functions in an area; small blocks, many street corners; more old buildings preserved; moderately high population density (Jacobs 1961). Protecting the ecological environment, green and beautify towns and houses, opposing the uniformity of architectural styles, encouraging interpersonal communication, and emphasizing the harmony and unity of people, society and the natural environment (Alexander 1977).

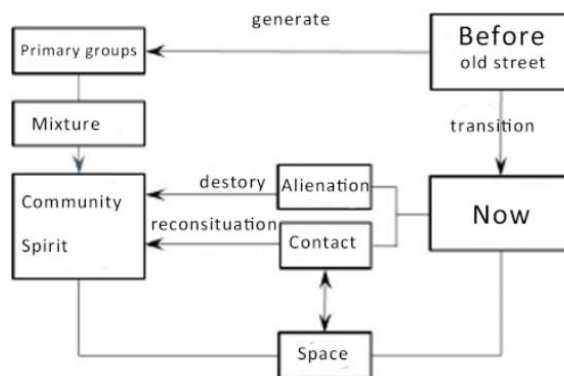
Transformation in the form of large-scale demolition and construction was the most serious damage to the diverse traditional culture of the city. It was also a state-supported way for politicians and real estate developers to make a lot of money. However, the common people had become tragic victims. On the one hand, urban renewal paid insufficient attention to the interests of the public. On the other hand, the opportunities for the public to participate in urban renewal were minimal. Facing the social chaos and economic depression in the neighborhood, would undoubtedly lead to a decline in the neighborhood relationship. The historical practices that couldn't be ignored proves that it was almost impossible to rebuild the old city through the simple form of large-scale demolition and large-scale reconstruction (Jacobs 1961). Planners should represent the urban poor and disadvantaged groups. They should first solve urban slums and urban declining areas. They also should move toward the people and different groups of residents to communicate and serve them (Davidoff 1965).

The life and character, history and memory of a city exist in every piece of land, every inch of texture, every skyline outline in the historic city. Therefore, it was especially necessary to protect the historic district from the urban structure and macro environment (Shan 2006). At present, the society's concept and practice in the protection, renewal of the historical city are constantly changing and progressing: First, it has begun to pay more attention to the scale and needs of people. Focus on the balanced relationship between people and the environment, emphasize the importance of residents and community participation(Wu& Shan 2006). The renewal method has also shifted to small-scale, gradual, comprehensive renovation with the main goal of

improving the community environment. The second is to put more emphasis on the protection of historical culture and the environment, focus on the protection and utilization of traditional buildings. The third is the shift from a purely physical environment transformation planning to the integration of social and economic development planning in planning, emphasizing the planning process and the continuity of implementation. The concept of sustainable development has become a consensus. Attach importance to continuity in space and gradualness in time.

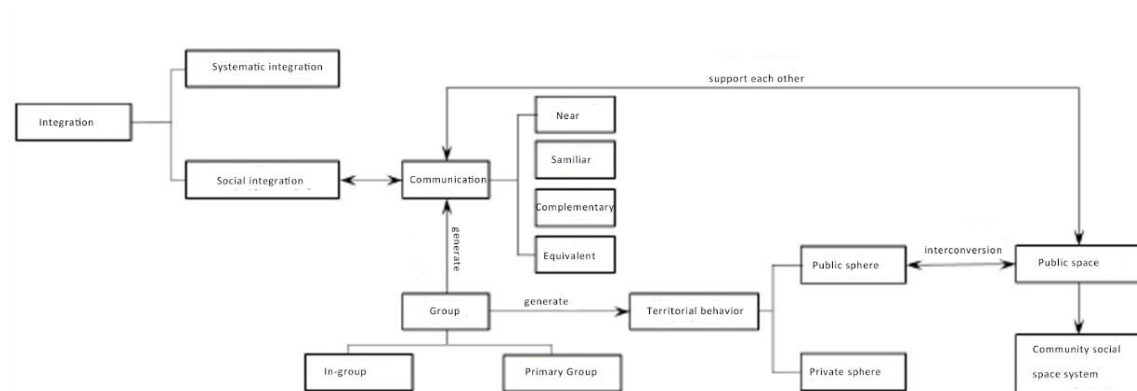
In 2009, Li and Wang presented a new perspective on urban planning research based on the coupling of physical and space at the Centennial Celebration of the Chinese Geographical Society. Adopting the main research line of "process-structure-mechanism-control", using a combination of qualitative and quantitative analysis methods, the theoretical framework of the coupling of physical and social space in Chinese cities during the socio-economic transition period was constructed. Issues such as coupling stage level, coupling spatial differentiation, coupling dynamic mechanism and other issues were discussed in depth (Huang 2014). Core idea: The social space conclusions obtained after the social survey of old settlements with the needs of human settlements as the core often showed diversity (different classes had different needs), microscopic (not only paid attention to group interests but also individual rights), objectivity (from Actually set out to obtain first-hand survey data), had commonalities (different urban old settlements had some similarities, such as dilapidated houses, lack of infrastructure, etc.), but also had individual characteristics. These were the evolution of time, physical factors and social factors interact with each other. Interlacing forms the form of social space. This form could be expressed as an irregular form. Summarize the connection between the two, finally guided and improved the space problems in the human settlement environment in an appropriate way. The core idea was to seek the characteristics of both physical space and social space.

Chart.2 The relationship between social space and physical space before and after the transformation



Source: Author self-painted

Chart3. Relationship between social integration and public



Source: Author self-painted

Madanipur had further enriched the urban design research based on the social-spatial perspective. Rediscovered the social space role of the street and its main role in the urban transformation. Focused on the connection between the crowd, behavior and place to seek the overall solution of the city Urban design methods, demonstrated its effects on economic renewable capacity, social inclusion, cultural significance, environmental sustainability, and political democracy (Maidanipur&Liang 2016). In the book "Urban design, space and society" (2014), he placed the practice of urban design in the context of politics, economy and culture. Expressed a clearer and more positive attitude towards the development prospects of urban design.

It shows that urban design not only pays attention to aesthetics and practical space design, but also includes the pursuit of urban social tolerance, democratic participation, cultural significance and ecological sustainability. He pays attention to how to interpret the understanding of urban design from the perspective of social and

political theory, calls on urban design practice to actively respond to the complex challenges faced by the diverse social needs of cities in the 21st century.

Social Space Research

The term "social space" was first coined by The French sociologist Durkheim, The Chicago School, represented by Park and Burgess, started the process of studying urban social areas from the perspective of social space (Park& Burgess 1925). Castells wrote in *Urban Problems: The Marxist Method* elaborated the role of social structure in the construction of urban space and enriches the social-space theory (Castells 1977). Harvey inherited and further expanded Henri Lefebvre's interpretation of social space. It was suggested that an interdisciplinary interface should be established for urban research, the core of urban social space research was to analyze the relationship between spatial forms and social processes as their internal mechanisms (Harvey 1988). Social space research has gradually formed a broad and polysemous "social-space" connotation, which has become an important perspective for sociology, geography and urban planning to carry out urban research.

The concept of social space refers to society not only referring to the various relationships formed by people, but also directly related to the area where the group lives. Space can not only reflect social life, but also construct social life (Durkheim 1893).

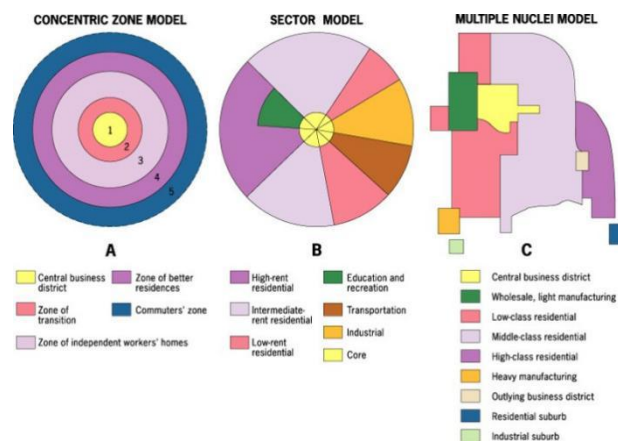
The Chicago School of American Sociology, which combined ecology and urban studies, believed that the study of human culture must be revealed from the perspective of the ecological space in which people live. They believed that competition and succession are important manifestations of urban social space. After investigating the relationship between Chicago's local location layout, spatial organization, division of labor, and lifestyle. They proposed several models for the study of urban spatial structure: concentric circle model¹¹, sector model, and

¹¹ The city will eventually form a form of high concentration in the central area. The center became the control center of the city and the place with the highest land price. Several concentric circles are formed around the central area.

multi-core model¹²(Park&Burgess 1920). It is worth noting that in concentric circle model, the second ring is a transitional area, slums, the most dilapidated houses in the city, etc. are concentrated in this area. One of the explanations is that there is such a group living in the transitional area. They lived in the center of the city in the early days. Because they have no special means of making a living, they are parasitic to the central business district. On the other hand, once they move away, they will lose the means of making a living.

Another explanation is that in addition to high-end office buildings and high-end industries, the first circle also needs some service industries to support its development. In other words, there is an interdependent relationship between the first circle and the second circle.

Fig.32 Concentric circle model, sector model, and multi-core model

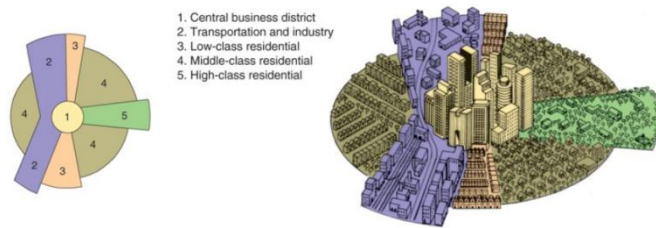


Source: <https://pranilblogs.wordpress.com/2016/10/08/sector-model-a-brief-analysis/>

Residential functions would grow in patterns of wedge shape with a sector of low earning housing bordering manufacturing/industrial sectors (noise, pollution and traffic makes these areas the least desirable) while sectors of middle- and high-income households were located farthest away from these functions. Hoyt's model pursued a broad urban organization principle(Hoyt 1939).

Fig.33 Hoyt's model / sector model

¹² The development trend is multi-core. In addition to the large center, there are other centers in a certain area.



Source: <https://pranilblogs.wordpress.com/2016/10/08/sector-model-a-brief-analysis/>

The social space was interpreted as a structure including objective and subjective parts. The objective part was an objectively existing spatial area in which the group lives. The subjective part referred to the space recognized and perceived by individuals in the group. Different individuals may have different perceptions of the same space. Individuals' evaluation and behavior of the space could reflect the relationship with the external environment (Lauwe 1951).

"Production in space" was rephrased as "production of space". The main difference was that the former refers to the space with natural attributes, and the latter referred to the space with social attributes. The production of space means: ①Space was social: on the one hand, it involved social relations, including the relationship between gender, age, and specific family organizations, from biological to physiological conditions. On the other hand, it involved production relations, referred to the split relationship between labor and organization; ②Under the capitalist production system, space was regarded as a whole: it was used to produce surplus value; ③There were also many contradictions in the capitalist space, including the pulverization of space caused by private property and the demand for fragments that could be exchanged, as well as the ability to deal with space science and technology (information) (Lefebvre 1960).

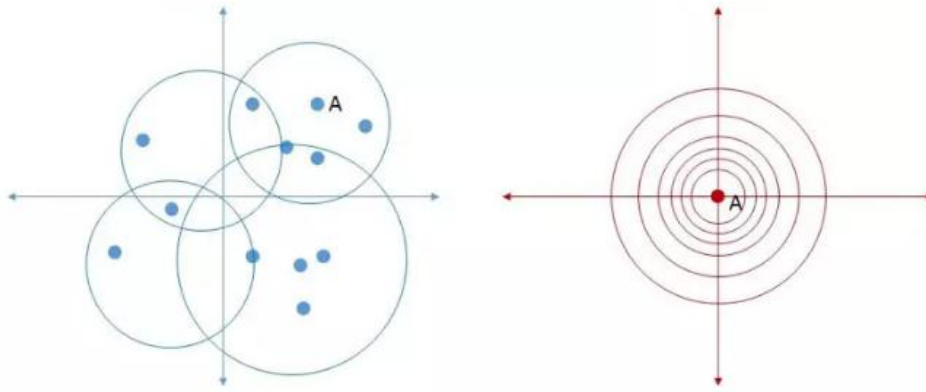
The trinity of "spatial practice", "spatial representation" and "representative space". The conceptual theme of "space practice" reflected the society's use, control and creation of space, highlighting specific social production methods. The basic meaning of "spatial representation" was to make people understand space practice better. Experts and scholars used symbols, codes, terminology and knowledge to interpret space practice. Make a certain spatial form representation, specific and conceptual.

The "representative space" was the space used through signs and intentions in order to achieve a certain symbolic purpose (Lefebvre 1974).

The socio-spatial dialectic had become a relatively intuitive result of studying the relationship between urban physical and social space. We humans were in order to meet individual needs and reflect the value of individual existence. By constantly creating and acting on urban space, it also constantly adjusted the environment. Human beings were gradually adapting to the surrounding natural environment and people. This phenomenon expressed that there was a continuous two-way process affecting the city. It could be expressed as human beings trying to create and change urban space while being tightly controlled by other urban factors, such as living space factors and working space factors (Soja 1980). There was a connection between urban space and social environment. At the same time, residents' values, attitudes, and behaviors were also affected by the surrounding environment and other people's activities in the relationship between the community and neighbors (Knox 1994). The dialectics of social space had three basic characteristics: ① The events that occurred in social relations need to be formed through the medium-space; ② The events in social relations were restricted by space, such as the degree of convenience of the material environment or hindering people's actions; ③ Emphasize that events in social relations were affected by spatial mediation (Wolch 1989).

Advocacy planning and its theory of communicative planning derived in the 1990s were representative of the theory of "public participation" planning. In recent years, collaborative planning theory and interactive planning theory had also been the development and extension of public participation in planning. The theory of public participation emphasizes the participation of community organizations and urban residents in the public decision-making process in order to achieve a cooperative mode of coordination among multiple subjects, so that the interests of the original disadvantaged groups could be valued and protected, a "bottom-up" basic community participation was formed (Davidoff 1965).

Fig.34 Comparison of Chinese and Western Relationship Networks



Source: Similarities and differences in social networks, China Planning and Research Institute, 2019.

The cultivation of a network of relationships was the result of social needs or a sense of responsibility, a means to achieve instrumental ends. On the other hand, friendship was an emotion that was developed for the purpose of happiness in common interests and similar interests. Modern Western society was based on the equality of individuals, so the absolute coordinate plane showed on the left could be established. The movement and positioning of the individual on the plane determined the group he belongs to. In China, it was impossible to establish an absolute coordinate plane. Everyone could only look from their own perspective and saw the ripples of social relations surrounding them. The coordinate plane changed due to the different perspectives of each person. Themselves were always in the center. This was the difference between the American community and the Chinese acquaintance society (the biggest feature was the lack of mobility) (Wu 1932). The pattern of China's relations was not a clear bundle of firewood in the West, but more like the ripples on the surface of the water thrown by a stone. Everyone was the center of the circle pushed out by his social influence. The circles used by each person at a certain time and place were not necessarily the same (Fei 2012).

The sense of neighborhood was the sense of belonging of members to the community. It was the belief and approval of members to satisfy their own needs. The analysis framework included Membership, Influence, Integration and Fulfillment of Needs, and Emotion Connection. (McMillan & Chavis 1986). "Sense of neighborhood" was a sense of belonging to the soul. The four elements included Spirit, Trust, Trade, and Art. These modifications paid more attention to how the community level changed

with individual senses and development (McMillan 1996). In the measurement of the influencing factors of the sense of community, socioeconomic status, residence time, social relations, degree of community participation and community environment had a significant impact on the sense of community (Gerson & Kathleen 1977). The theory of "cultural memory" had become a turning point in the study of collective memory. A special distinction was made between "cultural memory" and "communication memory". "Cultural memory" referred to all knowledge that guided behavior and experience through a social interaction framework. It was knowledge acquired from generation to generation in repeated social practice and could be continued through textual or institutionalized communication. "Communication memory" was a daily collective memory, which occurred among members of families, neighborhoods, professional groups, political parties, associations, and ethnic groups (Asman 1990s). Collective memory was based on past experience, determined the choice of the era and a future development direction according to the objective reality. It was dynamic and constructive. It was not simply understood as the simple superposition of each individual's memory, but was based on the common identity of individuals with social culture on the basis of the same community culture. It was produced through the re-selection and reshape of past memories (Habwachs 1950).

The formation of social interaction mainly depended on whether the residents had common interests in economy, politics or ideology. The physical environment, functional, and social spatial processing could expand or stifle development opportunities. Through the rational layout of a series of public facilities, the residents were guided to form a certain activity mode. The physical environment structure design contained various space facilities could attract all residents and groups (Bistrup 1976). The concentration of people and activities in time and space was the prerequisite for anything to happen. It was not enough to simply create a space for people to enter and exit. It was also necessary to create suitable conditions for people to move, linger, participate in a wide range of social and recreational activities in the space. Activities could grow on the boundary of centripetal. If the boundary ceases to exist, the space would not be rich in air (Alexander 1977). The border area as a place

to stay has obvious advantages both in fact and in psychology. The area along the facade is obviously the most popular area for residents to gather. You can walk into the public space from there, or you can step back at any time. Psychologically speaking, it is easier. Activities often develop from the inside to the boundary of the center of the public space.

2.3 Study of relevant renovation cases

The devastating destruction of the historical situation by the Second World War caused the rapid disappearance of the architecture and human environment, which led to the increase of people's nostalgia and protection awareness. With the continuous deepening of urban spatial development theories in Western countries, the social attributes of humanity and economy are unified with the physical attributes of functions and uses, there are diversified reuse methods for the spatial characteristics of the old city. A part of the old city has become an "artwork" for "exhibition" to the outside world; part of it is used for protection to meet the needs of the real society, its production is a correspondence of its productivity in the contemporary time and space context. Basic characteristics: (1) The aesthetic value of the uniformity of style and appearance. (2) The protective use of space. (3) Joint protection of people and buildings: The purpose of joint protection of people and buildings is to protect the purest regional cultural environment. It is not limited to the protection of material space, but also responds to the importance of culture in social, humanistic, and educational aspects.(4)The government is highly organized and commanding.

Bologna, Italy

Bologna is a historic city in northern Italy with a rich cultural heritage. From the end of World War II to the '60s, a period of rapid growth. In the process of widening the gap between the rich and the poor, the population in the center of the old city gradually decreased, while the disorderly expansion of the surrounding areas deepened the phenomenon of external poverty. In this case, the method of large-scale construction of centralized housing in the suburbs not only failed to completely solve the housing problems, but also made the trend of population reduction in the old city

more serious, resulting in a vicious circle.

Bologna proposed a strategy of "holistic protection". It was not only simply to preserve the old city buildings, but more importantly to retain the people who live in them. From the perspective of heritage of historical context, to protect life and the social class in it. The process of transforming urban development into a dynamic conservation. One of the first cities in the world to put forward the idea of protecting houses and people together (Yao 2019) .

At the beginning of the 20th century, Giovannoni made an important theoretical contribution. In his work *Citta 'Vecchie e Edilizia Nuova*, he pointed out that "old and new" could coexist in harmony, and considered the whole city center as "living", valuable and integral "collective monument". It also emphasized that the scope of protection should be extended to historic districts and towns, which laid a foundation for the theory of "holistic protection". Overall protection was not the integrity of physical space, but the overall protection and coordination of the protection of the physical space, the revitalization of the social economy, and the improvement of people's life.

Bologna completed its master renovation plan in 1960. Three basic principles laid down in urban planning. 1) Develop at an appropriate rate and make full use of existing service facilities. Emphasize the principles of improvement and utilization of the existing built environment. Avoid blindly building new, expensive cities for the sake of growth. 2) Priority should be given to housing planning for low-income groups. To pool resources and strive to improve the living conditions of the working class and provide a good quality of life. 3) Preserve historical heritage and natural environment.

In 1969, Bologna proposed a plan for the preservation of the historic center of the old town, in order to avoid the negative effects of the reconstruction and rapid development of most European and American cities and social structures. This plan emphasized several aspects: 1) analyze the value and context of architecture from the perspectives of sociology, anthropology and history, seek the space for reconstruction of some buildings with potential for reconstruction. 2) Make full use of social

resources, such as public housing funds, to protect the historical environment and provide a strong logistical support for improving the housing environment. 3) Restructuring downtown life on the principle of guaranteeing the quality of urban life for Bolognese. 4) Use the vacant building as a display and education base to serve the community's cultural propaganda. 5) Mobilizing public participation is an important component (Na & Yao 2017). In order to implement the plan effectively, the Government of Bologna mainly used two tools: one was public participation. Local media campaigns and mass rallies. Consultation, discussion by the stakeholder committee and each family on the specific implementation provisions of the plan, and reached a consensus in the special hearing committee; The other was the tripartite agreement model, which used public finance to finance the renovation, reuse of residential real estate and the overall living environment in the historical center. To convert subsidized vacant and rented private homes into public or subsidized housing for the working families who were then renting in the historic centre.

Fig.35 Photos of Bologna



Source: Paper: Research on Urban Renewal and Transformation, Yang, 2016, p16.

Experience

The transformation of Bologna was based on respecting the humanistic environment and formulating transformation strategies tailored to local conditions. Rationally used the deployment organization of municipal resources to avoid disputes between the people and the government, strive to bridge all social strata, promote the development of transformation toward a situation where the whole society could be prosperous. Renovate part of the use functions of the old city to meet the functional requirements of modern society, give full play to the cultural value of the original space, shape the local brand culture, provide the focus of sustainable development for the old city. In the end, it formed the fusion of the physical space with a long history and the social space with unique cultural value connotation, founding a way to develop and continue

its own cultural heritage in modern society. This has reference value for the transformation of China's old urban areas. The first is to use sociological survey methods to analyze the social composition of the old city, fully excavate the humanistic environment of the old city, establish cultural values that conform to regional characteristics. The second effort promotes the development of the whole society toward "harmonious" relations. Only harmonious class relations can create appropriate humanistic space to achieve sustainable development. Third, give full play to the enthusiasm of the people to participate in the transformation not only through top-down planning strategies, but also through bottom-up thinking and continuous improvement of design behavior to meet the greatest common prosperity interests.

Pay attention to protecting the intangible cultural connotations of a city that is different from other cities, such as folklore, folklore, lifestyle and social customs. For urban renewal and old city reconstruction, it should be realized that protection not only requires technology and knowledge, but also requires the formulation of relevant social policies to mobilize people's enthusiasm. Only a transformation plan rooted in the community and in line with public opinion can be welcomed by the majority of the community, and reflect the humanistic value of the renewal of the old urban area. Finally, establish a strict policy system, establish a diversified renewal model, and smoothly promote the renewal of stock land.

East London, UK

In the early 1980s, the Lea View House in Hachey, East London, England, achieved great success. This is a case of local government tenants participating in housing renewal more effectively. Before the reconstruction began, housing had almost all the typical social, political and environmental problems in the inner city of the UK. 90% of residents hope to leave. In 1982, the private architect firm Hunt Thompson Joint Architects accepted the commission of the Hachey Local Government to be responsible for the renovation of this area (Guo 2006). The architects adopted a "participatory design" approach: they moved into an empty house on the site and

formed a planning team including four employees. It became the social center of this community, allowing tenants and architects to have a full dialogue. After investigating the situation of the tenants in the house, the architect found that the main reason for the residents' dissatisfaction with the current environment was the basic management of the house. Together, they worked out solutions to deal with the basic problems of the living environment. For example: by rearranging the location of houses and passages to restore the sense of identity between residents; by clearly distinguishing public and private spaces to improve the management of public areas; by using insulation and solar energy systems to save fuel costs, etc. Housing adjustments and renovations were carried out in accordance with the special requirements of each household. You could also make final amendments to your own house and directly participate in some environmental remediation work. After the completion of the renovation, the crime rate in the area had been significantly reduced. The physical and mental health of residents had been significantly improved. The spirit of the community had also been rebuilt in the transformation process. The final result could be said to be very satisfactory.

Fig.36 Photos of East London



Source: <https://zhuanlan.zhihu.com/p/378207746>

Fig.37 Photos of East London



In addition, the school had carried out educational activities aimed at both students and families to improve community culture, joint enterprises had structurally strengthened the employability of residents. The project used the school's service scope as a soft boundary, avoiding a series of problems caused by rigid boundary delimitation. Continue to use local feedback and learning to accurately reconstruct the community ecology on a personal scale.

Experience:

Residents were willing to take the responsibility of creating and operating their own

environment, participate individually or collectively. Through democratic methods, their own community organizations had been created in the community, they were also supported and helped by other social organizations. Residents, communities and foreign subject experts established a creative relationship of cooperation and participation. The specific renewal plan fully considered the actual needs and capabilities of the residents for the environment, pursued continuous and gradual changes in the environment. Pay more attention to the three important aspects of personal or family education, employment and community culture to eliminate structural poverty in order to reconstruct the community ecology.

Ota District, Tokyo, Japan

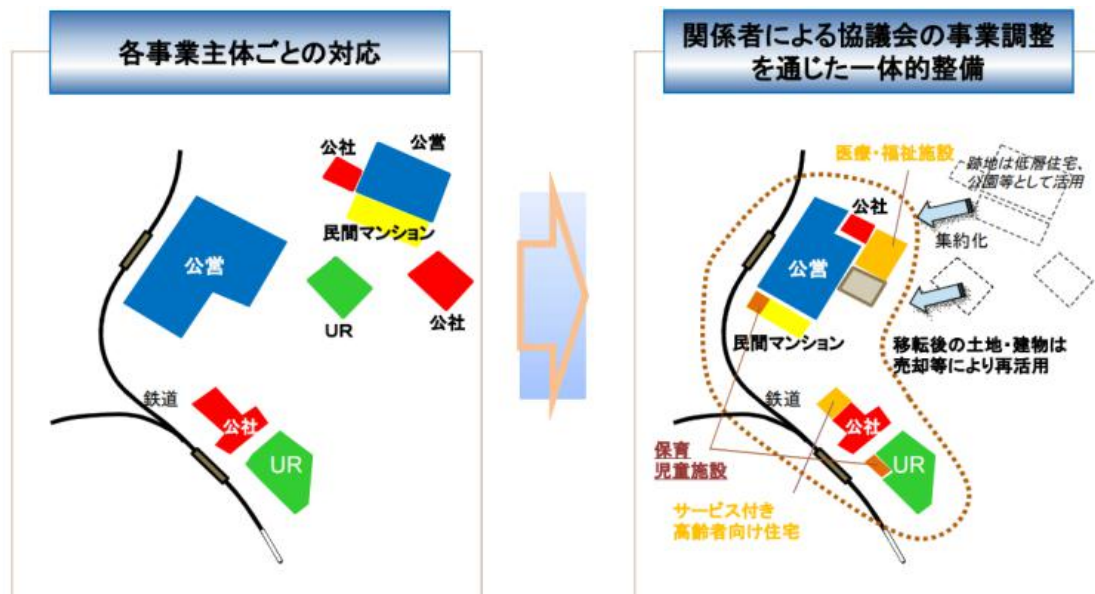
The renewal of residential quarters in Japan involved more adaptation to aging and stimulating regional vitality. Addressed issues such as the aging of the population, the lack of convenience in life, the weakening of community vitality. Japan relied on meticulous planning and multi-party cooperation as a means to build a complete system of land regeneration business, paid attention to the comprehensive construction of land use optimization and regional vitality enhancement.

Fig.38 Real scene before and after transformation



Source: Ministry of Land, Infrastructure, Transport and Tourism of Japan. Examples of regeneration of housing estates

Fig.39 Residential function regeneration and further development



Source: Ministry of Land, Infrastructure, Transport and Tourism of Japan. The 3rd "Reclamation of Housing Estates" Contact Meeting

In addition to general reconstruction and reconstruction, it also combined new service forms of privatized community reconstruction and reconstruction for the elderly. It was mainly embodied from "inland islands" to "human communities", with exchange meetings, mutual aid associations, and self-government associations as carriers. Around the existing public facilities, built a green, people-oriented "new human community", organized regional activities, developed a mini-economy with community characteristics, etc., and sought self-development and self-harmony.

Fig.40 Activity diagram

Fig.41 Activity diagram



Source: Ministry of Land, Infrastructure, Transport and Tourism of Japan. The 1st "Regeneration of Housing Estates" Contact Meeting: Material 1

On the basis of the continuous improvement of the "Reclamation Land Regeneration" worked and the continuous improvement of the "Urban Regeneration" series of systems. Continuously implemented the comprehensive renovation of old residential

areas and their service facilities, surrounding areas, and even the entire city. At this point, it has met the requirements of "compact" urban construction and innovated the way to use the stock. Promoting comprehensive transformation focusing on demand orientation and supporting public services has become the core idea.

Experience

It should be based on full consideration of the differences in the construction age, ownership system, and ageing needs of old houses. Closely followed the idea of "fine renovation + perfect supporting facilities + adaptive optimization".

We can learn from the quality improvement model and the vitality of residential areas to stimulate ideas in stages. From the perspectives of the system, practice, development, the transformation of old residential areas is truly effective.

Rotterdam, the Netherlands

Urban renewal in the Netherlands is called "Building for the Community", which reflects a large amount of public participation.

The background of the Rotterdam "Build for the Community" project was the decline of inner city blocks. Inner city blocks were the product of industrialization and urbanization of land speculation (Hui 2021). A large number of privately-owned and rented housing to the working class lacked effective maintenance (the landlord was unwilling to invest money), the housing decline was very serious after World War II. A large number of middle-class or middle-income workers who originally lived here moved out and replaced more low-income groups, thus forming a vicious circle: housing maintenance was insufficient, rents continue to fall, and maintenance costs were getting lower and lower. By the 1960s, the quality of houses in the inner city area of the old city became prominent.

In the 1950s and 1960s, the Netherlands also wanted to implement the American model of major demolition and construction. For example, the Old Western district around Rotterdam Railway Station was planned to be demolished and rebuilt into a business district in the 1960s, but it was not realized because of residents' opposition. However, this plan of overall demolition and reconstruction had aroused strong

opposition from the citizen class (as the birthplace of capitalism, Dutch citizens had the willingness to participate in political issues extensively). Residents of the Old West District spontaneously formed action groups to protest the government's demolition behavior in an organized way. The protesters put forward two requirements: the first was not to demolish and rebuild, and the residents' right to live in the original area must be guaranteed; the other was to improve their right of residence, and the tenants couldn't live in the dilapidated houses that the landlord did not repair. The government should repair them as much as possible. The responsibility of the house. So similar to Germany, in the early 1970s, large-scale protests across Europe demanded changes in urban renewal policies.

Fig.42 Residents protesting in the street

Fig.43 City update map



Source: <http://www.atd.com.cn/UploadFiles/Soft/2014/12/201412101627583883.pdf>

However, in the mid-1970s, a 180-degree turn was made to the Dutch urban renewal policy, that is, abandoning the large-scale demolition and large-scale construction model. This became an opportunity for urban renewal and change in the Netherlands. The Labor Government had also established its own office for the Citizen Action Group in this community to legalize citizen groups. The Netherlands adopted the method of decision-making by residents. A neighbour office was established in each block. The office had a decision-making committee. The members of the committee were composed of half government representatives and half tenant representatives, the number of tenant representatives was one more than the number of government representatives. When making a decision, everyone voted to resolve it. This project contained a large number of flexible procedures, including attention to immigrant groups, the introduction of public service facilities for the elderly, and the protection of the block's own business.

From the perspective of traditional physical space improvement, "building for the community" was actually a typical urban rejuvenation. First of all, this renovation was gradual. Divided into three types of renovation modes: light blue represented the renovation mode. That was, the structure of the house remained unchanged, and only modern maintenance was carried out on the house. It was similar to the repair of units or complete houses in the comprehensive renovation of old communities in China. Dark blue represented the transformation mode. The dilapidated house structure was retained, but the appearance of the building, the original layout and functions of the house could be changed, similar to the renovation of the tube building in China. Red represented the demolition and reconstruction mode. For the originally dilapidated house, it could be demolished and rebuilt.

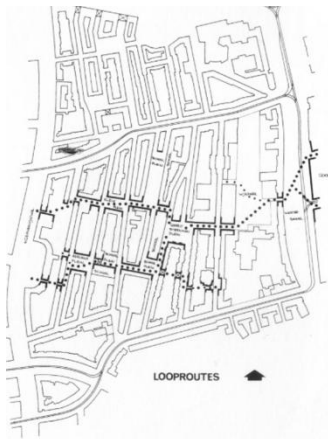
Fig.44 Three types of transformation methods Fig.45 The style of the neighborhood where old and new buildings coexist



Source: <http://www.atd.com.cn/UploadFiles/Soft/2014/12/201412101627583883.pdf>

The principles and standards for the division of the above three modes depended on economics: First, cultural relics and historical buildings could not be moved and could only be repaired; for ordinary residences, economic calculations must be carried out to calculate the proportion of repair and reconstruction costs.

Fig.46 Create public space along the pedestrian route Fig.47 Activity space



Source: <http://www.atd.com.cn/UploadFiles/Soft/2014/12/201412101627583883.pdf>

Renovated public service facilities and public spaces. The living quality of inner city blocks has been generally improved, the overall living environment has been improved. At the same time, it has avoided a large number of relocation of the original residents, and also solved the housing problem of the low-income class of immigrants.

Experience

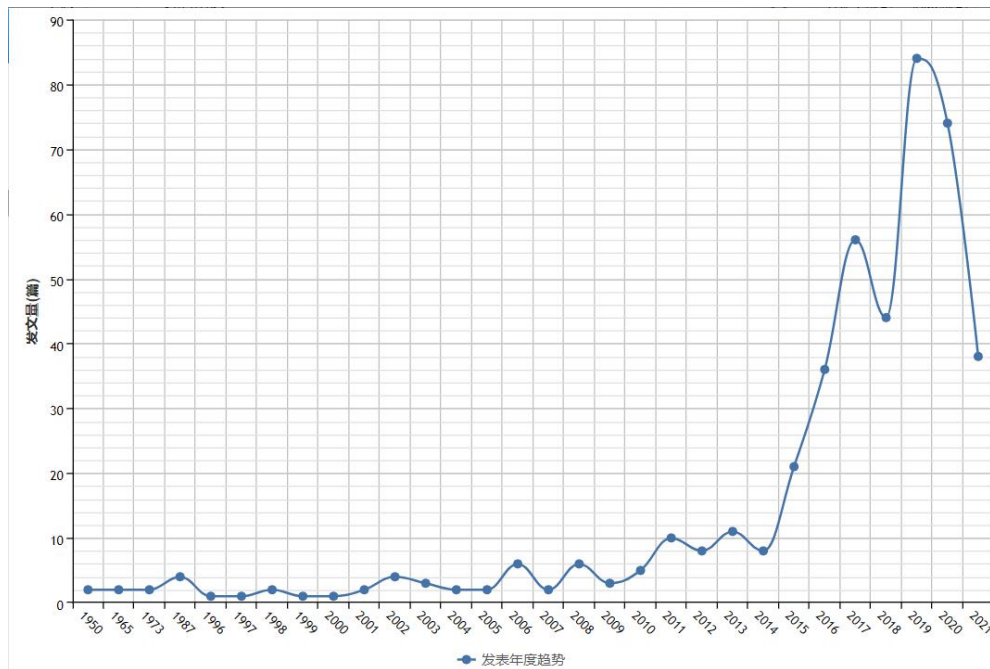
The reasons for the very good results can be summarized into several aspects: First, it has generally improved the living quality of inner city blocks. Second, it have been effectively increased. the supply of social housing and the proportion of social rental housing in the housing market. Third, it has avoided a large number of relocation of original residents, also solved the housing problem of the low-income class of immigrants. Fourth, the regional characteristics have been protected and the regional social network has been maintained.

Urban renewal is an inevitable requirement of urban development. It is based on the rethinking of urban functions and the reuse of space based on urban development issues. Domestic research on the protection, renewal of historical and cultural blocks is carried out with the practice of urban renewal. In 1994, Academician Wu put forward the theory of "organic renewal" in the book "Beijing Old City and Juer Hutong", which opened the road to the localization of urban renewal theory, had an important influence on the protection and renewal of historical cultural blocks in China. Since then, the research on China historical and cultural districts has gradually enriched. Representative works include: "Theory and Planning of Historical and

Cultural Cities Protection" by Ruan&Wang (1999); "Modern Urban Renewal" (1999) by Yang & Wu; "Contemporary Beijing Old Town" by Fang; Urban Renewal: Investigation•Research•Exploration (2000), "Nanluoguxiang" (2015) edited by Duan, etc.

As of July 2021, there were more than 800 papers related to the renovation and updating of the old streets in the CNKI China Knowledge Network database. For example: The first was to study the relationship between the main body of activities (the public), the renewal of historical and cultural blocks, believed that it was necessary to promote the renewal and development of historical blocks by strengthening public participation, paying attention to the public's subjective feelings, such as Wang (2009), Xie , and Zhu (2014), research by Zhao, Ma (2015), etc. The second was to study the relationship between culture and the renewal, believed that culture was the source of power for the development of historical and cultural blocks, mainly included Xiao (2008), Jiang , Li (2013), Wu, Xie(2015), etc. The third was to study the relationship between space and the renewal. It was believed that the renewal of historical blocks should be carried out through structural optimization and functional replacement of space. Scholars holding this view include Guo, Quan(2013), Ye, Wang (2016). On the whole, Chinese scholars have made breakthroughs. They were not limited to the protection and renewal of historical buildings, but they have begun to treat it as a space and research it from multiple perspectives.

Chart.4 The number of articles published in China related to old neighborhoods (as of July 2021)



Source: <https://www.cnki.net/>

From 1990 to 2011, China's urban renewal entered a period of practical exploration and innovation led by market mechanisms. How to achieve a comprehensive balance of social, environmental, and economic benefits of urban renewal, to provide it with a sustained, efficient, fair and just institutional framework, is the experience and enlightenment left to us at this stage.

From 2012 to now, China's urban renewal has opened a new phase of people-oriented and high-quality development. Under the macro background of ecological civilization and the overall framework of "five in one" development and the construction of a national governance system, urban renewal pays more attention to the development of urban connotation, puts more emphasis on people-oriented, pays more attention to the improvement of the living environment and the promotion of urban vitality.

In China, Beijing, Shanghai and other super first-tier cities. They have planned to rely on the background of globalization, in order to solve regional problems, achieve the goal of sustainable and healthy urban development. The renewal of old neighborhoods has been carried out early. Regions with strong development momentum, such as Sichuan, are also studying new ideas that suit them.

Comparison of two transformation methods in Shanghai

Top-down transformation model

Shanghai Xintiandi

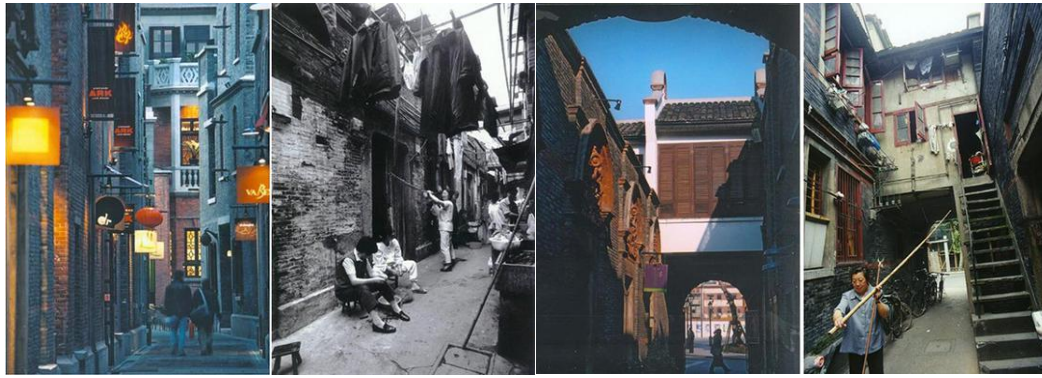
Xintiandi is located in Taipingqiao area, the main body is the old-style linong residences in Shikumen. The entire renovation plan covered an area of 52 hectares and is divided into three parts. Xintiandi was the first phase of the project, which was completed in June 2001 and fully opened the following year. Xintiandi has become a leisure pedestrian street integrating catering, commerce, entertainment and culture. Xintiandi has also become an internationally renowned meeting place and a business card of Shanghai.

The basic idea of Xintiandi's planning and design was to "reserve the outer skin of the building, transform the internal structure and functions, introduce new life content". Based on this concept, the plan would move all the original residents out. Gave way to commercial activities such as tourism, leisure, culture and entertainment, realized the overall replacement and transformation of block functions.

All the aborigines of Xintiandi moved out, although it was an improvement in the quality of life for the aborigines of the area. However, the "top-down" real estate redevelopment in cooperation with the government and the developer forced them to leave the familiar and cordial area. They did not have the right to share the high profits after the development with the residents, but only compensated for the residual value and relocation expenses. It could be said that the aborigines were exploited indirectly.

Under the top-down renewal model, the autonomy of urban renewal lied not in the residents but in the government. The fact that the inhabitants' "marginal" role made the indigenous people have to passively accept the renewal. The government had the power to decide whether to renew the city, the government also had the power to decide which mode of renewal is adopted. The decision-making power between immediate benefits and sustained long-term benefits rested with the government. In this process, the aborigines had no right to make decisions and to choose.

Fig.48 Photos of Xintiandi



Source: <https://mp.weixin.qq.com/s/ei61OrwxK0NxTvZDh69kKQ>

Each participant had its own purpose in the development process. The government hoped to use this project to improve the style and appearance of the old city, improved the living conditions of residents, maximized the land benefits of the central city. For developers, the most fundamental purpose could not escape to obtain investment profits and returns. The protective transformation of "Xintiandi" had its own purpose, which lied in the comprehensive balance of broader fields: through "Xintiandi", the development of the entire Taipingqiao area was promoted, the value of surrounding land parcels was increased, the overall income was increased.

Throughout the entire development process, the government and the developer have always led the organization, the residents who were the original property rights holders of the buildings in the developed area were always in a passive position and were left at their discretion. Through the relocation, more than 70,000 indigenous people have been moved out of the reconstruction plan area, a new wealthy class of 33,000 people have been implanted. The relocation of the residents was to cut off the spatial memory of this cultural place in a one-size-fits-all manner, away from familiar daily fragments. The relocation of the residents, the activists, business formats, and management mechanisms have undergone a major change. Xintiandi had nothing to do with the residents, and the residents could not share the benefits of the renewal of the old city. The fact that the aborigines were "marginalized" was a concrete manifestation of social value orientation biased toward economic interests.

Under the pursuit of economic interests, the "developmental protection and renewal" Xintiandi has actually separated the old Shanghai style from its context. Under the urban design concept of a strong "commercialized" space shaping strategy, Xintiandi

has been shaped as an international "high-level commercial district". And this had nothing to do with residents. Therefore, its success lied in the sensational effect of commercial operations, rather than the victory of the sustainable development of the old city.

Fig. 49 Photos of Xintiandi



Source: <https://mp.weixin.qq.com/s/ei61OrwxK0NxTvZDh69kKQ>

Although the transformation has obtained huge economic benefits. However, it greatly damaged the original transportation network and historical atmosphere of the region. For the residents, this was not friendly.

The bottom-up transformation mode

Tianzifang-Shanghai

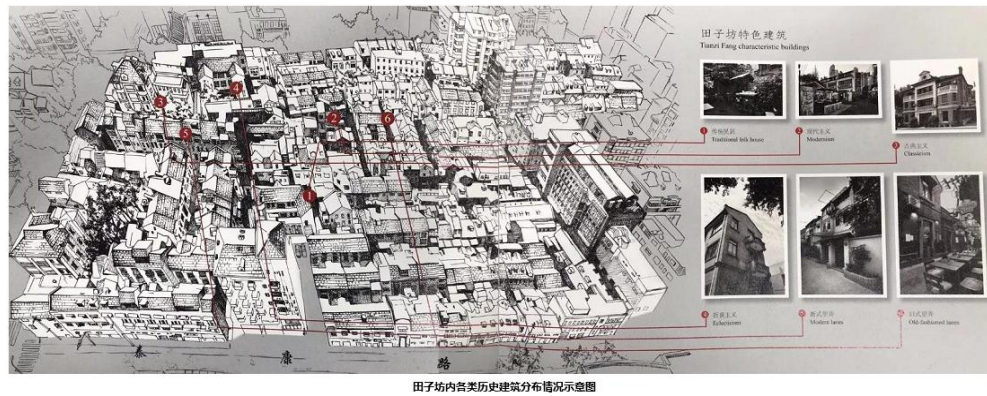
The problem with the transformation of many cities now is that human factors, especially the aboriginal factors, are completely ignored in the transformation. The transformation of Tianzifang was largely to preserve the aborigines. Although after a period of operation, many aborigines have also withdrawn. At least in the initial stage of the transformation, this idea existed (Zuo 2021) .

Fig.50 Changes in Tianzifang



Source: Paper: *Research on Spatial production in urban renewal*, Zhong, 2012.

Fig.51 Building distribution map of Tianzifang



Source: Paper: *Research on Spatial production in urban renewal*, Zhong, 2012.

Tianzifang is located in the center of Shanghai Luwan District, which is an important urban functional area. It covers an area of 7 hectares and a building area of 20,000 square meters. It is the most representative, complex and diverse district in old Shanghai. Community renewal should be taken into account as well as urban renewal. From the perspective of practice, Tianzifang is promoted by the spatial practice and interactive behavior of specific actors under specific space-time conditions, it is a space work "conspired" by the practical behavior of different actors. From the perspective of social science, the spatial reconstruction of Tianzifang is an effective text that can combine action analysis with spatial analysis, connect the perspectives of agency and structure (Zhong 2012) .

The first refactoring: Coincides with the financial crisis and the governance, officials gave street occupies space, controlled the possible space provided by the production process. This time also was scholar as "old and new system transformation and economic development in trough time" (Zhu 2009) formed the residents, officials at the grass-roots level, cultural merchants and artists had win-win results. In order to realize their own interests, all parties formulated a series of rules and regulation mechanisms for spatial reconstruction by taking advantage of their own action power, corresponding social and spatial positions, thus forming a balanced, stable and win-win phased order.

Spontaneous renewal mode made the old urban space be updated without unified planning and specific standards. The most significant contribution to the transformation of the physical space was made by all new space users -- artists and

businesses renting the factory space.

Since it was the preference of the old factory that attracts them to enter, the renovation of the space was committed to combining the existing spatial characteristics with their own use needs. The development team had very few restrictions on the space renovation of the store, so that they gave full play to their initiative in space utilization and creation.

The second refactoring: The government's participation in the discussion and design of reconstruction, from the perspective of urban space, the characteristic attributes of different regions have produced resultant forces, forming the effect of interconnection and promotion between regions, complementing the regional integrity. Through the "dialogue" between aboriginal people, artists, tourists, government, architects and the place, the space was no longer simply to provide residential needs, but a shared space integrating commerce, culture and history.

Most of the areas retain the original urban texture and life texture, there are still many families living in the area, still full of life atmosphere. Part of the house and old factory buildings have been transformed into studios, creative arts areas, bars and other characteristic communities. It has the function of sightseeing and can also enhance the attraction of the area. For the residents of the original residential area, try not to relocate and keep the original residential form. Make the residents become the biggest beneficiaries after the reconstruction, maintaining the long-term sustainability. It protects the endangered city's history and culture, using creativity and culture to bring new vitality to the region. To retain the community function of Haipaili Square, improve the image of the community, attract creative investment and business opportunities. Old architecture and new culture are integrated to create a gathering place for creative industries in the city. The biggest charm and characteristics of Tianzifang is that it still retains many residents living here, full of life atmosphere.

Experience

(1) Similar to the case of the empirical study in this article, the spatial characteristics of the two are similar, the social space is mainly the material space of the social class dominated by the aborigines, which contradicts the social needs to produce

reconstruction needs. (2) The empirical case had the basic conditions for bottom-up, small-scale, and gradual reconstruction, its development was divided into multiple periods and reconstruction activities are carried out in multiple steps. (3) The process of preserving the basis of material space for social "integration" is worth learning to support its new positioning of social space in the city. For example, the cultural characteristics constructed by the aborigines interact with the regional architectural space to form a travel space environment with experience value, the reconstruction activities of Tianzifang have been carried out for more than 20 years. Its reference value is high for us. (4) Tianzifang integrates housing and living, cultural experience consumption, and folk cultural display, etc. The empirical cases all have the social foundation and cultural connotation for the development of similar industries.

Excessive independent marketization also led to chaos in block operations in the later period. Such as the contradiction between commerce and residents, and the chaos of the neighborhood. These problems need to continue to be resolved in the future.

Two locations, comparison of two modes

The overall vitality of Xintiandi is not as good as Tianzifang, but the per capita income of its stores is 2.26 times that of Tianzifang.¹³ Investigate the reason. In the renewal of Xintiandi, Hong Kong Ruian Group obtained the regional development rights through land transfer, the developer as a single entity dominated Completed commercial development. The improvement of environmental quality is quick and effective, and economic benefits are outstanding. The essence is development, and the focus is only on the commercial opportunities brought about by the regeneration of Shanghai's lanes. In terms of social vitality, Tianzifang has active residents that Xintiandi does not have.

Between the two, the role played by residents has also changed dramatically from "periphery" to "subject". Unlike Xintiandi, Tianzifang is a process of continuous dialogue, reflection and correction with places and various people; although its spatial form is similar to Xintiandi, its final presentation is not an overnight process.

¹³ Shan Ruiqi, Zhang Song. Discussion on the evaluation of the renewal vitality of the historical built environment and the regeneration strategy: Taking Shanghai Tianzifang, Xintiandi and Yuyuan Tourism Mall as examples[J]. Urban Planning Journal, 2021, No. 262(02): 79 -86.

The process of transformation is accompanied by dialogue, reflection and correction. It reflects the gradual identification and respect with the urban context and place spirit. Recognize resident culture, respect personal rights and social attractiveness. On the other hand, the consciousness of the residents themselves is gradually awakening. Whether driven by profit or other reasons, residents have gradually become aware of the foothold and importance of their role in urban development. For the sustainable development and organic renewal of the city, it is undoubtedly an inevitable and hopeful result brought by time change and social development. From the upper level planning to the awakening of the residents' self-consciousness, they actively participate in the trend of urban renewal and development. It can continue the cultural heritage of the city, avoid one side of the city, and bring new power. Residents have gone from "marginal" to "subject". The urban context and place spirit have also experienced "periphery" to "subject".

Beijing Juer Hutong

Beijing Juer Hutong

It is located in the northwest of Dongcheng District, Beijing, within the Second Ring Road of Beijing. It is the central city of Beijing.

More than 20 years ago, this was a typical area in the old city of Beijing with water, leaks and dilapidated houses. Buildings were dense, many families had no sunlight and shared living facilities.

Since 1987, Professor Wu had been conducting research and coordinating with his team. Put forward the theory of organic renewal. That was, in accordance with the internal development law of the city, conforming to the texture of the city, exploring the renewal and development of the city on the basis of sustainable development-the organic renewal of the "New Siheyuan" system (Wu 2005). This can be said to be a Non-stiff replacement----maintain the overall style and texture of the ancient city.

From the perspective of physical space

According to the actual needs of residents for transportation and activities, the focus of the transformation is on the road network .(cars + pedestrians) The neighborhood

road in Juer Hutong allowed urban traffic to pass. The density of the open road network in the entire block was about 15.7%, which exceeded the density of the block road network outside the closed residential area (Ju 'er Hutong Research Report 2011). The connection between the neighborhood road and urban traffic has been recognized by the residents. To a large extent, the pressure on urban traffic has been eased. The continuous pedestrian road improved the convenience of travel. People coming and going increased the residents' sense of security. Safe walking paths inspired street life.

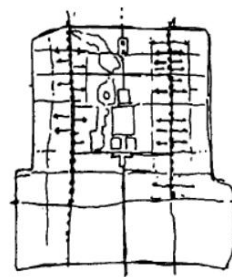
The original hutong-yard system was well maintained, it adapted to the old city environment and its texture. At the same time, it combined the advantages of unit buildings and courtyards. It not only achieved a higher floor area ratio, but also arranged the indoor space of each household reasonably to ensure residents' needs for modern life. It also formed a relatively independent neighborhood structure through the courtyard. A public space where residents interacted.

Tried to demolish and build as much as possible so that the original community structure was largely undamaged and new life needs could be developed.

Fig.52 Plan of Juer Hutong



Fig.53 Fishbone System



Source: Organic renewal of Juer Hutong

From a humanistic point of view, it contained rich life content and understanding. Retaining part of the urban texture could reflect the city's history, humanities, and people's sense of identity with urban space. Reflected the social value tendency in a specific period, including ideological orientation. The cultural heritage of the old Beijing city was preserved.

An important point of the plan was that the entire block was open to the city, and there was no wall of any kind along the street. The interior of the district was connected

through fishbone¹⁴ alleys, each courtyard unit could be reached freely. This kind of open neighborhood system brought convenience to urban traffic and residents' travel. Tried to gather residence, work, transportation, recreation, etc. into various urban communities and even block plots. Form a non-identical and diverse urban experience, a network of interpersonal relationships formed by the process of daily life. Made the block truly a vibrant organic unit of urban life.

According to the ratio of house composition, family composition, age composition and nationality composition, the proportion of renters and young people in the new courtyard in Ju'er Hutong accounted for about 50%. The proportion of elderly people was lower than before, but it still accounts for about 23%, and foreigners also accounted for 16% (Ju'er Hutong Research Report 2011). This diverse composition has broken the original balance and formed a new pattern. On the other hand, the opening of blocks means that more non-residents can be integrated into it, and the objects of social interaction among residents have extended to the city.

From the perspective of spatial composition: Ju'er Hutong has Sanlitun to the east, Shichahai to the west, and Gulou Street to the north. These noisy urban spaces become a gathering place for young people and foreigners in the neighborhood. Compared with the simplicity, the petty bourgeoisie in Ju'er Hutong shows a relatively low-key atmosphere, attracting the surrounding citizens who occasionally come here to enjoy the slow-paced life. Adjacent blocks have different themes of social life. The sharing and complementarity between each other gives residents more choices and enriches urban life.

Nowadays, there are not only the elegantly designed courtyard houses, the skeletons of traditional neighbourhoods, and the perfect pedestrian street space. There are also first-class community services, the continuation and integration of residential culture. So far, more than 10,000 friends from various countries have visited here, and more than 20 foreigners have become new residents in that area(Beijing News 2018).

Experience

¹⁴ Organized with the channel as the framework, it develops in the north-south direction and expands in the east-west direction. Its form is like the skeleton of a fish.

Try to preserve the original block texture and culture. Replace the demolition blindly with transformation, and retain the living atmosphere of the residents of the original block.

It is necessary to improve openness and fully integrate into the city. It includes the opening of community space, group space, public road space and community management system.

Mixed communities are vibrant communities. Mixture principle requires that the community function space is rich and changeable, the population composition is diverse and integrated, and the community business is complex and diversified. Enhance regional inclusion.

While ensuring privacy, it retains the spiritual core of traditional Chinese residences that value the friendship between neighbors. Pay attention to the humanistic perspective and retain the individuality of the urban texture. Reflect the social value tendency and ideological orientation in a specific period. Pay more attention to human feelings.

Chengdu Kuan Zhai Alley

The Kuanzhai Alley in Chengdu is composed of three old-fashioned streets arranged in parallel, Kuan Alley, Narrow Alley and Jing Alley, with the courtyard between them. It is the last relic of the old Chengdu "thousand-year-old city" urban pattern and a century-old original architectural pattern. The Kuanzhai Alley in Chengdu is one of the most life-saving cases in the old neighborhoods that are renovated as they are old. After the renovation, the overall popularity and vitality of the block has been enhanced. Bring a huge flow of people and new vitality to the region. The collective memory of the block remains relatively intact. For the local culture, the residential form is restored to the greatest extent.

The protection content of Kuanzhai Alley includes "three states" : physical form, non-material form and commercial form. Form is the basis of protection and the carrier of Kuanzhai Alley culture spirit. Text is the core of protection, is the purpose of protection of Kuanzhai Alley; The business form is the presentation of protection.

Through commerce, Kuanzhai Alley becomes the name card of the city and has a relationship with modern urban life.

The Kuanzhai Alley in Chengdu is divided into a core protection zone and an environmental coordination zone as a whole. The former emphasizes protection, while the latter emphasizes development. In the core area, in line with the implementation principle of “relocation without demolition”, 40% of the buildings have repaired according to their original features, and their internal facilities have improved. Most of the historical buildings have been preserved and restored in the core area, the original courtyard layout has also been restored.

Protect positioning

1) Kuan Alley -- "Leisure Life"

Kuan Alley represents the folk market culture of Chengdu and presents the memory of Chengdu people. Aboriginal people, inns, doorways, plane trees, old teahouses, etc., constitute the unique Chengdu vocabulary and attractive elements of Kuan Alley. After the protection and renewal planning, the Kuan Alley has become the original real life experience area and tour center of old Chengdu. Focus on the spirit of life in Chengdu. Form a consumption rest area with characteristic folk-custom dining, private dining, characteristic tea houses and other scenes (Commercial Research and Analysis of Kuanzhai Alley in Chengdu 2015).

2) Zhai Alley -- "Slow Life"

Zhai Alley is the characteristic of the slow life in Chengdu. The Zhai Alley shows the courtyard culture of Chengdu, representing an elite culture and elegant culture, feeling the spirit. Through conservation and renewal planning, Zhai Alley has formed a fine life and taste area with the theme of characteristic cultural stores, art leisure, various western drinks, coffee, and healthy living halls .

3) Jing Alley -- "New Life"

Zhai Alley positioning is the new life in Chengdu. Through conservation and renewal planning, it becomes the modern interface of the area. It is the most open, the most dynamic, the most diverse consumption space.

Fig.54 West End of Wide Alley-Light and Shadow Corridor Fig.55 Shuan Ma Stone-Symbolic



Source: <https://mp.weixin.qq.com/s/otCvwArNzFfVlrJDs7QsIQ>

The daily life and collective memory of residential areas are retained in different forms of expression of old photos. For tourists, it is kind of understanding. For the old residents, it is endless memories.

Fig.56 Vegetable vendor

Fig.57 Wash things



Source: <https://mp.weixin.qq.com/s/otCvwArNzFfVlrJDs7QsIQ>

Inspired by 1998, Chen Jin, a native of Chengdu, took such a photo in a narrow alley: a little rain, a small vegetable vendor riding a tricycle, shouting in the alley. A very homely scene has become a representative scenic spot in Jing Alley. It adopts half plane and half three-dimensional, which is integrated with the wall, which is vivid and interesting. "

This photo recorded the Kuanzhai Alley in 2004, when the indoor space of every household living in the Kuanzhai Alley was very narrow. Therefore, the optimistic people of Chengdu built water faucets and pools in the lanes between their houses and they have been preserved until now. On the head are the rooms on both sides, and the things to be washed are hanging on the walls. People are carefully washing daily necessities by the pool. Although the alley is not spacious, it is full of the warmth of home.

Fig.58 Display wall of neighborhood life Fig.59 Display wall of neighborhood life Fig.60 The brick



Source: <https://mp.weixin.qq.com/s/otCvwArNzFfVlrJDs7QsIQ>

Taken in front of a courtyard in a narrow alley in 2004. The brick door frame has its own characteristics and is called a "concave door", which is a form of wall shaped like a mirror frame. The side bricks next to the door are laid out in a herringbone pattern, which is quite chronological. There is also a newspaper box on the wall, and inside the brick door is a tea seat in the courtyard.

Experience

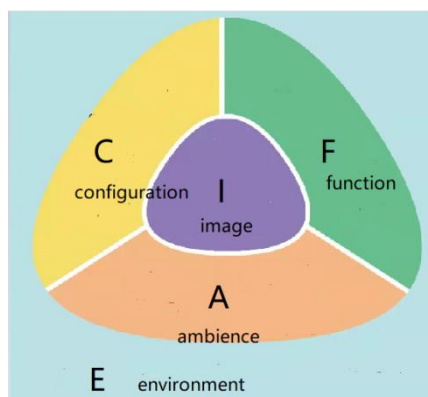
This is a relatively successful example of the old block combining commerce and other forms of business on the basis of retaining the original street characteristics and humanity. It carries the urban leisure cultural life with the heavy sense of architectural history and records the urban life of old Chengdu.

From the above cases summed up the five factors affecting the quality of the block
——IFACE

I-image F-function A-ambience C-configuration E-environment

Such blocks have common features, mixed functions and innovative vitality.

Fig.61 IFACE



Source: Repainted by the author

Inspiration of great reference value provided

1. It is not only limited to the transformation of physical space, but also pays more attention to the social benefits and sustainable development behind the space improvement. Focus on strengthening the organic connection between space resources and social groups.
2. Attach importance to the extensive participation of bottom-up social forces. Effectively integrate top-down and bottom-up two-way resources through system

design.

3. Based on the region is the basic starting point for renewal activities, and the ultimate goal of renewal points to regional revitalization and sustainable development. The practice of renewal focuses on the integration of regional resources to achieve common renewal, connects the community with a larger regional place through spatial transformation, and absorbs more actors to participate in community development through social transformation.

4. The renewal of old communities is inseparable from the guidance and investment of the government. At the same time, it also needs to integrate multiple forces such as market mechanisms and community autonomy.

Chinese scholars' comments on the current situation of old city reconstruction in China

The difficulty of the reconstruction of old residential areas is the characteristics of this work. There are mainly four aspects as follows: first, the location of the community. Most of the old communities are located in relatively mature urban built-up areas, which are usually important or even sensitive areas of the city. On the outside of the community, the requirements for urban space quality are higher than those in general areas, while on the inside of the community, the public space is basically small and the facilities are old, which is a contrast. Second, the average age of the staff in the community is older, the average income is relatively low, and the composition of the staff is relatively complex, there are more tenants, the management is difficult; Third, the community residents generally tend to be conservative, with weak awareness of fairness, public space, paid services, active participation, and low acceptance of new things. Fourth, the management of communities is generally lagging behind, most communities even have no property (Huang 2020). Now the reconstruction of the old street is not only the demolition of houses, roads and other infrastructure renewal. What is more important is the synchronous renewal of urban industry, culture, environment, infrastructure and living conditions, which is a more comprehensive and broader concept. Not old wine in a new bottle, but a new concept to guide the

high-quality development of the city (Qin 2020). Regarding the “chaos and disorder of function and space” in traditional cities, planners often emphasize the pursuit of a “rational” urban spatial form and a unified visual spatial order. In the design, the space function division and purpose are purified, but the most important coordination between human and society is neglected. Ignoring the interests of the public; at the same time, it is pointed out that planning and design should shift from traditional physical environment transformation to social and economic coordinated development planning, a comprehensive human settlement environment development plan that combines physical environment improvement plans (Ma 2007). Based on the social problems caused by the transformation of the old city, it has triggered social thinking about the transformation of the old city and criticized the unreasonableness of the traditional economic-led transformation of the old city. Point out that it has led to the loss of social equity and the marginalization of the interests of urban low-income groups and disadvantaged groups. And then propose to formulate a solution strategy from the perspectives of government policy, planning, design, and residents' needs (Zhang& Wang 2007). In recent years, Shanghai has been vigorously implementing urban micro-renewal, and has made great efforts to demolish violations. This has led to the disappearance or loss of vitality of some bottom-up commercial districts, arousing even greater controversy. In the field study of the reconstruction of Nanchang Road in Shanghai, he pointed out that the old city renewal should not only satisfy the nostalgic preferences of scholars or artists, but also not ignore the wishes of local residents. Regarding the renewal and preservation of the old city, there is no consensus among local residents, the government and experts, the level of public participation is far from enough (Zhu 2017). Culture and capital are two very important things in the development of urban space, but they are also inseparable from the support of space, location and other conditions (Zhang 2021). The economy and environment can be in a good or bad state in different parts of the city, or in different cities. It's all because of people-the demographic structure has changed. From an economic point of view, when people go outside, the facilities will follow, and the market will follow. So why decay? Just everyone is gone. So why is there a

revival? Because people are back (Zhou 2018). Now, the result of the renovation of many historical districts is that foreign tourists find it very local and nostalgic. But in the eyes of the locals I know, most people do not agree with the newly opened fun space. In essence, these reforms were not considered successful. Local residents prefer the old houses and the towering plane trees beside the street, everything remains the same (Zhu 2018). The main purpose of preserving historical cultural relics and ancient buildings is not to compete for "world cultural heritage" (most cities do not have this condition), nor to develop tourism, but to allow local people to live in a historical and cultural atmosphere (Cheng 2020) . The main function of a city is to live in, not to watch. Therefore, judging the success or failure of urban construction should be determined by residents who have lived here for a long time rather than officials who are going to be promoted. To put it bluntly, good-looking cities are not necessarily suitable for living (Cheng 2020). The composition of the people in the old communities is relatively complicated, basically they have been settled for a long time without economic conditions. Quite a lot of people at the bottom of society. In fact, the problem we want to solve is the problem of social justice (Cao 2020).

Taking into account the population composition of Dongguan Street and the serious aging of the population. Universal design and aging design are becoming more and more important. China is also vigorously promoting the construction of a livable environment for the elderly to be fully integrated into the transformation process of old communities (China Social News 2020).

Including the travel safety aspects of the elderly with disabilities: paving, steps, ramps and handrails, etc., such facilities should be combined with walkway renovation and site renovation; rest facilities include seats, chess tables, pavilions, etc., mainly combined with site renovation Reasonable configuration. Vehicle parking, garbage transfer, etc. must be safe, hygienic and tidy. Marks, architectural sketches, colors, sounds, lights, etc. are used to facilitate the identification of the elderly; lighting facilities are an important guarantee for outdoor activities especially at night. Lighting facilities should be set up around the walkway, and the lighting of the lighting

facilities should be soft.

Fig.62 Accessibility diagram



Source: https://www.cdlangli.com/main/business_detail/id/13

A case of better general design of public space

Elizabeth and Nona. Evans Recovery Garden

The interior is paved with lawn to allow wheelchair access, the viewing deck is equipped with handrails. Plants and terrain can be used to develop covert horticultural therapy programs. Local rocks and water not only enrich the garden, but also mask the noisy traffic noise nearby to a certain extent. The plants on the walls and in the planting beds invite people to smell and touch. The dense shade absorbs moisture from the air, creates a cool and pleasant microclimate for the garden during the summer. The roads and activity areas here are spacious. Designers select plants in different flowering stages and carefully arrange their planting sizes to enrich the visual effect. It also provides an opportunity for walkers and wheelchair users to smell the flowers. Bonsai walls and narrow paths separate multiple adjacent Spaces, allowing people to enjoy the beautiful views without being disturbed.

Fig.63 Landscape plan



Fig.64 Real picture



Fig.65 Real picture

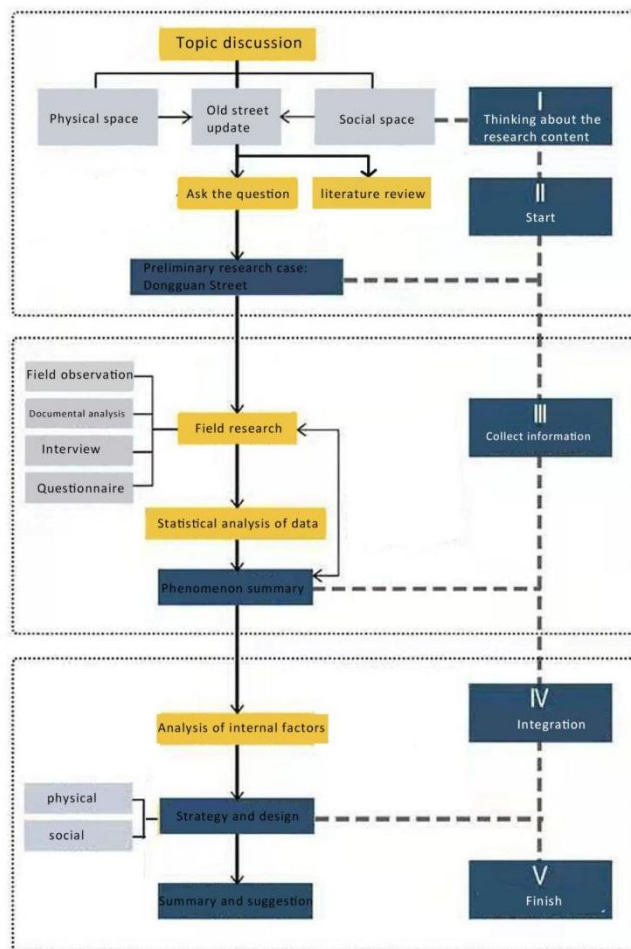


Source: <https://www.asla.org/awards/2006/06winners/294.html>

Chapter 3 Methodology section

This chapter offers an overview of the methodology used to address the core questions of the thesis, concerning the problem of transforming physical and social space in Dongguan Street. The research adopted a mix-method approach and a number of different methods were used: field observation, interview, literature review, questionnaire. This chapter was a record of the development of the research process. Recorded the preparations, steps, and processes of the survey; summarized the methodology used and how to implement the survey work. Urban research was a whole process of work. From information collection, diagnosis, to problem countermeasures, work plan formation, and final summary. It should be the whole process of rolling. The picture that follows summarizes the steps taken during the research.

Chart.5 Frame work



Source: Author self-painted

The preparatory work was to have a preliminary understanding of the geographical location, actual situation and surrounding environment during the program research period. Then carried out purposeful in-depth work on the set problems and research direction. Emphasized that facts precede value, and strove to clarify the nature of the problem. Pursued the "three realities", that was, reality, empirical and experimental. We should not just stay at the factual level, but also traced the cause and mechanism behind it.

3.1 The research process

Generally speaking, it could be divided into stages. Preparation stage-investigation stage-research stage-summary stage.

Selected and confirmed relevant research methods and questions that need to be investigated for Dongguan Street, and clarified the investigation tasks. Then scientifically designed the investigation and research programs. Had a basic understanding of the basic situation and working methods of Dongguan Street.

The establishment of the investigation project-Dalian Dongguan Street physical and social environment investigation.

Used Offline + online model, The goal was to get more people involved. Used interviews, field observation, questionnaires, Document analysis research methods to get more comprehensive information.

First We Collected basic data types on relevant websites to obtain basic information. Checked the relevant literature. Conducted field surveys, then took pictures on the spot, and recorded measurements. Made a preliminary understanding of the research object or problem in order to obtain a preliminary impression and perceptual knowledge. At the same time, a research type that provides foundation and direction for in-depth research. Explored the possibility of more systematic and more thorough research.

The document analysis was mainly to collect and sort out the geographical and historical evolution of the Dongguan Street, to fully understand the relevant

information about the development positioning of the Dongguan Street District in the new modern city master plan. On-site investigation was to record the physical space of the historical block through various methods such as measurement, photographing, and transcripts. To record the current living conditions of the residents in the block through questionnaire surveys and interviews. Data collation and analysis was a summary of the previous series of data collection. These steps were very important for sorting out the block texture of the entire block, understanding the social structure of the street and the characteristics. The investigation and analysis of the current situation of Dongguan Street was also a summary of the evaluation of the value of the entire area.

3.2 Current Project Progress

Preparations for the transformation of Dongguan Street have already begun long ago. Since 2017, the Dalian Municipal Government had successively carried out relevant protection planning work. Mainly include: "Dongguan Street Modern Architectural Group Cultural Relic Conservation Planning in Dalian", "Dongguan Street Historical and Cultural Street Conservation Planning", "Dalian Dongguan Street Historical and Cultural Street Conservation, Utilization Planning and Design", etc.

In the second semester, I worked as an intern in Dalian Land Space Planning and Design Co.Ltd for more than three months. During this period, under the leadership of the company's leaders, I came into contact with some actual planning projects, one of which was the Dongguan Street Reconstruction Project. In practice, it not only broadened the professional knowledge, but also personally touched the actual project. Besides, I also had an internship experience in here before, and had a basic understanding of the company and the project. In addition, I lived in the area briefly with my grandmother as a child. Therefore, there was a certain feeling and understanding of Dongguan Street.

Dalian Land and Space Planning and Design Co., Ltd., the superior authority is Dalian Natural Resources Bureau. Responsible for the overall planning of land and

space, various types of special planning, detailed planning, urban design and historical protection, site selection demonstration, etc. My department was the detailed planning office. We had a team responsible for the renovation of old districts in Dalian. Headed by Director Bai, Planner Yang and Planner Liu were the main persons in charge to carry out related work. And my main job content was to assist the planners in the group, responsible for the preparation of research, data sorting, site survey, basic drawing, analysis report, etc. As well as understood the work procedure, basic working content, work methods, the laws and regulations of Dalian city planning. Read legal documents "Liaoning historical building measures" regulatory documents "Dalian city master plan", "relevant regional regulatory detailed planning," "historical and cultural city protection standards".

Discussed and modified the whole area renovation plan together with urban Development design Company, Architectural Design and Research Institute. Participated in the redevelopment project of Dalian's historical and cultural street, including Dongguan Street and Fengming Street. Our department was mainly responsible for planning and controlling the overall block. Cooperated with the Architectural Design and Research Institute to complete the work on architectural protection design and other aspects.

Judging from the current situation, the Dongguan Street project is currently undergoing a clear reconstruction schedule, with the protection of historic buildings in the core area as the central point, and gradually expanding. It will be carried out in an orderly manner in accordance with the sequence of protecting and restoring historic buildings—public spaces—commercial/residential spaces.

After Vanke won the bid in 2020, it worked with Xigang District Government, Dalian Planning Institute, and Urban Development Design Co., Ltd. to advance the design details and implementation plan as a whole.

The old buildings and public spaces in Dongguan Street were divided into "asset packages"¹⁵.

¹⁵ Refers to the delineation of building red lines for buildings, the confirmation of property rights, comprehensive consideration and value evaluation. Form different levels. The basis for dividing the

And formulated the corresponding spatial form protection content and technical standards, which were mainly divided into three types of asset packages.

Among them, A-type asset package: It has important historical and cultural information and commercial value. Mainly for protection, repair, renovation, and no building demolition; therefore, it is necessary to strictly supervise historical and cultural resources, follow relevant laws, regulations and planning requirements for protection, and encourage reasonable and appropriate functional replacement and activation to prevent over-design;

Type B asset package: It has important commercial value and certain historical value, On the basis of reasonableness and lawfulness, the principle of appropriate protection shall be adopted. Historical value, as an important means of rejuvenating the development and utilization of historical districts, has been focused on. It is necessary to realize the continuation of historical resources and the embodiment of commercial value.

Type C asset package: The historical value and commercial value are low, and the building itself is in poor condition. Mainly to demolish and rebuild. From the perspective of urban renewal and public space creation, implement a more open, inclusive, public and settlement urban plan. Demolish dangerous buildings, maintain a safe neighborhood environment, analyze safer buildings, and explore their historical and cultural values as much as possible. Retain the memory of the city, maintain the authenticity of history, avoid over-development, and focus on cultural and commercial inheritance.

Fig.66 Construction site map



Fig.67 Construction site map



Source: <https://mp.weixin.qq.com/s/gAAItk9WOjz3rZgHUDcEaQ>

"asset package" is obtained by superimposing two methods: form combing and property right combing.

With the efforts of many parties, Dongguan Street was officially approved by the Liaoning Provincial People's Government to become a provincial-level historical and cultural district. Developed the management and control requirements for the block, launched a professional appraisal of the historical value, features and structural safety of most of the old buildings. Completed protection and repair work for some buildings. Restorative construction measures are given priority to poorly-preserved traditional buildings. In accordance with the higher standards of the state, the Ministry of Housing and Urban-Rural Development, the Provincial Housing and Urban-Rural Development Department, the revision and improvement of the street protection plan for Dongguan Street had been carried out. It was planned to further expand the protection objects. Increased the scope of the core protection area and added a number of traditional buildings. At the same time, detailed plan management and controlled requirements were required to ensure that the style of the new buildings in the future will in harmony with the traditional style.

Dongguan Street has irreplaceable uniqueness, but on the other hand, its declining development process also presents the reality of material degradation. The numerous historical relics in the area will be transformed into the old district, which is the first core issue facing Dongguan Street. The work currently in progress is the overall renovation of the façades of the protected Siyun building¹⁶ in the area. Next, 13 historical buildings and traditional buildings in the area will be repaired, improved, rebuilt and transformed. During the renewal, some necessary infrastructure and public service facilities should be built to control the planning conditions, and the architectural style should be coordinated with the traditional pattern of the block. Its purpose is to meet the normal production and life needs of the residents, maintain the vitality within the core protection area, and facilitate the continuation and inheritance of history and culture. The total investment of the project is 1.942 billion yuan, the construction period is from 2021 to 2023. Currently, site leveling and foundation construction are underway. The annual plan is to complete an investment of 500

¹⁶ A time-honored brand in Dongguan Street, a characteristic restaurant in Dalian's history, the birthplace of Dalian cuisine. The roast chicken is very famous.

million yuan, the main task is to complete the repair and protection of the first phase of the project (Data comes from Sohu Dalian website).

Fig.68 Historic building under repair Fig.69 Demolition of illegal buildings



Source: <https://mp.weixin.qq.com/s/iBozxG8xAlAIOK5khnBMDA>

Fig.70 Siyun building

Fig.71 Sub-regional renovation plan



Source: <https://mp.weixin.qq.com/s/iBozxG8xAlAIOK5khnBMDA>

The renovation project of the old city of Dongguan Street was divided into six major areas, with 2,310 existing houses. In the Dongguan Street area, there were three public service organizations, Dalian Second People's Hospital, Dongguan Street Primary School, and Dalian 37th Middle School, which were not in the ranks of relocation and reconstruction.

The historical old blocks are valuable historical and cultural heritages that survived the development of the city, and are the material manifestations of traditional culture.

It is understood that after completing the task of protecting and renovating important historical buildings. According to the safety module (hard module¹⁷: wall protection improvement, dangerous building demolition, civil air defense system, etc.. Soft

¹⁷ Refers to the content that must be updated and standardized.

module¹⁸: universal design, old age modification) Building module (roofing repair, facade repair, public corridor integration renovation and unit entry) Transportation module (hard pavement, safety facilities, paving, etc.) The sequence of environmental modules is comprehensively transformed (greening, tree-lined landscape, activity and rest, etc.).

Fig.72 Activity pictures



Fig.73 Activity pictures



Source: <https://mp.weixin.qq.com/s/JlxGmi5aVz6UPDO4SeJfZQ>

The government held a briefing session, invited more than 20 citizens and local residents to participate. Interpreted the goals of the renovation on the spot, responded to the residents' problems and concerns. Concentrated explanations were made on the transportation facilities, the scope of the historical core area and surrounding areas to be renovated, the future business development, public opinions and suggestions were solicited. A leading group for the transformation of the old city of Dongguan Street was specially established, the subordinate headquarters was responsible for the coordination of residents. Completed the investigation of residents' willingness to collect intent, completed registration, selection of evaluation agencies, and exchanged of questions. Follow the government-led, voluntary, fair and just principles to carry out urban renewal planning.

Fig.74 Consulting



Fig.75 Consulting



Source: News Dalian, photos by Liu, 2017.

It mainly included money compensation, non-monetary compensation, and extended

¹⁸ Focus on caring for disadvantaged or special people.

service.

Monetary compensation: For the residents who needed to be demolished in the core area, residents who chose not to move back after relocation, different options were provided. 15,000-16000 yuan/square meter. **Non-monetary compensation:** including relocation and Property right exchanged compensation. **Relocation:** If the residents' normal life was affected during the renovation, they could relocate after the renovation was completed. **Property right exchanged compensation:** When it came to changing attributes after transformation, chose the area of other vacant housing for replacement. **Extended service:** You could purchase housing in the government's registered housing.

Fig.76 Government issues notice of compensation scheme

东关街 旧城区改造工程 征收补偿方案
(征求意见稿)

货币补偿方案

住宅货币补偿款
=房屋货币补偿价值+搬迁奖励
+临时安置补贴+其他补偿

房屋货币补偿标准

- 所有权房屋的货币补偿价格拟定为**16000元/平方米**
- 使用权房屋的货币补偿价格拟定为**15100元/平方米**
- 在一定期限内搬迁最多可获得**每户5万元的搬迁奖励**

补足房屋建筑面积
被征收房屋建筑面积不足45平方米的补助至45平方米,补助面积部分的补偿标准为**15100元/平方米**

非货币补偿

这次的补偿方案意见稿的制定充分考虑了东关街的实际情况和被征收人的利益,产权调换创造性的采取了政府搭建团购服务平台公开备案安置房屋的方式,让东关街旧城区改造项目的2300多户居民在备案房源中自愿购买房屋。

延伸服务

本次备案的房屋向所有征收人公开被征收人持已签订的《东关街旧城区改造工程房屋征收补偿协议书》都可以在备案房源中选购房屋

Source: <https://mp.weixin.qq.com/s/dtRB1IBwvWXRrhjWZM9ixA>

On August 28, Zhang Yong, deputy director of Dalian Nature, responded to the concerns of residents in Dalian's Dongguan Street and Fengming Street. Explained the progress of the renovation of old streets.

In terms of characteristics: Dalian is the only city in mainland China with uninterrupted tram history. 201 Road runs through Dalian's old city from east to west. With the development of public transportation in our city, the current passenger volume of this line has been reduced, and its transportation function has weakened. Because the cultural creative industry has a growing cultural connotation and artistic development. The development of cultural tourism is also a very important form in the protection model of historical phenomena. we hope to plan and build a cultural tourism route in the future, which can better integrate with local culture, and the

characteristics between local commercial functions and traditional functions. The important node is Dongguan Street. In contrast, the protection mode of cultural tourism development is mainly the protection of architectural entities. A large number of tourists crowded the streets, and the original life mode of historical blocks basically does not exist. Therefore, we must balance its advantages and disadvantages from the overall and the details. As far as the interior of the block is concerned, we hope that the next plan will fully explore some of Dalian's time-honored brands, and we also hope that these time-honored brands can be revived in Dongguan Street. For the content that young people like, it is also appropriately imported, which is a new binding for the city, creating a place that everyone loves (Zhang, 2021). Improve the utilization efficiency of various resources in the neighborhood through "new customers". To build a platform for display, communication and release for the "cultural industry" to stimulate the vitality of the development of the region, so that Dongguan Street can become a new cultural industry of design, creativity and artistic creation.

3.3 Research methods and content

The main methods used to conduct the research had been Field observation, qualitative semi-structured interviews, questionnaires, literature review and document analysis.

Field observation method

White wrote in "Street Corner Society"¹⁹: To truly understand a community, you must truly understand its social structure and people's behavior patterns; and to do this, you must rely on personal experience, immersion, and understanding The trade-offs and games behind every explicit behavior. In the process of research, try to maintain a more neutral attitude in the group (White, 1994). From Husserl's proposal that scientific research should "return to daily life" to Lefebvre's critique of daily life, to Desai's emphasis on viewing daily life from practice. The basic theories of daily life

¹⁹ The book describes the analysis records of White's "mixing" in the cornerville district of the poor Italian community between 1936 and 1940, placing himself in the environment and activities.

research have been continuously deepened and received more and more attention. The survey method of field observation is very important.

The core of Dongguan street was people, streets were gradually developed around people. Different people's behavior habits, life, and working space were different. Focused on the daily behavior characteristics and activity habits of the residents of Dongguan Street; experienced the cultural atmosphere of the street firsthand; felt and analyzed the geographical environment and landscape of the area, found problems and made records; sorted out the industrial composition of the area, etc.

The first step: I visited the whole block, have a holistic understanding of the street.

Observation objects: I chose a few representative observation factors that I think are important. For example: (1) Buildings (including architectural style, architectural function, architectural scale, materials and craftsmanship, design quality, maintenance and status quo of Dongguan street). (2) Land use and landscape: Like the maintenance status of the building, the size of the residential land and the landscape design can also reflect the economic status of the residents in Dongguan street; the spatial arrangement of the landscape (whether it hinders or promotes communication) can also infer the status of communication between Dongguan street. (3) Use of buildings : The situation reflect the activity characteristics of Dongguan Street. By comparing the degree of economic diversity in different regions, combined with economic development and location characteristics, the future development trend of Dongguan Street can be predicted; changes in land use also imply changes in users, business formats, and lifestyles. (4) Architectural decorations and signs: the details of handicrafts used as decorations often contain a considerable amount of household information. (5) People: In addition to people's age, race, and gender, their dressing style can also reflect their preferences, lifestyle and economic status. Observe the daily life activities of the residents in the area, the specific situation of the gathering activities. (6) Public walking environment (including street name, street width, sidewalks, curbs, sidewalk trees, maintenance status). The information of public streets can reflect the historical development and changes of related areas. Street width, sidewalks, and curbs reflect the time when the street was built; the

maintenance status of the street as a public domain can reflect the cohesion of the community and the sense of identity of the residents in Dongguan street. (7) Building layout: The architectural layout includes the relationship between the building and the street, entrances and entrance paths, and the way the building encloses the space. To a certain extent, they determine the transition from public space to semi-public space to private space. The layout of the buildings on Dongguan Street can also hint at the interaction of residents to a certain extent.

Then I chose 3 relatively observation points to observe the behaviors and habits of residents.

Fig.77 Observation location



Source: Author self-painted

The first observation point: I chose the intersection of Fanrong Street and Changjiang Road. The platform of tram 201 is on Changjiang Road, Xigang Market is on Fanrong Street. This was a relatively large flow of people, it was also a place where people often gather.

The second observation point: I chose the eastern section of Changjiang Road, which can reach the Huasheng Street, Dalong Street, and Combination Street in the area.

The third observation point: I chose the intersection of Union Street, and to the south was Dongguan Primary School.

Observation time: I chose different time periods on weekends and working days. Chose two different time periods, working days and rest days. Seeing more people means seeing more clues. It could also be a contrast.

First time: Monday, April 19

Second time: Sunday, May 9

Both days were sunny, ignoring the influence of weather and temperature on the survey results.

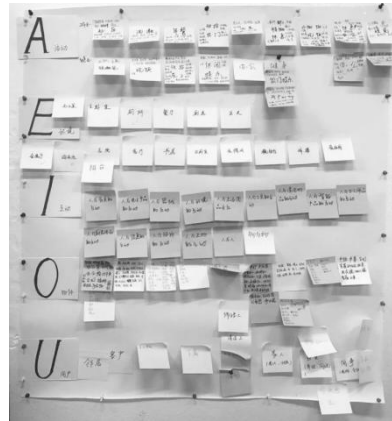
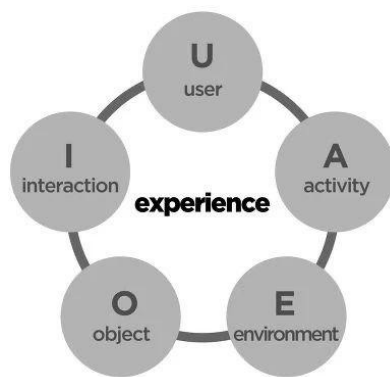
Divided the day into 8: 00-10: 00, 10: 00-12: 00, 12: 00-14: 00, 14: 00-16: 00, 16: 00-18: 00 five time periods. A place was randomly observed for 15 minutes, and the behavioral activities observed within 15 minutes represented the behavioral activities that occurred during the period. Behavior research included: gender, age, behavior type, behavior stay time, and space location where behavior occurred.

Transportation: I chose to walk in Dongguan Street. Walking is the best mode of transportation for research. Compared with other modes of transportation, walking allows me to control the speed of observation. I went to more places that were inconvenient for vehicles. More importantly, walk could be more fully integrated into the environment, the slow speed could combine the observed phenomena with the knowledge and experience in the mind.

Field observation and measurement were carried out on the spot, aimed to truly understand the real physical space conditions of the area, felt the folk customs. Used the professional knowledge of space experience and evaluation, through on-site surveys, on-site drawings and photos of public spaces, public facilities, building appearances, residents' activities and other aspects were recorded, then the space experience survey records were formed by the recording method corresponding to the diagrams and photos. Observed, listened, felt and recorded some things that have happened and are happening in the area in the natural environment. The AEIOU observation method was adopted, focusing on five aspects: user, activity, environment, object, and interaction.

Fig.78 AEIOU observation method

Fig.79 AEIOU observation method



Source: <https://zhuanlan.zhihu.com/p/156928212>

Public Space & Public Life Survey

An assessment of the quality of public space in Dongguan Street and the public living conditions of residents. Understood and mastered the characteristics of people's activities and behaviors in public spaces.

Public space analysis mainly focused on where public space was needed, which public space could be used for public life, what quality existing public space had, how to tap the potential quality of public space and improve existing problems.

The public life survey mainly focused on investigating how the public spaces of Dongguan Street were used and what activities people carried out in these spaces. Recorded the status of people's lives and activities at the selected location. The investigation process focused on factors such as activity group classification, time classification, and group age classification.

Took the photos in the process of my research, the purpose was to record the basic situation of Dongguan Street and the story that was happening.

The expression of the image text of the Dongguan street was just a kind of "collective memory": through the image to expand the experience and cognition of the city, then used the space imagination to convey the interpretation of real life. It came from the perspective of the residents, not the perspective of the bystander. Help us understand the community in the eyes of residents, so as to locate the real problems and needs of the community, finally make the changes that the residents want, rather than the changes that the researchers want to see.

Fig.80 Picture of Dongguan street Fig.81 Picture of Dongguan street Fig.82 Picture of Dongguan street



Source: Author self-photo in Dongguan area.

When organizing and expressing data, I think it is easier to understand using visualization and diagrams.

It's better for me to draw a time map to express what the residents of Dongguan Street are busy at different time periods.

Time Map can show the characteristics of blocks and people in different time periods from the time dimension. We can use this method to predict how related things will develop in the future. For the investigation of Dongguan Street, the use of time map is convenient to summarize the characteristics of different time periods, different locations, and crowd activities.

It's better for me to draw a behavioral mapping to take different areas of Dongguan Street as the center to record residents' activities. Behavioral Mapping is a method of directly observing and recording, analyzing the behavior of people in a specific space and time. This method was first used to study how physical environment characteristics affect people's behavior in the late 1960s, including the level and type of activities. According to the map or the layout plane of the map, record the activity location of the residents of Dongguan Street. Stay at a specific time or area and some other characteristics. Such as gender, age and degree of interaction with others. Use this method to record the streamline behavior of regional residents' activities. Taking the location as the center, record the behavior characteristics of the sample in a specific space. So that can understand what types of people, at what time, and what activities are carried out in different areas in this rhythm.

It's better for me to draw a cognitive map to understand different people's perceptions of Dongguan Street.

A map that reflects people's ability to remember and associate with the geographical environment. This method is a form of collecting environmental information. It can reflect different residents' perceptions of Dongguan Street. It is an expression of the intersection of geographical environment and human activities. It can express the residents' obvious preferences and needs for environmental facilities.

Fig.83 The example of the cognitive map

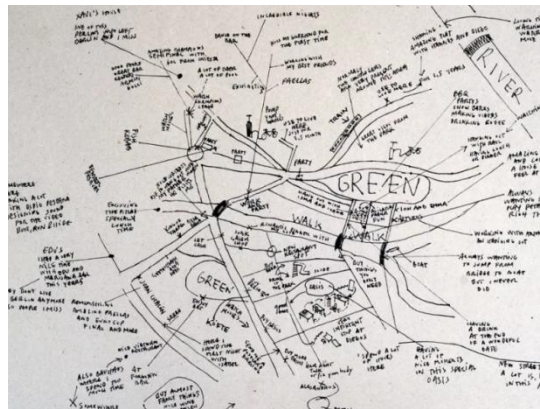
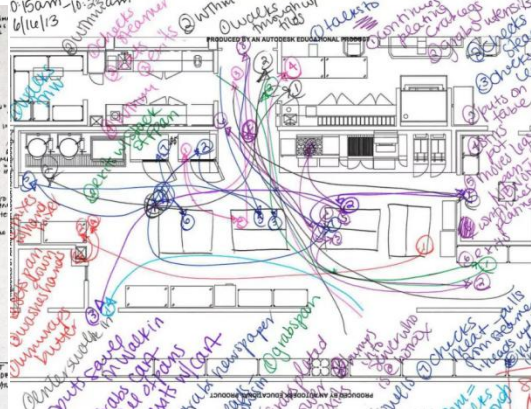


Fig.84 The example of the behavioral mapping



Source: <https://zhuanlan.zhihu.com/p/156928212>

Field research is like peeling an onion: understanding others from the outside, observing the behavior trajectories of different social strata, and analyzing their internal causes and potential connections.

Literature review

Collection and study of theories related to the renovation and renewal of the physical space and social space of old neighborhoods. Collected and learned from the previous cases of the transformation of old neighborhoods in China and the world.

Case comparison study-a comparative study of current cases of protection and renewal of historical locations at home and abroad. Understanding and introducing other planning experience was one of the important means to promote the development of planning theory and practice. The premise and foundation of borrowing from other mountains was to carry out comparison and research, that was, to first understand the experience or planning methods of foreign countries and other cities, and then to localize the amendment and use of the methods. Avoid copying that lead to "unacceptable". The production and application of each method had its own specific background or soil. The key to the research was: In order to make a certain

method of place A work in place B, it was necessary to analyze how to make corrections based on the background of place B. In response to this problem, we should focus on the "means-background" relationship, rather than just understanding the background.

By summarizing the experience of the protection, renewal of urban historical and cultural blocks in Beijing, Shanghai and other developed countries. Analyzing, comparing, learning various existing protection and renewal models. Finally put forward measures to effectively protect , renew historical and cultural blocks .(Chapter 2)

Archival research, document and media collection

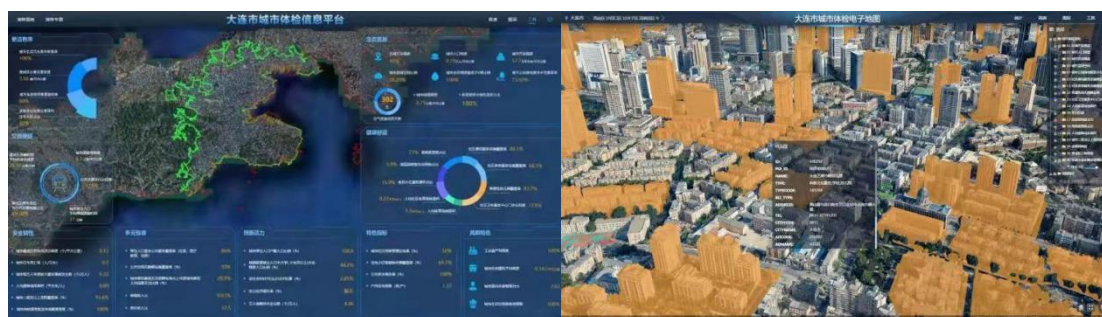
In accordance with the development and change process of the block, collected relevant documents of each historical stage as much as possible, so that the collected documents maintain continuity and accumulation in time, could reflect the development and change process of social phenomena. The planning texts of the old historic districts include "Dongguan Street Immovable Cultural Relics Protection Plan", "Urban Purple Line Management Measures", "Dalian City General Planning", "Regional Control Detailed Planning" and so on. All kinds of materials in the mass media, newspapers and magazines. Include text and video data. Documentaries "The Corner of the City -- Dongguan Street, Dalian" and "This Life Without Coming"

The increasingly popular urban basic geographic information data provided better conditions for the measurement of large-scale street physical space and the environment in which the street was located. For example, the open street map (OSM), Tencent map, etc., the numerical quality in Chinese cities was improving day by day, which facilitates the acquisition of basic information on urban streets. The emerging street view pictures (SVPs) and other massive data with people as the benchmark perspective provided an important data source for street research. However, it was temporarily unable to reflect temperature, emotion, sound, atmosphere and other environmental information. The method was convenient, and it was not restricted by weather, time, and location.

With the development of the times, new data (including government data, open

organization data, social networking site data, etc.) had a large sample size, dynamic, and time-sensitive characteristics. We used the Dalian City Physical Examination Information Platform to obtain regional big data to give macro support. The purpose was to obtain geographic information data and accurate population data of Xigang District and Dongguan Street. This was something we could not be precise in our field research.

Fig.85 Dalian City Physical Examination Information Platform



Source: Dalian City Physical Examination Information Platform

Qualitative semi-structured Interview

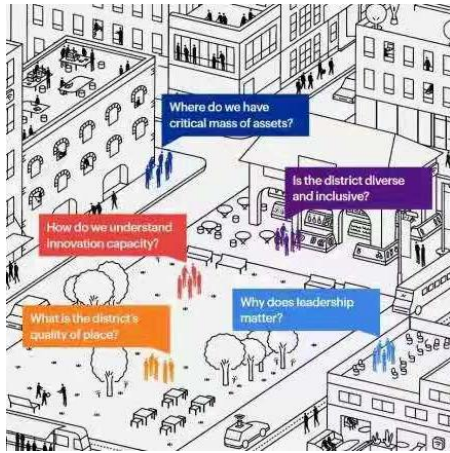
Used an unstructured (informal) interview method, the purpose was to use open questions to generate qualitative data. Had some in-depth conversations with the interviewee, the respondent chose his/her own answering method. This helped to have a deeper understanding of hot issues and actual conditions. At the same time, it could eliminate the nervousness of the interviewee and helped to obtain more information.

Conducted in-depth interviews with relevant personnel in the region.

In terms of population selection, I selected groups with different ages, family backgrounds, genders and representative characteristics.

Chose a representative person for the interview. A more detailed understanding of the special circumstances of a case, as well as his intricate influence and relationship with other aspects of society, facilitate the proposal of targeted solutions. Through interviewed different people, we could grasp its inherent laws and development trends. From this, we could recognize the viewpoints, life, psychological characteristics and social needs of various groups of people.

Fig.86 Schematic diagram



Source: NNGroup.com

Among those willing to be interviewed, I conducted 5 qualitative semi-structured interviews with people living and/or working in the area. Among them, interviewer A is a friend of my grandma's, talked a lot to me. The E interviewer is a planner in charge of the project in the internship unit. The rest of the interviewers were found on the main street and small shops. Use the form of street visits to ask questions about the community space experience and the rules of life activities. In order to reflect the needs of community development and the renewal of existing settlements as truthfully as possible, interviewees were selected from different ranges. In the case of fully respecting the wishes of others, as far as possible, selected people of different ages and genders for interviews.

Grandma A, who lives on the edge of this area, is 72 years old and lives with her husband for more than 30 years. The children are out of town. For retirees, the monthly pension is about 2500 yuan, and their living is guaranteed. Often move around with other people of the same age in the residential area. She likes to dance and drop by to chat.

Aunt B, who lives on the edge of this area, is 38 years old. She and her husband are both from Anhui and chose to work in Dalian. I chose to live here because of the geographical location of the area and the low rent.

Uncle C who used to live in this area before. He is 40 years old and has lived for 18 years. For a better living environment, He moved to the house in Ganjingzi District²⁰ in 2019. The main job is security, and the salary is 3000 a month. His brother still

²⁰ The outermost urban area in the central city of Dalian, The cost of living here is relatively low.

lives in this area. He still often comes to Dongguan Street to find his brother.

Ms. D, who lives in the surrounding apartment area, is 29 years old, a white-collar worker from a company, with a monthly salary of 15000+. Work is very busy.

She rarely walks into the area. She believes that the environment in the area is too bad, the area is not safe and has no contact with the residents of the area.

The designer E of the area. Participated in the construction of such projects many times.

Also can do some researches with people on Internet.

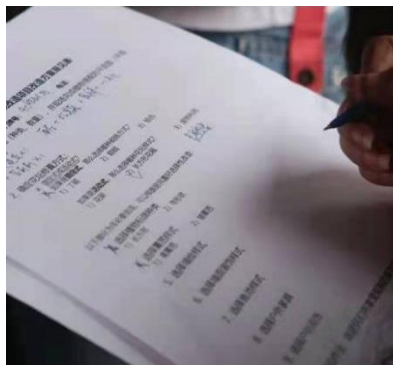
According to the interviewee's social attributes, living habits and consumption behavior and other related information, make user portraits (focus on residents' motivation and behavior).

Questionnaire

A common tool used to collect data in social investigation and research activities. Questionnaires with unified design were used to understand the situation of the respondents and to seek opinions and collect information.

Previously, the Detailed planning team(My intern group) issued 150 questionnaires to the residents lived in Dongguan street and received 106 valid responses. I summarized and sorted out the questionnaire questions again. The main information focus was on basic information, neighborhood status, sense of identity, life satisfaction, and willingness to reform. The purpose was to make a general understanding of the situation of residents in the region According to the different questions, use Yes/NO to answer, open questions...

Fig.87 Questionnaire



Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

Questionnaire design

Individual level variable survey: Individual factors have an impact on the construction of social relations, the identification of the living environment and its social space. Statistics of individual-level variables such as gender, age, education, family status, occupation, and residence status.

Neighborhood interaction analysis: Including related issues such as familiarity with neighbors and contact status.

Identity analysis: Including participation in community construction, participation in community activities, recognition of community activities, and concern for issues such as community affairs.

Do activities with: Pay attention to the social networks of local residents.

Life satisfaction analysis: Pay attention to residents' satisfaction with hardware infrastructure and social service facilities.

Investigation on Demolition Willingness : Do you wish to leave here? what is the reason.

Likert scale was used to analyze the open scoring questions.

The Likert scale could be used to measure how people score on a particular question. The scale is composed of a group of statements, and each statement has five answers of "strongly agree", "agree", "not necessarily", "disagree" and "strongly disagree", which are recorded as 5, 4, 3, 2 and 1 respectively. The total score of attitude of each respondent is the sum of the scores he gets from answering each question. This total score could indicate the strength of residents attitude or them different status on the scale.

Fig.88 Likert scale

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
(1)	(2)	(3)	(4)	(5)

Source: <https://www.simplypsychology.org/likert-scale.html>

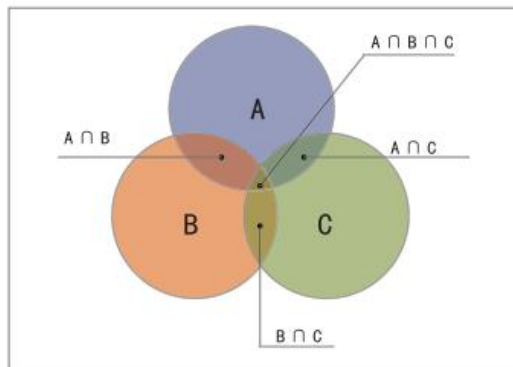
After completing the research work, I sorted out the information obtained.

Useful information was classified, extracted and summarized, so that the materials could be systematic, complete, concentrated, and concise to reflect the facts. For

digital data, the results were clearly displayed through visualization. I Identify related factors, prioritize, and understand core issues.

Used the intersection approach when collating data materials and identifying information priorities.

Fig.89 Judgment of the importance of concerns



Source: NNGroup.com

" $A \cap B$ ", " $A \cap C$ " and " $B \cap C$ " represent the content of the intersecting two common concerns and belong to the second level of attention; " $A \cap B \cap C$ " represents the content of the intersecting three common concerns, which belongs to the first level of concern.

3.4 Reflection on the research process

I took notes at any time during the research process. I thought taking notes is a very important part of my work. Used to record what you saw and heard in a day, someone said a certain point of view. Conducive to subsequent supplements. In the later process of organizing the notes, I mainly focused on showing the relationship, that is, I wrote out what I saw in a straightforward manner, and in the process of writing, I tried to restore the original appearance of the matter without bringing too much subjective emotions.

In the process of "participation", I experienced and understood the views of "insiders" more closely. At the same time, I required to maintain the status of "outsiders" at any time, forming rationality and reflection after observation. In turn, a conscious balance was maintained between familiarity and distance, insiders and outsiders.

Controlling the overall situation is also something I need to pay attention to.

There also bad errors in the information obtained. The survey data was deceptive. When investigating social background, it was difficult to ensure the authenticity of respondents' answers in different forms and scales of survey practices. For various reasons such as the possible "Hawthorne effect"²¹, on the one hand, the interviewee would refuse to answer the question, on the other hand, the respondent may answer the question randomly or in the opposite direction for cover-up or other reasons. This lead to deceptive answers. No one could appear at all the life scenes of the interviewees to verify the information and statements that emerged at the survey site. What I need to do is to think about the default discourse restrictions on the research site and minimize interference factors.

Respondents' perceptions of themselves and the topic. Regarding the survey of social attitudes or perceptions, a very important issue that investigators tend to ignore was the unevenness of the respondents' perception of themselves. In fact, many people did not know what their true thoughts are. This lead to the fact that in the answering process, the real thought be "very bad" but the feedback be "normal". At the same time, the interviewee's understood of the topic was also an important factor affecting accuracy.

Some of the problems exposed, these problems appeared in different stages of social surveys, but the common point was that they affect the authenticity and accuracy of the data in the quantitative research. The question of whether the data captured from the society by the existing social survey methods were consistent with the real situation of the real society.

²¹ Refers to when the observed person knows that he has become the observed object and changes his behavior.

Chapter 4 Analysis and results

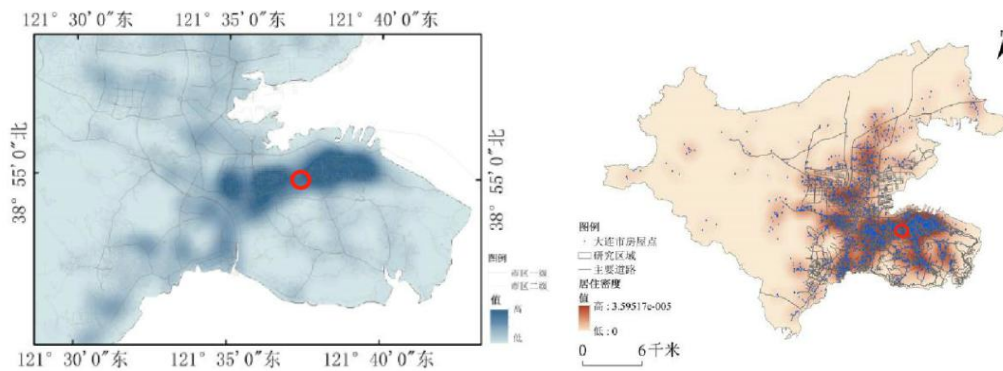
This chapter is the part of result sorting, visualization and analysis.

Based on first-hand data obtained through field observations, questionnaire surveys, interviews, and second-hand data obtained from literature review. Organized, analyzed, classified, and summarized. Got an overview of the physical space and social space of the Dongguan Street area. Display through analysis diagrams, visual icons, and textual expressions in this chapter.

When use these clues to analyze Dongguan Street, we pay attention to two points: the one is to combine different clues for speculation and corroboration, and the other is to pay attention to the changes reflected by these clues. Analyze whether the change is positive or negative. Research the causes of positive changes and their relevance to protection planning. At the same time, I focus on analyzing the causes of negative changes.

4.1 Dongguan Street physical space analysis

Fig.90 Dalian Road Network Density Map Fig.91 Distribution map of residential density and urban public facilities



Source: *Research on the Renewal Method of Existing Residential Districts in Dalian*, 2020.

The road network density and residential density are both high.

The existing relatively systematic basic service functions of the Dongguan Street block include education, medical care, and passenger transportation. The block has a relatively complete residential area and a shanty town. There are vegetable and fruit stalls, grocery stores, roadside food stalls, snack bars, hairdressers, hotels, etc. run by residents spontaneously in the shanty towns. Dongguan Street has the function of a

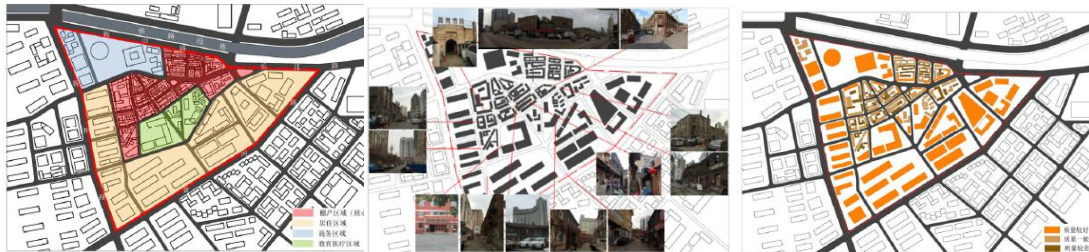
small commercial street.

In comparison, residential land occupies a relatively large area, which can account for about 64%.

Fig.92 Current status of functional zoning Analysis

Fig.93 Current Situation

Fig.94 Block building quality



*Red-Shanty Area Yellow-Residential Area
Blue-Commercial Area Green-Education
and Medical Area*

*Orange-better quality
Grey brown-average quality
Brown-poor quality*

Source:Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

Most of the buildings in the core protection area are 1 to 2 stories, accounts for a relatively high proportion. The outer buildings were completed relatively late and have a high height(Most were built around 1990-2000). The overall height increases progressively from the center to the periphery, the shape of the entire block is relatively flat. In terms of construction quality, there are more than 66 first-class buildings in the central area, accounting for 17.65%; more than 54 second-class buildings, accounting for 15.54%; and more than 86 third-class buildings, accounting for 12.73%. The four types of buildings have the largest number, with a total of more than 168, accounting for 54.08% (Dalian Planning Bureau 2017).

Type I buildings: buildings with high quality and high value.

Type II buildings: buildings with high quality and average value.

TypeIIIbuildings: buildings with average building quality and average value.

TypeIVbuildings: buildings of low quality and no retained value.

The TypeIVbuildings are mostly timber frame buildings, because the service life of their building materials has long been overdue, and the building quality is lower than the normal human settlement standard.

Fig.95 Surface texture

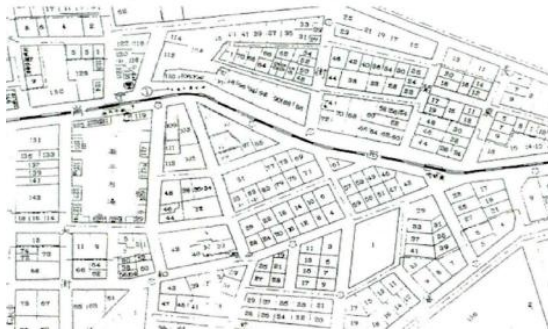
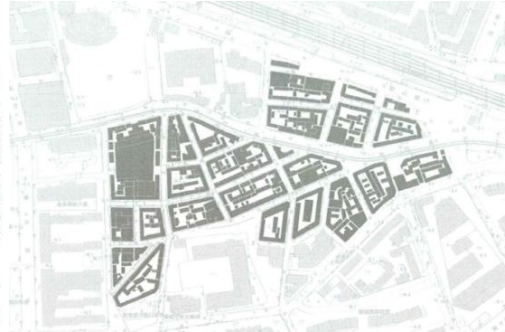


Fig.96 Surface texture



Source: <http://blog.sina.com.cn/qingyiuyiye>

It reflects the relationship between the building and the city. Comparing the existing surface texture map of Dongguan Street with the plan of the Xiaogangzi district during the colonial period²², it can be found that in the past 100 years, the Dongguan Street plot has basically maintained the urban texture of the early days of Dalian's establishment. The form of the group is enclosed, the shape of the group is mostly irregular quadrilateral, the streets are arranged neatly.

The borders around the Dongguan Street block are the main urban roads with a width of 24 meters and 18 meters. There are 19 secondary roads in the block of Dongguan Street, 9 vertical streets and 10 horizontal streets, with a high density of streets and lanes, is mainly slow traffic and walking. The width of the road in the block is about 6 meters, 3.5 meters, 2.5 meters and 1 meter. The roads in the block are relatively narrow, mainly for pedestrians, Vehicles rarely pass from here on. Most roads have no definite functional division. There is a serious interference between people and vehicles. Road traffic is chaotic, resulting in reduced traffic efficiency. Since the government did not invest too much energy in the area before, there is no parking lot in the block, so the main traffic in the block depends on the adjacent city main road. It is dangerous and can easily cause traffic jams. The most important one of the adjacent roads is Changjiang Road, which is the main traffic road in the city. In addition, trams were also laid along the Changjiang Road, dividing Dongguan Street into two parts: the north and the south.

The overall living standard in the Dongguan Street area is relatively low, and there is

²² Japanese and Russian occupation of the administration period.

no plan for the greening in the Dongguan Street area during the construction period. In the streets, there is not enough space for planting street trees. There are several old trees with history in the area. They are old acacia trees with white flowers, and the acacia trees are street trees in old Dalian. Acacia has a beautiful meaning of waiting to return, and it is a special symbol of immigration culture. In the process of continuous development, the population in the block continues to increase, and the relatively limited space of the block has been gradually occupied. The whole block of Dongguan Street is less green. One is restricted by overcrowding and the other by perennial neglect.

Fig.97 Road analysis



Red-main road

Green-secondary road

Fig.98 Green analysis



Fig.99 Comprehensive classification



Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

Based on the comprehensive consideration of the above factors (including the historicity and integrity of the building; the traffic and greening of the block; the importance of the block, etc.), a comprehensive zoning of the area is carried out.

Among them, Type One (purple area) is the core area. The environment in this area is harsher, but the value type is also higher. It is the area that needs special attention.

The characteristics of the street

(1) The core characteristics of street and buildings:

① The block of Dongguan Street in Dalian has a certain scale, the historical buildings in the area are very concentrated, the block is in the core area of the city. It is very convincing as a representative block that reflects the architecture and culture of the modern city of Dalian.

② The architectural style of the block is unique, combining Chinese and Western styles. Its typical architectural features are mainly reflected in the following: its

facade imitates the European architectural style, and the spatial structure continues the traditional Chinese courtyard style.

③The texture style of the street is unique. The European texture is mainly used, and the closed form is stricter.

④The facade of the building presents a rich and diverse row of architectural forms, seamlessly docking between the buildings, the form is diverse and continuous.

⑤As a former trading street in history, Dongguan Street is a street suitable for people walking in order to facilitate the commuting and exchange of merchants and buyers. This scale is different from the scale of pedestrian streets in modern blocks and the scale of sidewalks in modern residential quarters. Therefore, the crowd activities in this block also have a very unique effect. It's just now heavily occupied.

(2) The historical and cultural value of the block:

The buildings in the Dongguan Street block are different from the modern buildings in other areas of Dalian. The modern buildings in other areas of Dalian were mostly built by foreign invaders, their styles are entirely based on European architectural elements. The Dongguan Street architecture has distinctive Chinese traditional characteristics because of western learning from the east. In addition, the Dongguan Street area is the representative area of the modern Chinese people, which fully embodies the distinctive national wisdom and characteristics in terms of culture and architecture. Continued many social traditions. In the Area of Dongguan Street, the materials and construction techniques of buildings in different ages are different. Thus creating different architectural styles, but also bearing different humanistic spirit. It has special historical value.

(3) The economic value of the street: Dongguan Street is very conducive to the modern economic transformation of the block due to its historical economic development evolution. Because of the successive emergence of modern economic industries around Dongguan Street, it is very conducive to the construction of economic links between Dongguan Street and its surrounding facilities. Finally drives the economic construction of the entire development block as a whole.

(4) Low rents provide shelter for many migrant workers and disadvantaged groups.

Existing problems

The description of the problems in physical space are based on field research, observation, and documental analysis, in particular: the preservation and renewal of urban historical blocks (Luan 2014); the renewal study of Dalian Dongguan Street block based on symbiosis theory (Xu 2015); the renewal of Dongguan Street by (Dalian Planning Bureau Project team planning 2019).

①The house is seriously aging

Many houses in this area had problems after years of use, such as: aging of equipment and pipelines, deterioration of housing functions, serious loss of housing structure and materials, such as breakage of exterior walls, rotting of wooden windows. Residential lighting and ventilation conditions need to be improved.

Fig.100 Real picture



Fig.101 Real picture



Source: Photos by author

In addition, the style is better mixed with the general style and even self-built houses. Modern historical buildings are mixed with newly built multi-storey buildings. The addition of self-built buildings and the sporadic transformations have increased the complexity of the mix.

②The environmental landscape is poor

The vegetation and green areas in the community are generally degraded. And the plant species is single and lacks design. The lack of landscape design in the area does not take into account the growth of plants, the change of seasons and people's lifestyles. Only a few trees left over from history. In winter, there is no green and no vitality in the community.

Fig.102 Real picture

Fig.103 Real picture



Source: Photos by author

③Lack of public venues

Lack of necessary facilities, and places for the elderly to exercise and relax. Some public places are also seriously occupied by illegal buildings built privately and motorcycles parked at will. The distribution of public places cannot meet the needs of surrounding residents. The service facilities required locally are in dilapidated condition, and most of the cultural functions are left with only symbols.

④Single spatial level and lack of communication space

The patterned layout of the living environment is basically a parallel arrangement of strip spaces. This layout makes the space outside the cell a repetitive space. The spatial hierarchy is monotonous and lacks identifying public space. The landscape environment also lacks enclosure, and it is not easy to form a friendly place for communication.

⑤ The municipal infrastructure is obsolete and inconvenient to use

The municipal service facilities planned and constructed by the government are basically complete. However, some of the street lights, trash bins, publicity columns are in abnormal use due to lack of management and maintenance. For example, the pavement is severely damaged and the surface is broken; the drainage pipes are not drained smoothly; the overall sanitary environment of the community is poor.

Fig.104 Real picture



Fig.105 Real picture



Source: Photos by author

⑥No one manages, there is a safety hazard.

At the intersection with the main road, the phenomenon of intrusion of vehicles is serious. This not only directly leads to the dirty and poor environment in the area, but also brings many problems to the public order of the community.

Fig.106 Real picture



Fig.107 Real picture



Source: News Dalian

⑦Contrast with surrounding area,inconsistent with the development of surrounding areas.

Fig.108 Real picture



Fig.109 Real picture



Source: <https://bbs.focus.cn/dl/131572/b364d8752a171612.html>

There is a lack of coordination between the huge volume of the surrounding new high-rise buildings and the neighborhood's approached-scale. The street scale of Dongguan Street is between 4 and 9 meters. It is a typical pedestrian block scale space, but now it is surrounded by modern high-rise buildings around it, which makes the space feel very oppressive. The addition of inner blocks has affected the original block layout which is designed according to the road direction ups and downs. Block texture was destroyed, internal and external troubles.

From the perspective of the entire block, the block space that is suitable for the traditional town pattern has become an incompatible part of the modern town pattern. The surrounding new buildings, streets and public spaces are no longer related to

traditional neighborhoods. The central position and the rules of streets and lanes when the traditional blocks were formed are difficult to maintain, they have become isolated spatial aggregates in the urban space.

⑧Complex property rights ²³on Dongguan Street

The change of time has led to intertwined property rights relations and different property rights subjects. The types of property rights in the block include private houses, state-owned shared houses, unit-use houses, and mixed-use houses; the insignificant definition of public space property rights leads to environmental degradation. The above-mentioned problems not only cause confusion about the responsibilities and rights of relevant stakeholders, reduce users' willingness to renew and protect spontaneously; but also make it difficult for the government or developers to deal with the intricate relationship of property rights, increase the difficulty of the protection and renewal of historical and cultural blocks.

⑨The problem of business renewal. Dongguan Street has a native commercial and cultural format, which grew out of historical events or regional commercial needs. These original commercial cultures are often passed on for hundreds of years, and they have gathered time-honored commercial brands, local specialties, and old tastes of the city's tongue-rooted memories. These are the essence of the city's commercial culture. Now it has been more severely damaged.

4.2 Dongguan Street social space analysis

The results of the analysis of social space are based on questionnaire surveys, interviews, and government demographic information reports. Express it more clearly through visualization.

Based on the census data of Xigang District of Dalian City, the survey data of Dalian City Planning Institute is summarized²⁴: The permanent population of Dalian Dongguan District is 15,000, of which the floating population is 3,000-4,000, which is about 17%.

²³ Part of the property in the area is not clearly defined or affirmed by legal procedures.

²⁴ Source:https://stats.dl.gov.cn/art/2021/6/11/art_3812_700674.html

The age composition of the population in the block is mainly elderly people, accounting for about 70% (More than 55 years old) , followed by the middle-aged people (30-55 years old) accounting for about 20%. Youth accounting for the 10%, and in which more children who are in elementary school.

Chart.6 Resident living situation analysis

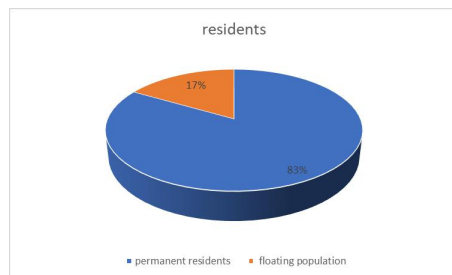
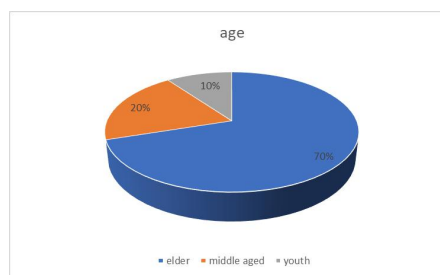


Chart.7 Analysis of residents' age



Source: Author self-painted

Obtained through the survey questionnaire and the survey data of Dalian City Planning Institute (The following data results) :

Among the residents surveyed, most residents moved in after the completion of the housing construction and have lived there for about 25 years. According to questionnaire survey statistics, the number of residents who have lived for more than 20 years accounted for about 55%. The residence period of other migrant workers is between 1-5 years.

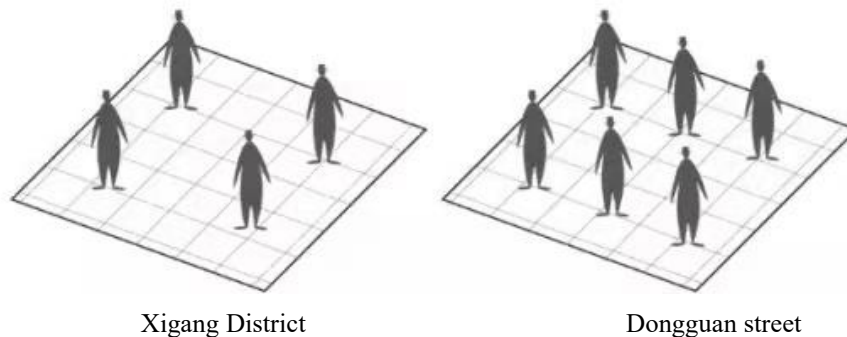
According to the work report of Xigang District, according to incomplete statistics, the per capita housing area ²⁵in Xigang District is 30 square meters per person. The per capita housing area in the area where Dongguan Street is located is about 16 square meters per person. This shows that the living conditions in this area are below the average line. The area is more crowded. According to the standard of per capita housing area given by the Chinese Academy of Sciences project team, the general standard is 20-30 square meters per capita; the comfort standard is 30-40 square meters per capita(Research on the Quantitative Indexes of Urban Family Residents' "Housing and Living" 2021²⁶). The per capita area of Dongguan Street only exceeds

²⁵ The per capita housing area is not only an important indicator to measure whether there is a house to live in, but also an important indicator to measure whether to live in a good house.

²⁶ Determine the standard of per capita housing area based on the use needs of people, and study from the perspective of ergonomics. Check from the level of land resource supply.

the bottom line standard (the bottom line standard is 13). Significant improvements need to be made.

Fig.110 Comparison of population distribution density



Source: Author self-painted

From the perspective of education level, the survey results show that only 4.3% of the population in the region have an education level of university or above, while those with a junior high school and below account for 79.6%.

The employment of regional residents is mostly manual labor and low-end service industries. Retired workers and laid-off workers account for about 43%, those with no stable income account for 31.2%.

More than half of the residents in the area live by themselves or with their spouses. There are also some parents who go out to work and leave their children to the care of the elderly, forming a model of grandparents + grandchildren. Only a handful of them live together with one family. For the migrant workers, they are basically living alone in a small space. The structure of family members is relatively small, and most of them appear as unit members.

Fig.111 Family structure

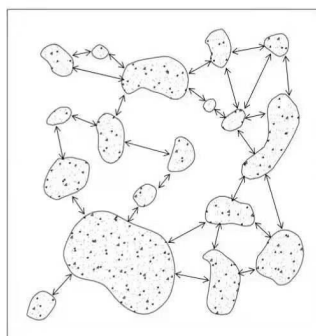
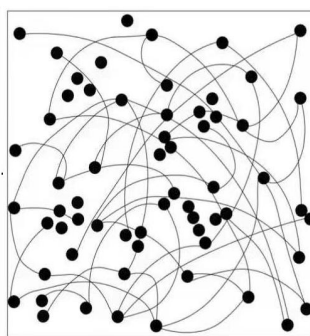


Fig.112 Unit structure



Source: Research on the structure of regional residents ,liu ,2017.

The resident population is declining, and the population is ageing seriously(Dalian

seventh National Population Census Bulletin 2021). As people's requirements for living conditions continue to increase, the outdated infrastructure and living conditions have caused most of the younger generation to leave.

Compared with Sixth Census Data, the Youth accounting decline from nearly 19% to around 10%(Dalian seventh National Population Census Bulletin 2021&Dalian sixth National Population Census Bulletin 2011). There is a gap in the intergenerational inheritance of residents in this area. Young people, high-income earners, and those with high education levels gradually escaped. Both the starting point and opportunities for human capital accumulation are at a disadvantage. These have also deepened the impression of poverty in the region and restricted the development of poverty reduction in the region.

The poor in the region are generally older, less educated, have a single job skill or lack the necessary job skills(Summary from the basic information of the questionnaire). The employment direction is mainly labor-intensive industries with relatively low technical requirements, especially the tertiary industry that is dominated by public service industries. However, due to low economic income and limited overall consumption power, it is difficult to promote the development of the service industry, so the job opportunities that can be provided are very limited. At the same time, the roads in the area are disorderly, traffic is congested, housing construction density is high, and the living environment is poor. The image of poverty in the settlements has been strengthened, the development of various industries has been slow. To a certain extent, this also reduces the employment opportunities for residents in areas where poor strata live. Vulnerable groups are highly dependent on the public transportation system. Limited by funds, buses, bicycles, and walking are the tools to connect them with other urban elements. The Dongguan Street area has huge advantages in the diversity and time distance of public transportation. According to the concentric circle model theory mentioned in Chapter 2, the existence and development of Dongguan Street is also in line with the law. It can better provide service support guarantee for the Central District.

The hollowing phenomenon ²⁷has appeared, the direct manifestation is the loss of "people"(Dalian seventh National Population Census Bulletin 2021&Dalian sixth National Population Census Bulletin 2011). Phenomena such as block empty and waste, industrial decline and waste of resources are largely due to the chain reaction brought about by the loss of "people". The population structure is unbalanced, the main body of labor is missing; the land is empty and wasteful; the infrastructure and public services are vacant, the regional cultural inheritance is broken, the organization is declining.

There is a trend of spatial solidification ²⁸of the poor. The registered poor population in this area is solidified in the existing space(Rixin Street, Xigang District, Dalian, 2020). The main reason is the lack of the ability to actively choose a residence. For a long time, it's only a process of self-consuming and self-repetition on one level. The differentiation of living space limits their efforts to expand their social networks and learn new life knowledge to a certain extent. This intensifies their dependence on the original relationship, making them tend to repetitively construct relationships within groups in the same community. Its social interactions have obvious and constantly strengthened homogeneity and internal. Long-term living in a declining poor community will have a net impact on residents' life opportunities. The biggest harm of this kind of negative feedback chain is that it will destroy the ability of the community to deal with crises and problems, make it lose the necessary social capital, and finally it is difficult to get rid of the shackles of poverty.

This part was organized according to the results of the survey questionnaire, and the key data information was extracted and displayed in a visual form.

²⁷ Refers to the massive outflow of various social resources such as young and middle-aged manpower and production in Dongguan Street. This results in an imbalance in the structure of the regional labor force and an unreasonable age structure of the population. This led to the rapid desolation of the region and the serious lack of endogenous development motivation. And then formed the hollow distribution in the spatial form. This has caused a large number of social and economic problems such as left-behind children, empty-nest elderly, low land utilization, environmental degradation, potential safety hazards, conflicts and disputes.

²⁸ Flows inside and outside the area are blocked.

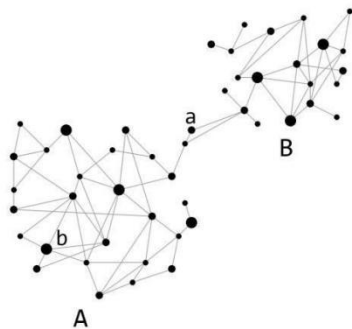
Statistics of Regional Information Dissemination Channels(Data comes from questionnaire survey)

The dissemination of information in Dongguan street mainly relies on daily neighbourhood conversations, which account for the largest proportion (40%). Public events (20%), rely on organizational notifications or publicity (25%). The proportion of information obtained through social networks is relatively low, only about 10%. About 5% of people get news through other channels.

The way of dissemination of information can reflect the scope and activity of interpersonal communication from the side. It can be used as one of the standards to measure the connection and intimacy of the area. The data proves that Dongguan Street is more active. In Dongguan Street, the relationship between people is closer. The traditional way of interpersonal communication based on geography and kinship still occupies a dominant position in the society, the social network of residents is smaller and the degree of dispersion is lower. In addition, it is greatly influenced by traditional culture, which will contrast with the modernity of urban residents to a large extent.

In a social network, not all individuals are directly related. A condition in which some individuals are directly related to each other, but not directly or without connection to others. It's like there's a hole in the fabric of the social network. There is a structural hole phenomenon in the Dongguan area. Relevant information needs to be relayed by a "third party" (such as a friend we know together) before it can be transmitted. And this "a friend", from the perspective of "social network", occupies an important position in contacting both parties.

Fig.113 Schematic diagram of structural hole (a is in the position of structural hole in the figure)



Source: <https://m.fx361.com/news/2019/0113/6283646.html>

With the development and progress of science and technology, the embedding of social networks is not only changing the structure of society, but also affecting the daily life. More and more people are choosing to use new media for communication, WeChat, QQ, etc. Judging from existing research, the influence of new media on interpersonal communication in Dongguan Street is not very prominent.

The main way for disadvantaged groups to obtain information is through traditional means other than digitization. Information disseminated by traditional means of communication is more likely to accumulate in Dongguan Street. Therefore, the transaction cost of obtaining this information in Dongguan Street is lower than the transaction cost of obtaining information in other parts of the city. Under the influence of their own economic characteristics, residents who mainly rely on traditional means of information dissemination to obtain information must maintain close contact with the neighborhood.

Do public activity with(Data comes from questionnaire survey)

Primarily with co-workers (18%) with loved ones (24%), with friends (20%) with neighbors (28%) with common interests people (10%).

The probability of residents in the area to move with their neighbors is as high as 28%, which indicates that a good regional social network has been formed due to the long-term living time dimension and harmonious relationship.

Chart.8 Regional information transmission channels

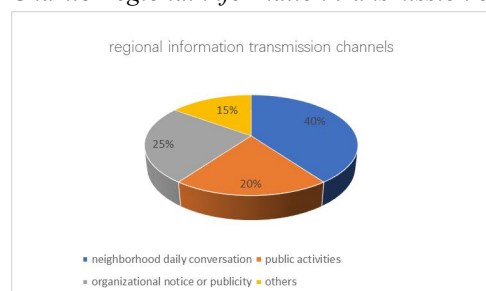
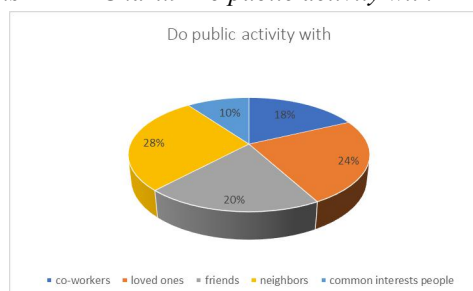


Chart.9 Do public activity with



Source: Author self-painted

Neighborhood relations(Data comes from questionnaire survey)

In the evaluation of neighborhood relations, 78% of the survey respondents are familiar with their neighbors, 39% of the survey respondents visit each other, and more than 30% have helped their neighbors in times of difficulty. Residents are

familiar with each other, the regional architectural space and street layout have more gray space environments that provide social interaction. Therefore, neighbourhood exchanges among residents in the area are more frequent and common. The proportion of regional identity is higher, and the residents are more united.

But between migrant workers and local residents, this state of affairs has significantly weakened. If migrant workers fail to buy a house and settle down, they will not be able to achieve true citizenship. Therefore, most migrant workers stay in a wandering, unstable life state for many years.

The social network in Dongguan Street is mature and complex. From individuals to families, social organizations, communities, shops and enterprises. Every subject is more or less embedded in this network, relying on the resources provided by the network for endless life. The elderly residents who have lived here for decades and those who own small shops are eager to improve the living environment, but are unwilling to leave. In Dongguan Street, the lower social class is the migrant population who drags their families to work in the city. Some of them work part-time in nearby shops, while others lease a storefront to run their own businesses. Because all aspects of their lives and work have to rely on informal arrangements, their economic losses and cost of living will increase more than expected due to the destruction of their social network. But in fact, they have not really integrated into city life. The long-term stratum differentiation and the uneven distribution of social resources brought about by the consolidation of stratum, the lack of group identity and other issues will lead to greater social contradictions. Such issues deserve our attention.

Participate in community or group activities²⁹

The participation of households is still relatively high, with 43% of the “frequent participants” and 25% of the “occasional participants”.

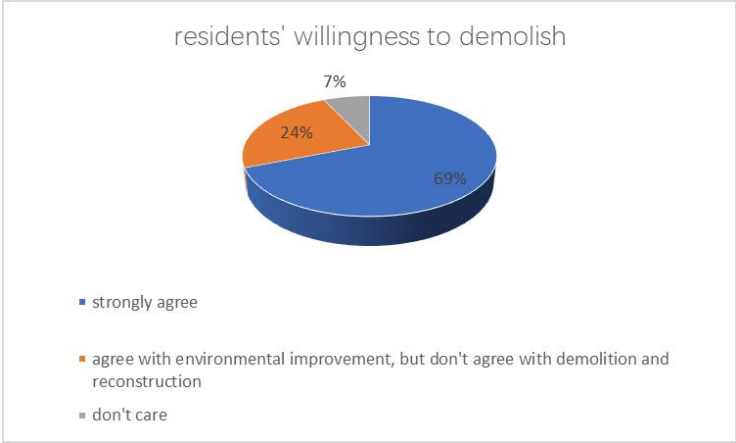
Willingness to transform and life satisfaction(Data comes from questionnaire survey)

Most residents are not satisfied with their current living conditions (78%), and have a

²⁹ Refers to cultural and sports activities spontaneously organized by communities or neighborhood committees, etc.

strong willingness to upgrade and restructure the area. But there are also some worries, embodied in the worry about the uncertainty of future life, the worry about the convenience of life. They are generally worried about losing friends after moving away. The cost of living in the new place of residence is high, the transportation is not convenient, and they cannot adapt to the new environment.

Chart.10 Residents' willingness to demolish



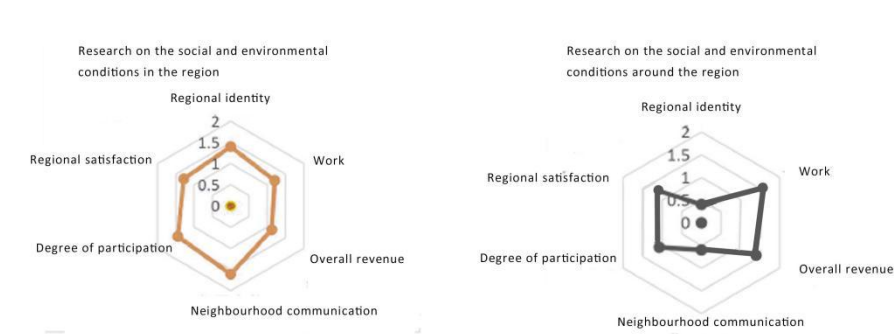
Source: Author self-painted

Over half of the residents still support the transformation, hoping to have a better living environment and quality of life in the future.

Contrast with surrounding area

Dalian Urban Planning Institute and Urban Development Group draw based on the social status data of the area and surrounding areas.

Fig.114 Compared between Dongguan street and surrounding area in Xigang District



Source: Repainted by the author

This graph compares the overall revenue, work situation, neighborhood communication, regional satisfaction, residents' identity between Dongguan street and surrounding area in Xigang District. It is found that Dongguan Street is significantly

ahead of the surrounding areas in terms of regional identity, neighborhood communication. It shows that after a long period of co-living, the old residents of Dongguan Street have formed a better social network connection. Relatively speaking, there is a sense of regional identity.

Potential problems compared to surrounding areas in Xigang District

Residential differentiation

Residents' occupational types, income levels, and cultural backgrounds are relatively different. The central area of Dongguan Street, the fringe area and the newly-built external community have produced serious residential differentiation. Moderate residential space differentiation is reasonable to some extent. However, excessive differentiation and isolation of the residential space pattern will lead to the social phenomenon of strong contrast. There may be many negative social problems hidden. Living space isolation stimulates people's nerves with intuitive visual impact. It has a negative effect on the social psychology, self-identity of low-income and other vulnerable groups. Thus inducing their sense of injustice and relative deprivation, even resentment.

Spatial exclusion will bring about total exclusion in socio-economic and cultural aspects. It is likely to have more serious consequences-social polarization. Further depriving the lower classes of life opportunities, the Matthew effect of the rich getting richer, the poor getting poorer, leading to sharper class antagonisms.

Service facility differentiation

Dongguan Street is located in the central area of the city. Many high-end shopping malls, top office buildings and other places have been built nearby. The power class and wealth class in the city are active. Occupying a street or gathering in a certain municipal area, the expensive, extravagant goods and services they sell form a natural barrier that discourages ordinary people. Even if ordinary people are interested in wandering in such areas, the living standards and consumption levels of residents in Dongguan Street are very different from this. Form an invisible barrier.

Differentiation of public space

The public space in the city is mainly represented by streets, parks, squares, etc. It is a

place based on open space for urban residents to relax, entertain, meet, and communicate. Traditional squares, parks and other leisure places for everyone are now more and more isolated and exclusive, the differentiation of public spaces is becoming more and more obvious.

The use of the street in everyday life-Found through on-site observation

The research on the residents' behavior habits in Dongguan Street can help us to determine the rationality of the spatial form, functional layout and facility details of Dongguan Street to a large extent.

Most of the activity-gathering places of residents in this area gather on scattered land with irregular and no specific functions to meet the needs of a variety of activities. Most of these scattered spaces are residential areas and small open spaces close to residences. There is also a certain degree of privacy and territoriality. This phenomenon is extremely obvious on rest days. Residents passing by subconsciously pay attention to the ongoing activities in the surrounding area, forming a gathering phenomenon in a small area. As I saw at the observation point, several old men were playing cards, a lot of onlookers gathered around. Several women chat on the steps at the door of the house, and the residents passing by will join in. Every time the playing children pass through a street, the team will grow.

Chart.11 Time map

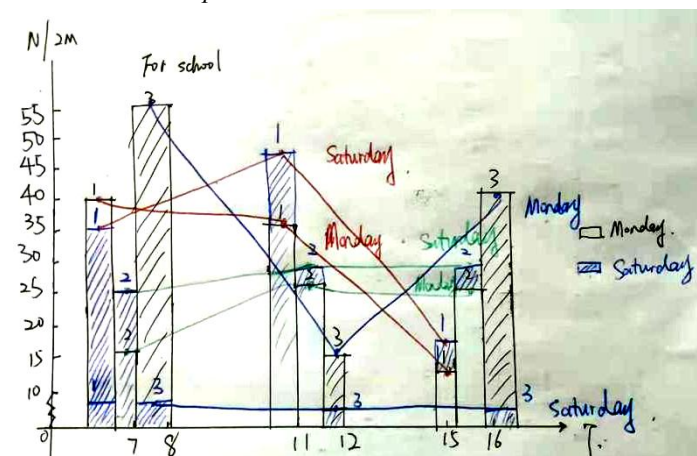
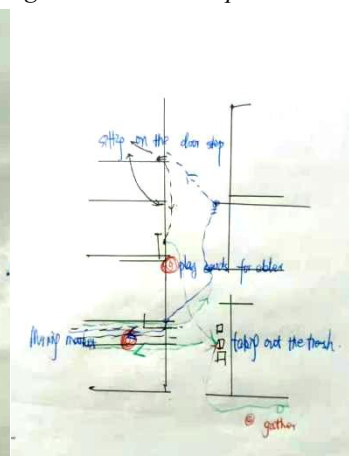


Fig.115 Behavior map



Source: Author self-painted

It can be clearly found that the street near the school at location 3 on weekdays:

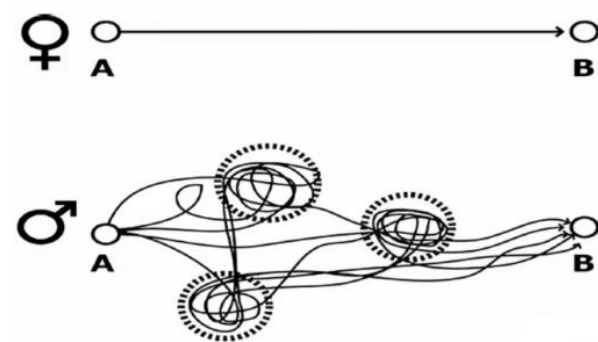
From 7-8 o'clock, from 15-16 o'clock, the flow of people increases sharply. Parents who pick up and drop off their children like to gather and chat together. On the rest

days, there is a huge contrast and there is less traffic.

The traffic in the area of location 2 is stable, and the traffic on weekends is slightly larger than that on weekdays. There is little aggregation.

Location 3 Because of the market, the flow of people in the morning is significantly greater than that in the afternoon. And the peak traffic time on Saturday is later than Monday.

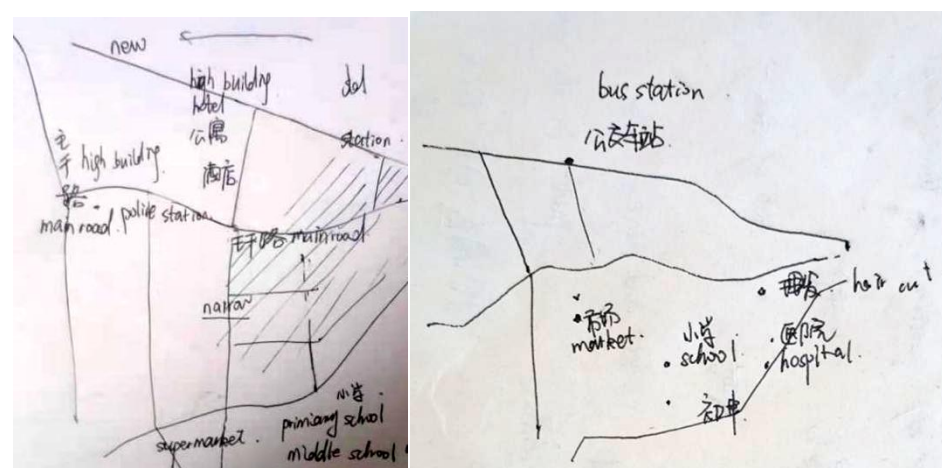
Fig.116 Behavior map



Source: Author self-painted

There is a gathering phenomenon in the street. The gathering of women is more obvious. According to observations, it is found that women's activity curves are more active, more scattered, and prefer to walk around. Men are more concentrated and purposeful. For example, gather at one point to play cards.

Fig.117 Cognitive Map



Source: Author self-painted

Discovered by sorting out residents' memory maps of the area: Residents have accurate memories of life service facilities, stations, markets, barber shops and other

locations. Explains the importance of these places to the daily life of residents. These areas are also areas with a large flow of people.

Observe and learn about the interactions between neighbors and communities.

Fig.118 Walking the dog together, having dinner, buying vegetables, helping to dry clothes, watering the flowers, playing cards and chess



Source: Author self-painted

Understanding of residents' thinking and living conditions. According to observations, the main activities of residents in this area include walking dogs, shopping for vegetables, watering flowers, washing clothes, playing chess and cards. The difference is that residents in this area like to do housework together, such as sitting at the door and chatting while doing laundry.

Fig.119 Daily life of residents in Dongguan Street



Source: <https://mp.weixin.qq.com/s/iP0mYYwawsAMpV8bFg8cYg>

Discovered through interviews

Even though the environment here is poor and the living conditions are rudimentary, they still enjoy their life here. Their ancestors have lived here for generations and have good memories. There are strong emotional bonds between old residents. This kind of social network is not experienced by residents living in surrounding newly built communities. The excellent location here also saves the workers a lot of time. Everyone still has a lot of affection for Dongguan Street. The planner's idea of the area also confirms this point, hoping to preserve the historical imprint of the area and the emotional network of residents.

“I moved out of Dongguan Street for a better environment. Although the living

conditions are better now, the traffic is not as good as there. This area is inconvenient and requires a long bus ride” (Old uncle C).

“Don’t look at the many buildings in the new residential complex, but you don’t know as many people here than in the old house. I just walked the stairs to get to know each other, but there was no in-depth contact other than that. Now there is no relationship between neighbors. When you go out and he goes out, no one knows anyone. It's not like in the old days when 30 or 40 families lived in the neighborhood compound and knew each other”(Old Uncle C).

“I think my life here is very happy and lively. It's quite comfortable to drop by, buy groceries, and chat”(Grandma A).

“Our buildings are like a family during the day. It is inevitable that there is a big deal and a little thing to be exchanged. Usually someone borrows things from house to house if they have less stuff. Especially when someone encounters a big problem, someone needs to discuss it. At this time, the neighbors will play a big role”(Aunt B).

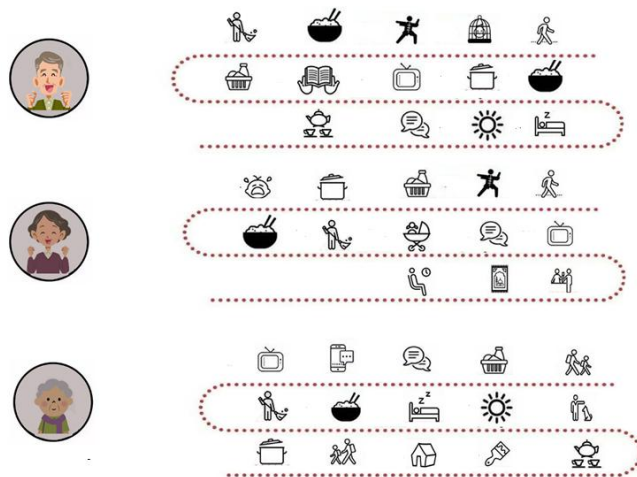
"The whole community is fragrant in the evening. It's not an exaggeration. The aroma of the food will overwhelm everything." The main street lamp bracket is very high, and the light projected is orange. There is a wonderful world under each street lamp: some are Old people play chess, some are chatting three to five, and some are children playing games"(Grandma A).

"Nothing has changed. The house has not changed. The house next to it was later built. It turned out that the next door was a small garden. Now the garden has become a house. The next door has become a restaurant. It turned out that there is no house in this half, and the air is old. Okay, now you see that the air can't get in"(Aunt B).

The living conditions most described by the residents are:

Get up at 6:30 in the morning, prepare and eat breakfast; send your grandson to school at 7:00; go shopping at 7:30 and just walk around; come back at 9:00 to pack and cook; 11:00 sit at home and chat, or Watch TV at home; sleep for a while after lunch at 13:00; pick up more grandsons at 15:00; take grandsons for a walk after dinner at 18:00; walk home at 20:00 (Zhang, female).

Fig.120 Life streamline diagram



Source: Author self-painted

The survey results show that regional residents are looking forward to the transformation of future functions. It presents the characteristics of multiple and composite functions, different groups of people have different needs for facility space.

Children: Safe play space, food snacks and stationery stalls.

Middle-aged and elderly people hope to increase the number of vegetable markets, barbershops and living supermarkets, focusing on the convenience of home life. It is also hoped that outdoor recreation facilities will be added. A safe space for children to school.

Young people believe that the facilities around the area can basically meet their needs.

If there are venues in the area, express delivery sites are even better.

The demand covers basic services and quality improvement.

Feeling the needs and behaviors of residents from multiple perspectives, combined with other research results, can ensure the authenticity and reliability of the subsequent planning scheme of the community.

Get information through online research

Through word frequency analysis, the high-frequency characteristic words related to the reconstruction of the old blocks of Dongguan Street are obtained. In the word cloud shown in the figure, the frequency of words in the text material is proportional to their size in the word cloud. It can be seen that the issues that residents are most concerned about include: space, cleanliness, landscape, greening, housing and so on.

Fig.121 Relevant views of netizens

Fig.122 Keywords of Netizen Opinion



Source: Dalian News media Group official account - netizen message,2020.

Fig.123 Relevant views of netizens

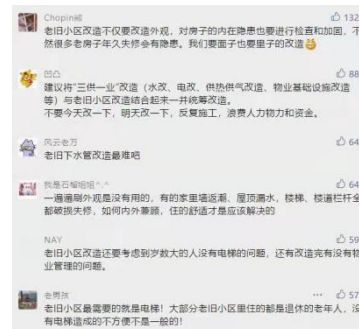


Author self-painted

Fig.124 Relevant views of netizens



Source: Dalian News media Group official account - netizen message,2020.



Summary analysis based on the above data results

The loose management of the residential area, frequent population movement, complex personnel composition and chaotic road network make this area a poor living environment, which is a "gray area" of urban development. Restricted the social network of the urban poor. Residents in areas where poor and floating populations live from outside or those in areas where poor people live in the old city center show a certain degree of isolation. Due to differences in socio-economic status and cultural background, residents in areas inhabited by impoverished and floating populations are vulnerable to rejection from residents who have always lived here, develop a certain degree of resistance. The social network of Dongguan Street is based on geography and kinship. It is more exclusive to short-term migrants.

The development of this region is at a standstill, the focus of urban development has shifted. Historic districts are reduced to fragments of the city and become the most backward areas in the city. Street physical structure, economic structure, cultural environment and other aspects of development stagnated. The protection of human environment has not been given enough attention. The stagnation of the development of historic districts results in the decline of population quality, the reduction of population quantity and the low economic capacity. The decline of economic capacity

will inevitably lead to the deterioration of building conditions and neighborhood environment, also means the reduction of population. In short, historic districts are in a vicious cycle.

Dongguan Street is losing its unique and diverse culture little by little. They are losing a little bit of the atmosphere of humanity and civic life. The continuity of regional context is affected.

Dongguan Street has long used a government-led closed space governance model. On the one hand, the absence of laws and systems has made public participation a mere formality. The single decision-making body, strict hierarchical system and backward feedback mechanism are difficult to coordinate the public's increasingly diversified and individualized development demands. On the other hand, the government's comprehensive management method has caused residents to be in a passive position for a long time, and they have developed the habit of over-reliance on the government. Residents' participation enthusiasm and subjective initiative are weak, their self-organization and participation capabilities are poor.

Chapter5 The renewal strategy of Dongguan Street

The main purpose of this chapter is to propose a suitable renovation strategy for Dongguan Street. In view of the physical and social problems existed in Dongguan Street. Refer to the successful experience of other old neighborhoods and combine the actual conditions of Dongguan Street to give targeted development strategy recommendations. Large-scale transformation is not conducive to the preservation of the historical culture and social network of the region. In comparison, the method of coupling renewal is more suitable for Dongguan Street.

5.1The early stage of the thinking

More careful and meticulous planning is required before the start of the renovation project. Preliminary research needs to be more cautious and reasonable to weigh the interests of all aspects, and to make adequate preparations and in-depth studies for possible challenges. Only in this way can the forward-looking and scientific nature of the regional renewal be further improved. The negative effects and various risks brought by the hastily initiated demolition can be avoided. Therefore, it is necessary to conduct a systematic analysis of update plans, strategies, implementation procedures and modes.

In Dongguan Street, historical buildings are relatively concentrated. It can truly reflect the past development of the city. When modern cities develop in a similar fashion, such special blocks are even more precious.

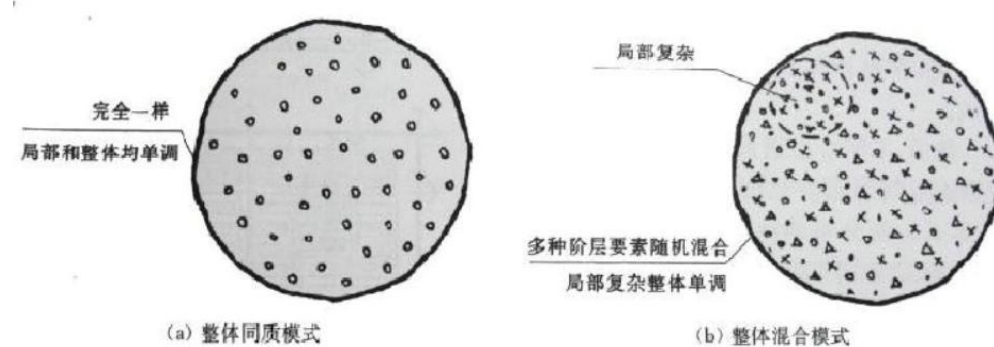
- ①How to coordinate protection and future development, respect the needs of residents?
- ②How to link the protection of old buildings with local characteristics, the traditions of residents, and the new functions of the city?
- ③How to combine transformation with residents' adaptation?
- ④ How to protect the special cultural value and wealth of Dongguan Street and protect the social network of residents?

These are all issues that need to be considered when proposing a strategy. The goal is

to meet the basic needs of residents, while protecting the blocks, while stimulating the vitality of the blocks, so as to maximize the interests of all parties.

Many problems cannot be solved in the short term, we need to focus on the long term. Avoid the problem of narrowing the horizon in research and consider many possibilities in the future.

Fig.125 Street pattern



Source: *A Sociological Analysis of the Spatial Model of Urban Blocks*, Wu, 2016.

Dongguan Street is currently in a state of partial complexity but monotonous overall. More factors need to be mixed to enhance the vitality of Dongguan Street. Reactivate the development of the area.

How to recognize the change process and social value of old communities, optimize and integrate community quality with space, activate community culture and economy is a new idea of renewal and transformation.

I found that the success of the reconstruction of old residential areas would need three conditions. Can be summed up as “right time”, “right place”, and “people”. Time is to have a suitable institutional environment to break all kinds of obstacles. Geographical location is to use the original conditions, can stimulate the enthusiasm of transformation. Finally, the support of the residents.

From the nature of the work, the old residential renovation is not a short-term project, but a long-term work. It is an entry point for urban work. The ultimate goal is to realize the transformation of urban development and the improvement of the overall living environment. Our group need to focus on long-term and sustained progress.

The reconstruction of old residential areas is not a one-man show of the government, nor a one-man show of a certain department. It's a symphony played by many.

Dongguan Street's situation based on a single perspective of the renewal model can not deeply solve its development problems. It is necessary to comprehensively consider the relationship among the population, society, industrial economy, and physical space. In order to improve the quality of the community's living environment, the vitality of social interaction and the commercial value of cultural tourism. By reactivating the hematopoietic function of the region, the activation and revitalization of the community with sustainable vitality can be realized.

5.2 Influencing factors

Population structure is the comprehensive mapping of Dongguan street social and economic development, it is the core point. Population structure influences the future development of cultural environment, economic vitality and spatial quality of the region.

The impact of household registration source on space utilization

Residents in this area are highly mobile and there are many floating populations. These mobile short-term renters are more concerned about whether the rent is convenient(from the survey), are not sensitive to the quality of the living environment and the convenience of space use. Because of the long-term sense of belonging and familiarity in the community, the local residents will pay more attention to whether the spatial layout and facilities are in line with their daily habits, they are more willing to express and optimize their spatial appeals.

The influence of age structure on space utilization

Space care should be given according to the behavior characteristics of each age group. In the future, Our group should first strengthen the transformation of ageing and barrier-free aspects, and pay attention to the activity space.

The impact of employment income on space utilization

Due to economic constraints, some residents in this area cannot afford the extra social and sports costs to enrich their spare time. Therefore, the dependence on residential space is very high, and it is very important for residents to enjoy low-cost and comfortable external public space.

The influence of behavioral factors

In Dongguan Street, due to the lack of planning in the regional space, Cause the uncertainty of spatial users' behavior. Objectively speaking, the reason for the above-mentioned is the difference in space usage habits, the subjective reason is that the difference in the composition of residents has caused the division of space usage groups. The group's social status, occupation, hometown, age and other personal factors form the individual's unique behavior preferences. People with similar social identities and preferences live nearby to form a "neighborhood circle". The habit differentiation brought about by this kind of neighbourhood circle in turn strengthens the spatial difference.

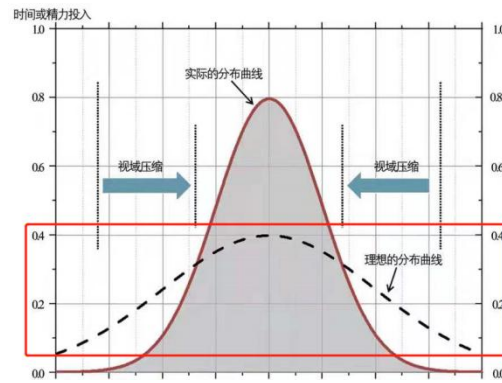
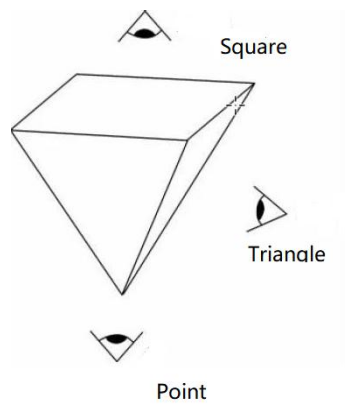
For areas with clear behavior patterns, it is easier to propose targeted strategies for spatial update based on actual conditions. Accurately locate the reconstruction target in a limited space; for areas where residents' behavior is random and unpredictable, the public space should be given sufficient flexibility and leeway to meet the changeable behavior of production and life. Therefore, the main point of the update is to form an inclusive space "network" system. Pay attention to the coexistence of the rich to the bottom, the strong to the weak, local to foreign, modern to traditional attitude. Form the greatest common divisor to enhance the sustainability and endogenous power of development.

5.3 Multiple subjects in the process of transformation

There are always different people and organizations involved in the process, and their subjective understanding is affected by factors such as values, interest considerations, mobilizable resources, time constraints and other factors. Form different or even conflicting subjective values and opinions. Focus on the main point of view to meet the interests of Residents, government and Dalian Vanke Real Estate Development Co. LTD.

Fig.126 Participants from different perspectives have a subjective understanding of the same thing

Fig.127 Distribution curve under ideal conditions



Source: <https://mp.weixin.qq.com/s/OMEyVmSD97WsO41Gb4Dyiw>

Source: International Planning Forum, 2020.

Fig.128 The appeals of all parties



Source: Repainted by the author

Value differentiation, collision of values: For example, road engineers are concerned about how to make motor vehicles flow more smoothly and build more and wider roads to alleviate traffic congestion. Government officials pay attention to the visual image of the street and are keen to refurbish the street interface. Residents need safer streets and more facilities for rest and activities. At this time, the collision of values is revealed.

Ideally, it is to pay attention to the balance of each element and give more input to the key parts. Instead of focusing on a certain part.

The following data were collected at the working meeting led by Dalian Municipal government, The participants of the meeting were representatives of all parties(Under no special circumstances, this meeting holds once a month to discuss the latest

progress).

From the government's perspective: Improving people's livelihood is the most urgent task; create functional areas and promote economic development. Plan to adjust the regional economy, use the changes in regional functions to drive the status quo of industrial development, and achieve economic growth. The government needs to take the lead and control. According to the survey, investigation and understanding of the current situation, the urgency degree and implementation time series of the reform are quantitatively analyzed. On the other hand, understand the wishes of residents. Guide the society to conduct fair evaluation. Give more attention to the interests of residents, reduce social contradictions.

The perspective of the development enterprise(Dalian Vanke Real Estate Development Co. LTD): the pursuit of maximization of the value of land exchange. Strive to achieve the most efficient use of land, optimize the positioning of functions, and strive to develop high-end products. Pay more attention to short-term benefits. Developers mainly conduct calculations and evaluations from an economic point of view. Through the comparison of cost-benefit situations, they can understand the feasibility and profitability of renewal projects in old residential areas.

For outsiders³⁰, They prefer the preservation of historical buildings and culture in the area. However, for those who have lived here for generations, they have to face oppressive physical spaces and dilapidated infrastructure in their daily lives. They start from the perspective of daily life, their understanding of the neighborhood is the insecurity and inconvenience of living. They cannot get the services and facilities that modern city life should have. At the same time, each resident as an individual is different, and residents' evaluations often show diversified characteristics. However, for a particular topic, in general, residents' wishes and perceptions may show consistency or similarity. Perhaps it is a necessary condition for the establishment of the renewal project. Residents are the best supervisors in street renewal. Residents are the largest group of living blocks in Dongguan Street. Residents' sense of belonging to the street and the cohesion between residents are the basis for smooth progress of

³⁰ Other residents who do not live here.

all work in street renewal. In the renewal of Dongguan Street, residents are the best supervisors. They play a vital role in the business operation, residential rental and the maintenance of the neighborhood environment.

Respect the will of the stakeholders who are most directly affected by the renewal of the old settlements. They hope to protect their own interests and rights while improving the living environment. The renter of the house also wants to maintain his own rent income.

The parties mentioned above “acted together in order to fight for or maintain a certain common interest or goal, and formed their own interest groups.” In a sense, the renewal of historical locations is essentially a process of interest adjustment and reorganization. They all have different wishes, like protecting history and culture. Realize sustainable development, improve the living environment, promote the development of commercial tourism, etc. Therefore, it should be embodied as a process in which various interest groups finally reach equilibrium through multiple games. " But in fact, some strong interest groups have greater influence, which has caused many unsatisfactory phenomena. It may be economically successful, but it has abandoned the diversification of some individuals. Isolate the family and the neighborhood, the organic communication of the community. The sense of network is broken. Cause an overall decrease in regional quality.

Space justice is the core driving force for urban renewal, it attaches importance to the balance of the rights and interests of relevant stakeholders. Particular attention is paid to the individual and fragmented small needs of socially disadvantaged groups. Cover all levels of demand.

Herzfeld (2017) called for public discussions among various disciplines and stakeholders to break the barriers of discourse. Cooperate with all parties above and below, maintain an open attitude, deal with the interests of the vast majority of people. It is not an official process that determines the needs of the public. The next thing to do is to constantly observe, listen, talk to the authorities and planners. "We are not planning in a vacuum, but have serious social consequences and impacts. We need to know how to affect the lives of people in a given community and place. This is a big

problem facing the world" (Herzfeld 2017).

In the spatial dimension, common problems need to be standardized.

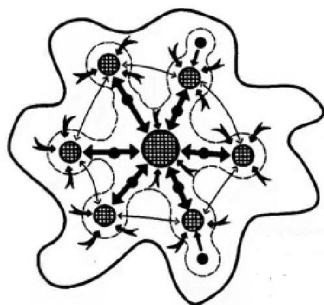
In the human dimension, the needs of the crowd need to be subdivided and differentiated.

In the time dimension, dynamically growing community update needs. We can't just solve the contradictions at this stage. We need to dynamically adapt to the growth and changes of the community and the needs of the population.

5.4 Theoretical basis for choosing the coupled update method³¹

Urban physical space is the basis for the existence of social space. The increase in demand for urban social space is the driving force for changes in physical space. The formation and improvement of urban social space is the ultimate goal. The two influence and interact with each other, and jointly outline the overall spatial pattern of the city through their coupling and interaction. Specifically, it can be summarized in three aspects: the role of space base, the role of space restraint, and the role of space guidance. Social groups will also make choices about the physical environment and exert influence on the space.

Fig.129 Coupling example diagram



Source: <https://mp.weixin.qq.com/s/Bkrok7SyAlAcRl5IMqIetw>

Comprehensive connection between the elements. The coupling method pays attention to the law of action between urban space elements, and emphasizes the

³¹ Solve problems in a complex way.

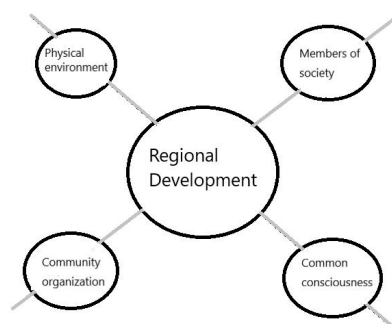
Coupling: The phenomenon in which two or more systems or two forms of motion influence each other and even unite through interaction.

Coupling was originally a basic concept in physics. In recent years, the term coupling has been widely used in social sciences, urban planning, geography and other disciplines.

overall systemicity, complexity and comprehensiveness of the space.

Friedman pointed out in the process of studying Chinese cities that the study needs to be carried out in various dimensions. He summarized 7 aspects, including demographic dimensions, cultural dimensions, economic dimensions, ecological dimensions(Interview with Professor Friedman in International Planning Journal 2006). He believed that the dimensions of physical space and the governance of all members of the city could be studied individually, but ultimately they need to be studied as a whole, because they were interdependent, and no one dimension could affect other dimensions at the same time. The influence of other dimensions existed. Friedman's point of view clarified the comprehensiveness of urban space research. These seven dimensions could be summarized into two dimensions: the physical level and the social level of the city. The physical level includes spatial elements, ecological Environment, industry, etc. The social level includes factors such as population, culture, and institutions. Urban spatial structure can be regarded as a combination of the physical layout and the spatial distribution of social constitutions in the urban space. This research on the interaction between urban physical and social space will reveal the development and evolution of urban spatial structure. An important perspective on characteristics and formation mechanism.

Fig.130 Relationship

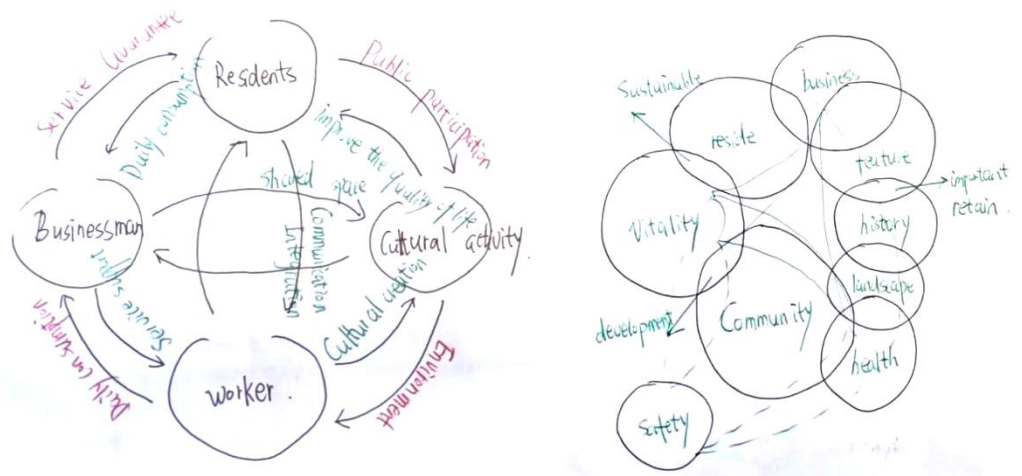


Source: Repainted by the author

Regional development is determined by the joint forces of many factors. It can't be changed by one party's efforts.

Fig.131 Relationship

Fig.132 Factors



Source: Author self-painted

There are many factors in Dongguan Street, and they all influence and interact with each other. Regional renovation and renewal generally involve all aspects, and products planned by linear thinking will only be simple results.

Select coupling elements and connect these coupling elements in series. All coupling elements will be connected to each other, forming a huge physical space network. And each material space carrier corresponds to the corresponding intrinsic value.

Dongguan Street is the result of people living and production gathering in specific places. What Dongguan Street embodies is the relationship among a specific group of people, a specific space and location. The resulting series of social relations, social structure, norms and social systems, etc. At the same time, both the space and the people are in a process of constant change. Therefore, the discussion needs to start from the relationship among people, space and place.

Regarding the protection of Dongguan Street, the Xigang District Government once envisaged that only a few representative courtyard buildings would be preserved and repaired, other surrounding buildings would be demolished and reconstructed. But this method appears as inappropriate; just keeping a few single buildings will eliminate the diversity of spatial forms, which also means that social actions based on this will be taken away. Only by effectively converging diversified social spatial forms, and even restoring the life form belonging to the prosperous era of Dongguan Street. In order to re-establish this traditional cultural street.

Dongguan Street has a complicated socio-economic structure, which is gradually formed after a long historical development. Provides rich and pleasant living space and employment opportunities for people of various income classes. Just imagine, simplified large-scale transformation will completely destroy this structure. The increase in land and property prices will cause most of the original low-income residents to be unable to return, and some residents will lose their source of income. The neighborhood will also become deserted, and it will be difficult to form a vibrant neighborhood again.

Public participation in large-scale transformation is very limited. Large-scale renovation projects that lack public participation cannot draw on the opinions of all parties to formulate a reasonable renovation plan. Not only harm the interests of many original residents, but also often fails to satisfy new users in the future. Therefore, serious disputes and negative impacts on society are prone to occur.

As far as the old city reconstruction is concerned, demolition and reconstruction are more economical than organic renewal, with shorter time and higher efficiency, eliminating the trouble of doing detailed work. It is also favored by developers because of its profitability. However, the historical context of the neighborhood, the society, and the atmosphere of life will also be destroyed by this. From the perspective of sustainable development, the loss is immeasurable and irreparable. There also lack of flexibility in planning and design. It will inevitably lack historical and cultural connotation, it is also boring in space.

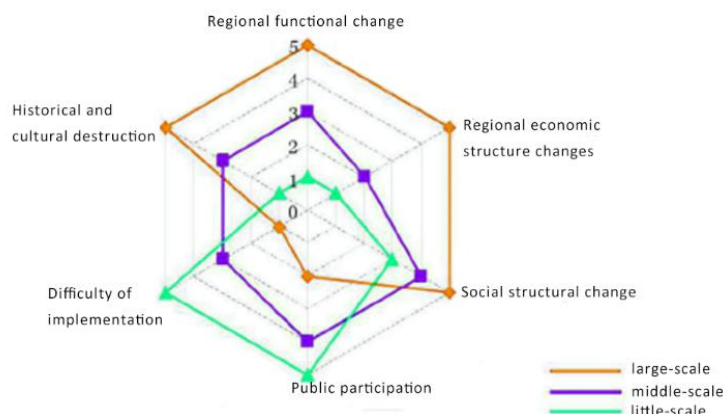
It is necessary to continue the continuity of physical and social space so that the city can grow organically on the basis of traditional spatial structure. Present the historical state from the past to the present, while maintaining its cultural characteristics. The characteristics of a place can only be revealed through real, deep and natural forms.

In history, many scholars have also criticized large-scale transformation. "The Death and Life of Big Cities in the United States" emphasized the complexity of cities, advocated gradual small-scale renewal. It believed that small-scale renewal was full of vitality and was indispensable for viable cities(Jacobs 1961). The "History of Urban Development" emphasized that urban planning, construction and renewal

should be human-centered, focusing on the basic needs of people themselves, and conformed to the human body scale (Mumford 1961). "Urban Non-Tree Structure" criticized the urban renewal movement based on large-scale transformation from a behavioral perspective, emphasized the importance of the cultural value of the city (Alexander 1965).

Based on the above reasons and analysis, large-scale demolition or even complete demolition of Dongguan Street is the first way to be denied. The recent documents issued by the Ministry of Housing and Urban-Rural Development of China also confirmed this. The first was to insist on delineating the bottom line to prevent urban renewal from deformation and distortion; the second was to insist on staying as much as possible, to keep the memory of the city; the third was to adhere to the ability to do the best, steadily promoted the transformation and upgrading. Avoided "large demolition and construction." Aimed at improving function, not construction. In addition to the "demolition of the old and new" plots, the overall transformation of the entire area's infrastructure, public services, and existing buildings was a very important content. In principle, the area of demolished buildings in urban renewal units (districts) or projects should not be greater than 20% of the current total building area. The local and nearby resettlement rate of urban renewal units (districts) or project residents should not be less than 50%.³²

Chart.12 Compared



Source: Repainted by the author

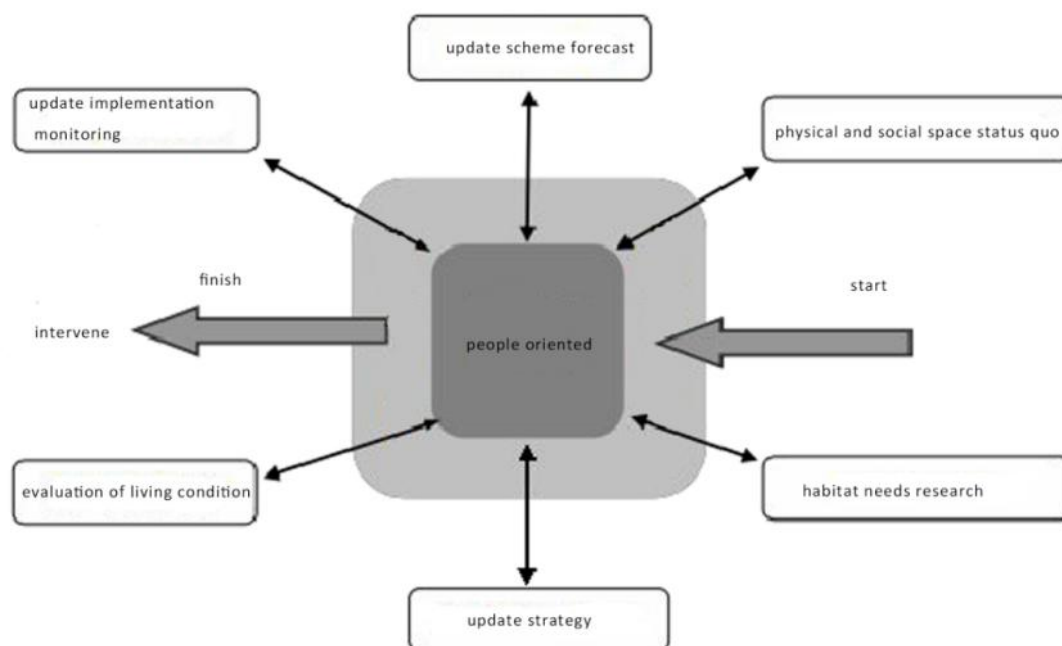
³² "Notice on Preventing Major Demolition and Construction in the Implementation of Urban Renewal Actions" (Jianke [2021] No. 63)

Analysis of the impact of the scale of renovation

The small-scale reconstruction and construction are basically something that the disadvantaged groups can bear and meet the actual needs.

Small-scale renovations are basically carried out within the original boundaries. In fact, it is an "adaptive change" within the existing urban context and texture, and is strongly restricted by the surrounding environment and mutual neighbors. Therefore, the impact on the overall environment of the region is relatively small.

Fig.133 Concept map



Source: Repainted by the author

The social refinement of spatial issues and the use of spatial methods to solve social issues are embodied as a "core-peripheral" circular model.

Taking the "core circle" (people-oriented values, living space issues, space renewal goals) as a necessary element in the renewal and transformation.

Pay attention to the needs of residents and subjective evaluation. The street is the daily activity space around the residential area and a collection of various facilities with services. People-oriented calls for planning, management pays attention to the differentiated life needs of residents, and improves the quality of life. At present, research and planning practices related to community life circles are still mostly

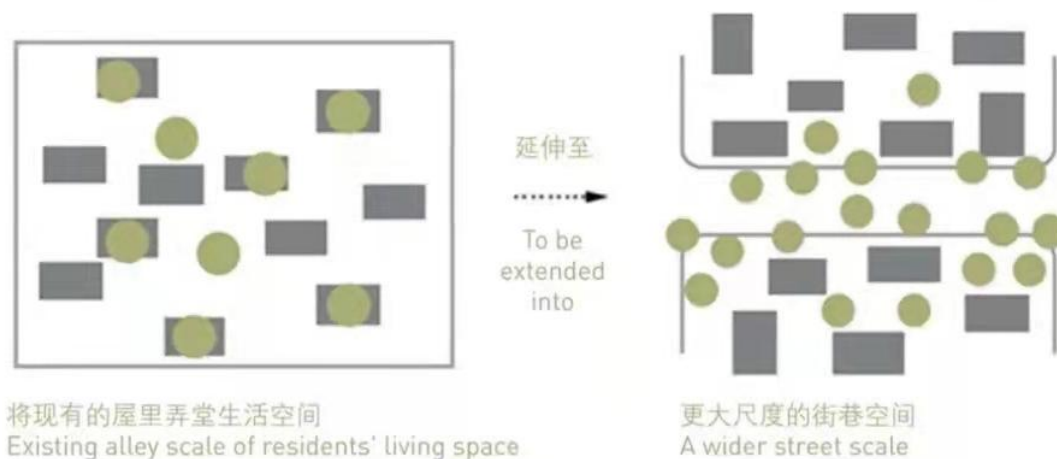
facility-oriented. Insufficient attention has been paid to the daily behavior and needs of residents. The needs of community residents for the facilities in the living circle not only have commonalities, but also have many differences. Therefore, it is necessary to strengthen the research on the individual needs of residents to better realize the precise matching of needs and facilities. In addition, residents have not only objective use of facilities, but also subjective feelings. While meeting the needs, we must also pay attention to the subjective evaluation research in order to truly realize the improvement of life satisfaction.

We need to think about Dongguan Street is whose street?

The renewal action should be carried out around the living environment, economic conditions, and what the people care about. One is to build compact and mixed communities. In order to increase short-distance employment opportunities and reduce long-distance commuting; the second is to provide a wealth of public service facilities. Including sound living service facilities, comfortable cultural and recreational facilities, etc.; the third is to increase regional accessibility. In short, continue to provide the common people with comfortable living leisure space, a safe and convenient travel environment, satisfy the people's yearning for a better life.

Based on the problems and demands of physical space and social space described in Chapter 4. The breakthrough points for this renewal and renovation are proposed: 1. Do a sharing design in public space and service facilities, repair and renovate the building. Optimize the physical space required by residents' lives, promote the emotional integration of regional members, increase the sense of place identity. 2. Each space node can be better connected through dots, lines and planes to form different types of characteristic spaces. Promote spatial integration and linkage in the area. 3. Guide the implantation of new industries and updating. Provide more employment opportunities for regional residents, at the same time promote regional economic development.

Fig.134 Extension of the activity space

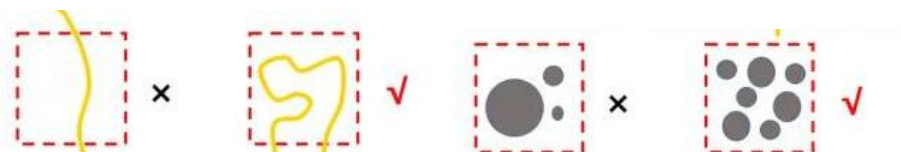


Source: <https://mp.weixin.qq.com/s/s8HgoJLeSrh0chEsw9q57Q>

It is better to extend the living space of residents moderately from the existing to larger-scale streets and lanes. It can expand the activity space of residents; it can create more opportunities for exchanges and interactions with each other; it enhances community cohesion and a sense of belonging.

Fig.135 Road network design pattern

Fig.136 Group design mode



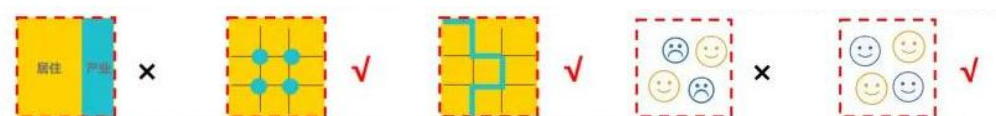
Source: Repainted by the author

From the perspective of the overall space, the road network design should play a role in series connection rather than separation.

The area difference between plots and clusters should not be too large.

Fig.137 Industrial- residential layout

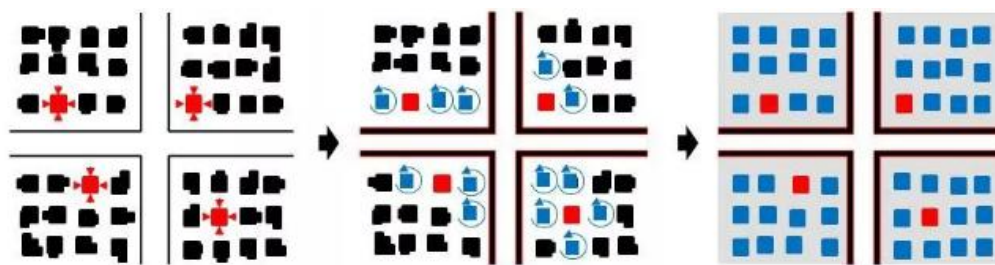
Fig. 138 Industrial living atmosphere



Source: Repainted by the author

Industry and residence should be organically integrated. The cultural tourism industry can be dispersed and penetrated into residential groups, or it can be concentrated and connected in series. The industrial atmosphere should be compatible with the residential atmosphere.

Fig.139 Development process



*Identify the breakthrough and assist
in the transformation*

*Lead the surrounding area to
renew and stimulate vitality*

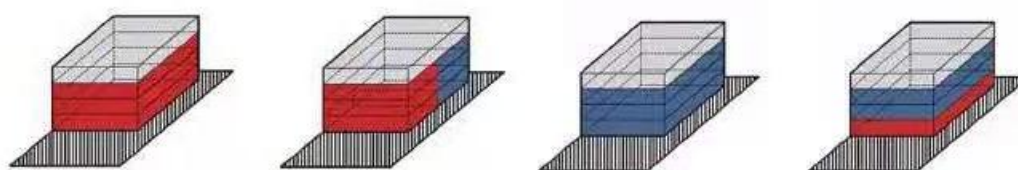
Region drives the whole

Source: Planning China, China Construction News — An exclusive interview with Fan, deputy director of Urban Renewal Research Institute, 2020.

Industrial coupling: Suggest to make full use of the historical and cultural resources of Dongguan Street. Focus on the development of cultural and creative products, street tourism, homestays and other cultural service industries. Promote the economic growth of the area, increase the in-depth interaction between the consumption points of tourism services and the community, enhance the economic and regional vitality. Continuously improve the energy level of the regional economy, stimulate productivity and creativity. Improve regional functions, improve public service capabilities and space quality. Excavate and protect the city's history, continue the city's cultural heritage, promote cultural innovation and prosperity.

According to the architectural characteristics of Dongguan Street and the historical business + residential model, the following development model is proposed.

Fig.140 Distribution method

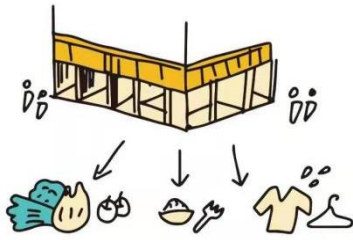


Business service industry + residence Business service industry + industry + residence Industry + Residence Business service industry + industry + residence

Red-industry Blue-business

Source: Repainted by the author

Fig.141 Schematic diagram of the underlying commercial



Source: *Friendly community planning, China Urban Planning Annual Conference ,2019.*

Under the people-oriented value orientation, the focus of community renewal planning should also shift to the attention to the evolution of community social processes and crowd behavior. Such as the study of the characteristics of residents' activities and the elements of human capital, etc., finally return to the theme of public space optimization and cultural life revival. Comprehensively improve the quality of the community and the quality of the construction of the human settlement environment.

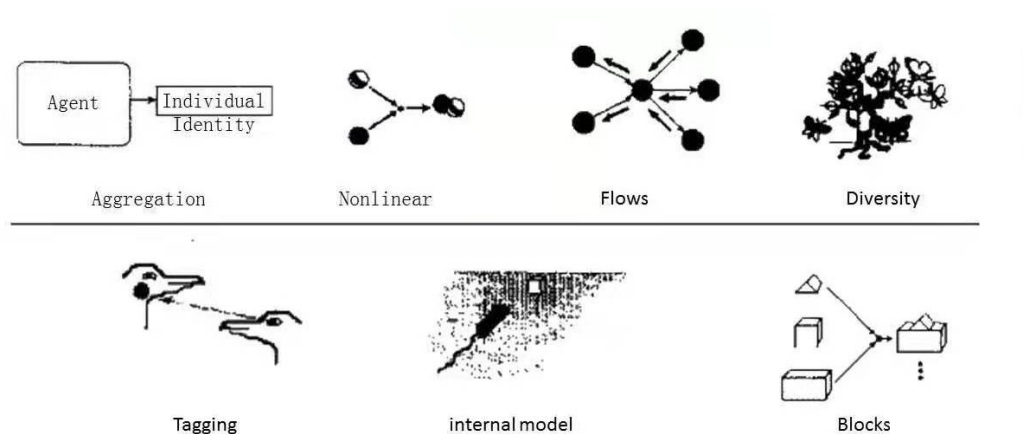
Crowd coupling³³: Suggest to emphasize the bottom line thinking of man-land relationship. Emphasizes the people-oriented planning orientation, responds to the planning according to the characteristics of the population structure. Strengthen the behavioral research of specific groups of people and improve the refined response of planning. Sufficient space is needed for crowd activities, dangerous buildings are selected for point demolition. Take the addition of public space as a breakthrough to meet the outdoor activity needs of surrounding residents. Reuse the excavable stock buildings and select vacant public houses for functional replacement. Provide a wealth of shared service facilities such as chess and card room, gym and so on. Provide a platform for people with the same interest in activities to meet the outdoor activities needs of residents in daily life. Interweave their daily activities here to promote more communication with each other and outsiders.

Full consideration should be given to the living characteristics of ordinary residents and floating population. With the follow-up of urban infrastructure construction, the basic supply of clothing, food, housing and transportation is guaranteed to facilitate their daily life. In addition, urban renewal and the construction of indemnificatory housing were adopted to improve the living conditions of the urban lower class

³³ Interweave the daily activities.

residents. In the provision of urban public services, promote the equalization of basic public services. We need ensure that urban residents and floating population enjoy equal access to urban services. Increase the attention to the urban disadvantaged groups and special groups. Improve their ability to access the city's essential resources. We need promote social equity and eliminate spatial differentiation. Ensure the stable development of Dongguan Street.

Fig.142 Development

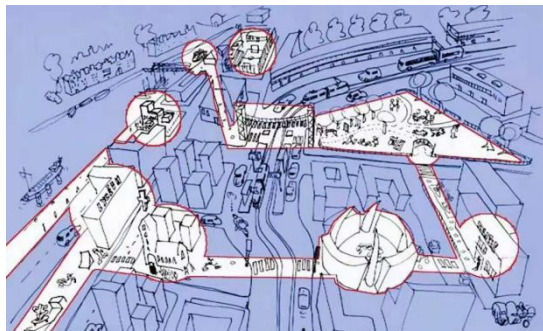


Source: <https://mp.weixin.qq.com/s/Xl8B11olfnNKebaxr4iEWg>

Spatial coupling³⁴: Based on on-site observation and investigation of regional populations. Based on the existing road network, some roads are dredged and widened, new moving lines are placed to make linear connections between scattered points. The linear spatial coupling, in series, forms the vitality chain structure of the community. And a variety of linear interweaving forms a net-like structure, which further connects the functions of the slices. The formation of a coupling relationship ultimately promotes the integration of the overall space of Dongguan Street. Based on the feature that there are tram tracks in the area, taking the regional linkage development axis as the main axis and the tram track as the baseline, the dynamic development axis of the old street is formed to enhance the vitality of the block. The spatial nodes of the blocks combine the static axis of the development of streets and alleys with the internal growth axis to form a two-axis street space with a static movement.

Fig.143 Connected node

³⁴ Tandem development, not alone development.



Source: *Urban planning, Urban Renewal Seminar, 2019.*

"Integration + darning"³⁵

Repair and darn renewal of old residential areas. Maximize the preservation of the unique spatial pattern and texture of the old city; encourage the use of local building materials and forms to build urban buildings that reflect regional characteristics, ethnic characteristics, and the style of the times. Keep the city's unique regional environment, cultural characteristics, and architectural style "genes" ("Notice on Preventing Major Demolition and Construction in the Implementation of Urban Renewal Actions" 2021).

New Space Darn into old street

Some areas of Dongguan Street are in serious decline, and the historical structure is indistinguishable. On the basis of meeting the upper protection requirements, the block can be partially relieved, and new spaces can be appropriately implanted to meet modern needs, and create new "historical layers" with high-quality innovative designs.

Methods of organic darn intervention in modern architecture

In some areas of the street with historical buildings, the original overall style has disappeared, it is not necessary to comprehensively judge the restoration. In this case, modern architecture can be used for organic darning. The protection focuses on the inheritance of the traditional style and features of the new building, the shaping of the traditional street pattern scale.

Methods of darning and intervening local traditional buildings

There are a large number of buildings of poor style and quality in the area. However,

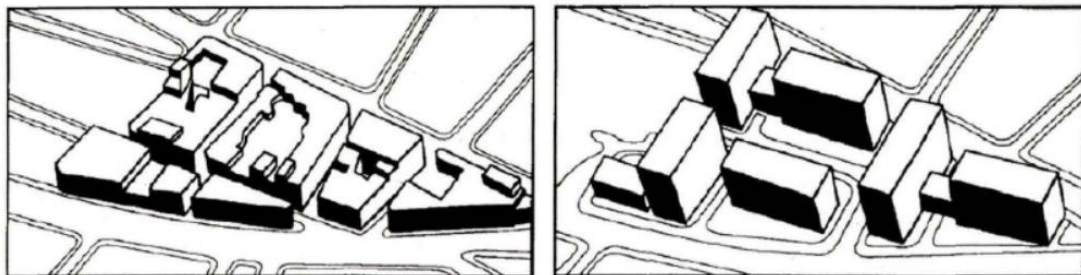
³⁵ "Darning" means weaving and stitching the broken things together with materials. As a strategy of urban renewal, the darning theory comes from contextualism, which aims to save the urban texture that is on the verge of collapse in the post-war urban construction in the West.

the structure of the remaining blocks is basically clear, some historical buildings are of high value. The historical environment is needed to reflect the cultural value it carries. In the face of this problem, on the basis of respecting the logic of traditional settlement organization, consider adopting the method of inserting new buildings for darning.

Land space integration and facility sharing: The open space of Dongguan Street and surrounding communities should achieve more functional and spatial integration. The integration of land use makes up for the lack of public service facilities and aging shortcomings in the old community, sharing can increase the use efficiency of open public service facilities. **Public facilities, social and cultural replenishment:** The replenishment of public facilities mainly targets public service facilities and municipal infrastructure. Construct a life service network by adjusting and improving various facilities. **Socio-cultural replenishment** is the goal of the transformation of the old community, through the construction of the physical and spiritual culture in the community. Form a residential atmosphere of mutual care, harmony and common prosperity. Promote the organic renewal of the city by "gathering people with things" in the development of the community. In the urban organic renewal, "gathering people to accomplish things" enhance the efficiency of community governance, so as to realize the virtuous circle of urban organic renewal and community development governance.

In different spatial units within the city, urban physical supply and social needs need to adapt to each other to achieve a balanced state.

Fig.144 Contrast between the naturally growing block shape and the planned block shape



Source: Research on Facade Features and Protection of Modern Buildings, Xie, 2018.

The spatial structure of Dongguan street should be planned for future development in

accordance with the growth structure of leaf veins. It is manifested in: (1) Self-similarity. In the multi-level relationship, the similar vein structure can be observed every time the part is enlarged; (2) It has multiple connectivity, which is a highly redundant and highly connected Network system; (3) It has lasting adaptability, any damage to a leaf vein will not affect the overall vitality of the leaf vein.

The rational planning that avoids the pursuit of order discards the complex structure from growth.

Fig.145 Leaf growth trajectory



Source: <https://pixabay.com/zh/photos/leaf-structure-texture-background-3482279/>

System coupling³⁶: public transportation system, landscape system, pedestrian system, peripheral resource system, etc., coupled with the overall development framework.

Fig.146 Traffic system

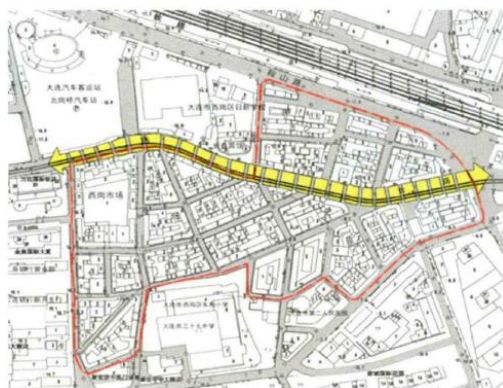
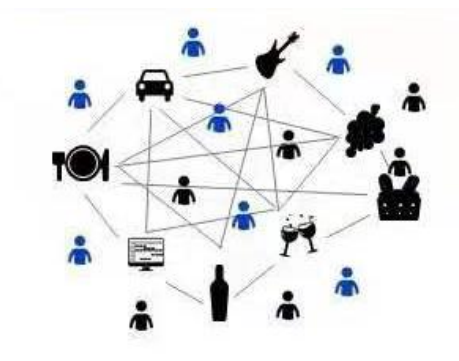


Fig.147 Living system



Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

Regional and spatial multi-layer network coupling: The transmission of people, information, logistics is regarded as the basis of urban phenomena, the relationship between the beginning and the end of the relationship constitutes a "flow network." The results summarized in the previous chapter can reflect the changes of network

³⁶ Integrated development of all systems.

nodes in a certain period of time. It is particularly important to sort out the coupling relationship between streaming networks and spatial networks³⁷, fully consider the reachability and portability of nodes.

Policy coupling: Advocate "multiple regulations in one" and adopt the "one picture" management model. Guide by the guiding ideology, the planning system covers functions, resident management, and other planning levels to ensure the feasibility of planning.

Based on the uniqueness of the history and culture of this area, the cultural continuity and cultural identity of Dongguan Street are regarded as important concerns.

Aiming at the problems of Dongguan Street in shaping the urban space and creating vitality, a cultural polar core plan for the old city is proposed. The plan is an important part of the urban cultural revival plan. Through the revival of historic buildings and streets, the traditional cultural premises are preserved, the urban context is continued, the traditional pattern of the city is inherited. Put the protection, utilization and display of the historical and cultural heritage of Dongguan Street. Restore the previous glory. Reasonably adjust the land use structure to maintain the vitality of the old city and at the same time improve the regional environmental quality. Eventually, Dongguan Street will be built into a city center with distinctive historical and cultural characteristics.

The Coupling of Social Space Reconstruction and Historical Preservation in Dongguan Street

In the inheritance of history and culture. If space is the physical carrier of urban culture, then residents and the way of their social life constitute the main content of social culture in urban culture. As a saying goes: The old house is still there, but the owner of the old house has changed; if the old man is gone, the old story is gone. When the process of social space reconstruction is carried out in an organic and gradual manner, the gradual changes in the social structure of the population can not only ensure the continuity of historical culture, but also develop on the basis of history.

³⁷ The research of urban spatial network introduces the concept of physical spatial network such as road network that affects and restricts the flow of "flow", which is called "spatial network".

New people and new stories will happen at the same time, the history of the city will also evolve in the process of changing from new to old. Large-scale and rapid reconstruction will rapidly change the population and social structure of the region in a short period of time, breaking the evolution of urban history. This will be a great harm to history and culture. Only the external material carrier of the historical and cultural block is retained, but the internal vitality is constantly lost. Historical and cultural information is gradually lost with the change of the space carrier, its historical authenticity is difficult to maintain.

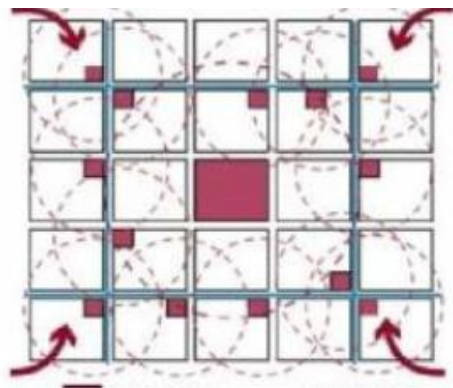
The changes in population structure and regional functions brought about by the reconstruction of social space have a vital impact on the regional cultural atmosphere. This cultural atmosphere includes not only the neighbourhood communication, living atmosphere and market culture in social life, but also the characteristics of the human-land relationship between residents and their place of residence. Therefore, the cultural protection of old neighborhoods should be the protection of the unique regional traditional cultural atmosphere of the old city area. Culture is a living content. The influence of the specific space in the old block on the behavior and communication patterns of residents, the sense of self-identity and community belonging of residents in the characteristics of the place cannot be copied and transplanted. This is very precious.

For the people living in the traditional blocks, they tend to place their "home" attachment and affection on the community. It not only carries their collective memory, but also gives them a sense of belonging and identity. However, with the reconstruction and demolition of the old city, the community form and community structure are constantly reconstructed. For residents, there are new memories constructed, new ways of living, and new neighbourhoods. The continuation of collective memory is the identification of their self-identity and community identity. The development of traditional residential community should not only be the superficial governance, but also the expression of spirit and humanistic emotion. In essence, the protection of the community is to protect the collective identity of the residents to the community history and culture. To emphasize the identity and

cohesion of the residents. For traditional residential communities, collective memory reflects community emotional tendency and community cultural evolution to a large extent, embodies the humanity of the block.

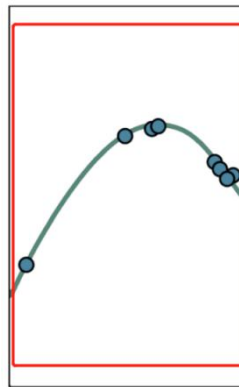
From the viewpoint of behaviour, creating a vibrant space is a new topic that should be paid attention to in space construction. To avoid residents' familiar living space becoming very unfamiliar, thus weakening the cultural value of public space.

Fig.148 Street network



Source: Urban Planning Journal,2021

Fig.149 Proper capacity status



Repainted by the author

The permutation and combination of elements in different regions will form a complex compound form, bringing unique effects. Proper fitting of each element is the best state.

In the planning method. In my opinion, it is better to transform the goal-oriented planning to the problem-oriented planning. It is necessary to transform from the pursuit of dream goals in the past incremental development to research on the problems of old communities. This advantage is more targeted. Guide by the systematic and overall nature of urban thinking. Establish problem-oriented planning methods and carry out organic renewal research. Look for renewal catalysts and drive overall development with local projects.

The residents also have their own ecological environment in the block, there are still interactions between the residents, which can be regarded as more positive content. These environments also form part of the ideas for micro-updates. It is not organized according to a certain pre-established position, but according to the relationship between things. How to sort out and integrate these existing relationships and jointly improve the community homes is a basic foothold for us to start our work. Therefore,

we focus our attention on public parts. Only in the public environment can residents, governments, and various businesses be connected together.

Modularization of community update mechanism

The first stage is the creation of space, including three goals of basic improvement, function enhancement and quality expansion. Mainly adopt functional modular thinking to solve common problems. Each type of functional module forms three levels according to the increase or decrease of the combined elements, including the basic level, the promotion level and the expansion level. In order to adapt to the needs of community space renewal at different stages.

The second stage is humanistic shaping, which mainly uses characteristic module customization to solve individualized problems. The focus is on the creation of spaces based on individual needs and featuring humanistic themes.

The third stage is mechanism cultivation, which mainly adopts the division of labor and modular thinking to promote the professionalization of Dongguan Street governance, thereby forming a circular mechanism. With integrated operating institutions as the core, a number of community affairs and demand chains are disassembled into different functional modules through a modular platform for division of labor and professional management.

For the systematic operation of the block, the relevant personnel must have systematic thinking, whether it is the planning and design in the early stage or the operation in the later stage. Committed to building a block ecosystem circle, block operations can cycle back and forth to produce its own hematopoietic system. Only in this way can the neighborhood stay alive and incubate new surprises.

Chapter 6 Reconstruction design of Dongguan Street

This chapter specifically proposes targeted design plans based on the research results obtained before and the analysis of the strategy in the previous chapter. Hope to Effectively solve the problems of the physical environment and social networks in the region. Make the design can meet the needs of residents to the maximum extent and the future development of the city.

In the earlier, Urban Renewal Working Group divided the area into different groups. Benefit binding, east-west linkage, high-end facilities, and implementation in stages. Made the area flow.

Fig.150 A bird's eye view



Fig.151 Core



Source: <https://mp.weixin.qq.com/s/eeayHl2KvbVC6iU57-LpYQ>

Sorted out the main line composed of characteristic cultural spaces, and carried out key transformations at important nodes. Guided by interventional implementation, it will be activated gradually and gradually.

Fig.152 Base model



Fig.153 Base model



Source: <https://mp.weixin.qq.com/s/FexOglfM2QFb0Gt1F747JQ>

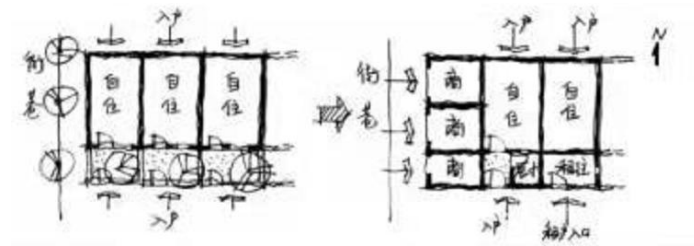
6.1 Renovation of old buildings

Horizontal growth³⁸

Plan to increase commercial area near the road.

① Relying on the transformation of the yard.

Fig.154 Renovation plan

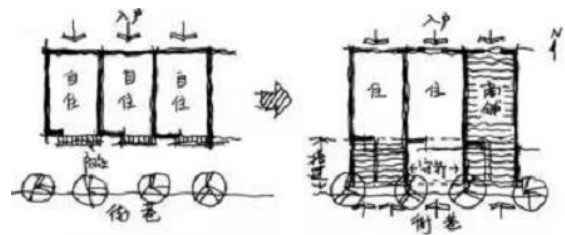


Source: https://mp.weixin.qq.com/s/gAKN_pZbYJ_yXsRa67fSrg

The picture shows that on the side close to the streets and the west side of the owner-occupied house, add commercial houses.

② Relying on the renovation of the balcony.

Fig.155 Renovation plan



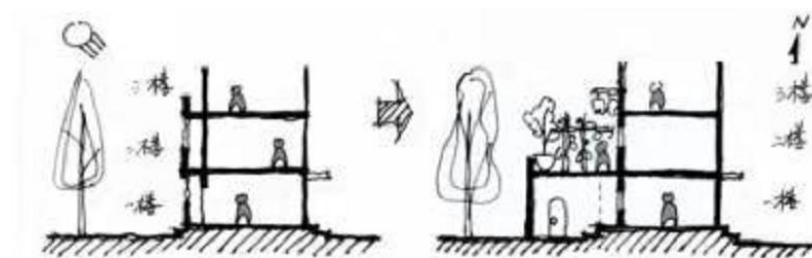
Source: https://mp.weixin.qq.com/s/gAKN_pZbYJ_yXsRa67fSrg

Widen to the south (the direction with the balcony).

Vertical growth³⁹

① Relying on the reconstruction of the ground floor.

Fig.156 Renovation plan



³⁸ Design in the horizontal dimension.

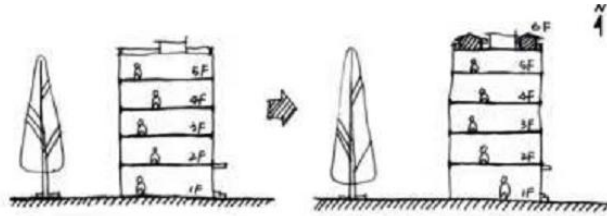
³⁹ Design in the vertical dimension.

Source: https://mp.weixin.qq.com/s/gAKN_pZbYJ_yXsRa67fSrg

Add on the ground floor and create a terrace space.

② Addition on the roof.

Fig.157 Renovation plan



Source: https://mp.weixin.qq.com/s/gAKN_pZbYJ_yXsRa67fSrg

6.2 Infrastructure and public space design

Fig.158 Facility allocation method



Centered

Peripheral

Mixed type

Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

Base on the behavior habits of residents in this area who like to gather in front of their own homes, consider the second distribution method and the mixed form in the figure.

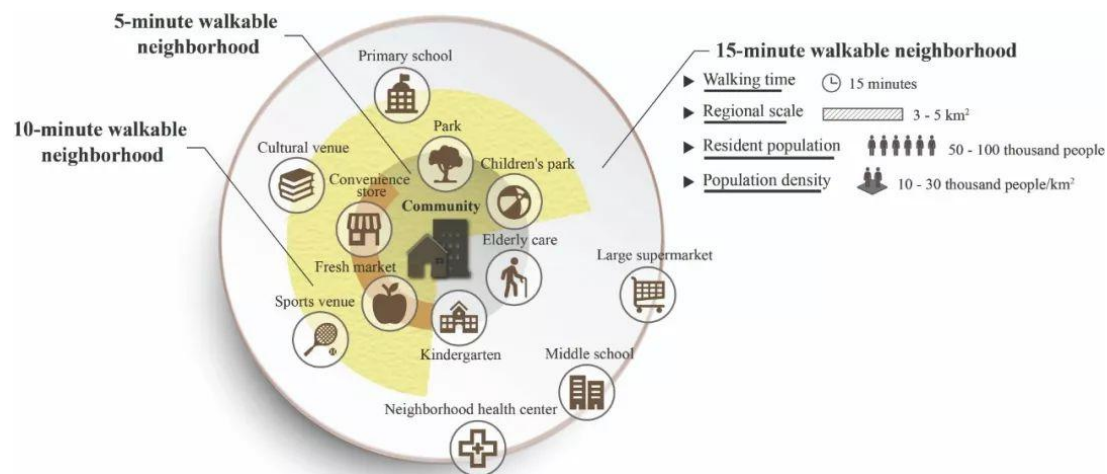
Consider establishing and perfecting a regional living circle.

Fig.159 Neighborhood-level living circles and street-level living circles



Source: https://mp.weixin.qq.com/s/8J_G6MdFNUg0I1bHJzq__w

Fig.160 Community life circle



Source: https://www.sohu.com/a/315378623_692608

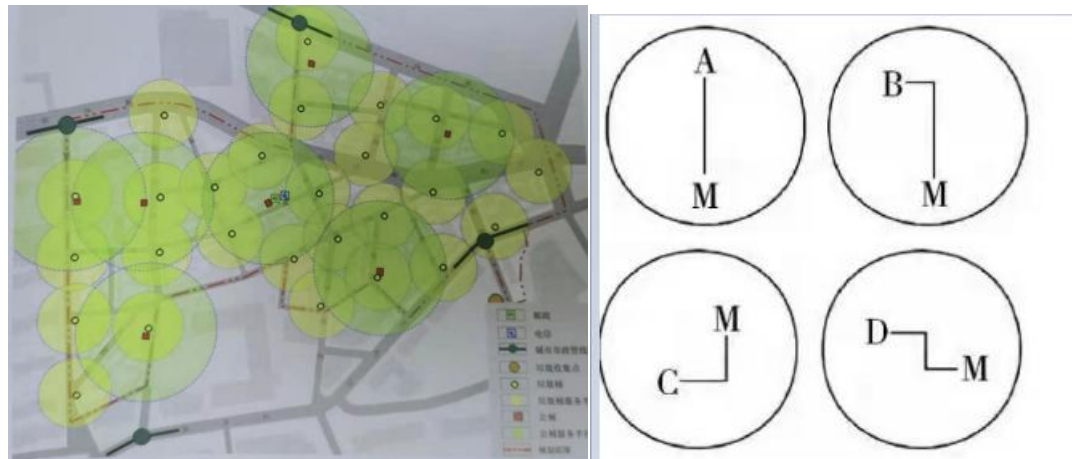
The community life circle is not only the facility circle and environmental circle existing in the physical space, but also the neighborhood circle and social circle existing in people's perception space. However, with the increasing diversification of residential features such as height, density, construction standards, the size of the residential population and the structure of service demand within the same service radius have been very different. Dalian was selected as a pilot city for a quarter of an hour convenient living circle ⁴⁰(Ministry of Commerce 2021).

Base on the living habits of Dongguan Street residents and the number of different infrastructure needs. Set up different levels of service facilities within a 5-15 minute living circle. 5-15 minutes living circle: draw a series of concentric circles extending from the core of different energy levels. The radii are 5, 10, and 15 minutes walking distance respectively. The different urban infrastructures should be rationally arranged. Near the center of its corresponding life circle, make it provide services for the surrounding area. In the neighborhood life circle within a 5-minute walk, set convenience stores, restaurant, street green spaces with fitness facilities, etc. In the neighborhood life circle that can be reached within 10 minutes, set up small parks, health service stations... A livable and slow living neighborhood circle is formed. In the community life circle center with 15 minutes' walk, set up supermarket,

⁴⁰ Produced with the development of regional business, it is targeted at community residents. The service radius is within a 15-minute walk, which can also be subdivided into 5.10.15 minutes. To meet the basic consumption and quality consumption of residents' daily life as the goal, it is a business circle formed by agglomeration of multiple businesses.

entertainment facilities centers. The purpose is to use reasonable urban design to improve the accessibility of places and to promote more regional exchanges. Generally speaking, it includes basic security⁴¹, quality improvement⁴², and low-profit businesses with a public welfare nature⁴³. The block type of Dongguan Street is suitable for the neighborhood layout, and commercial service facilities are arranged along the surrounding roads of the area.

Fig.161 Dongguan Street Infrastructure Service Radius Fig.162 Accessibility



Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

Ensure the accessibility of public spaces.

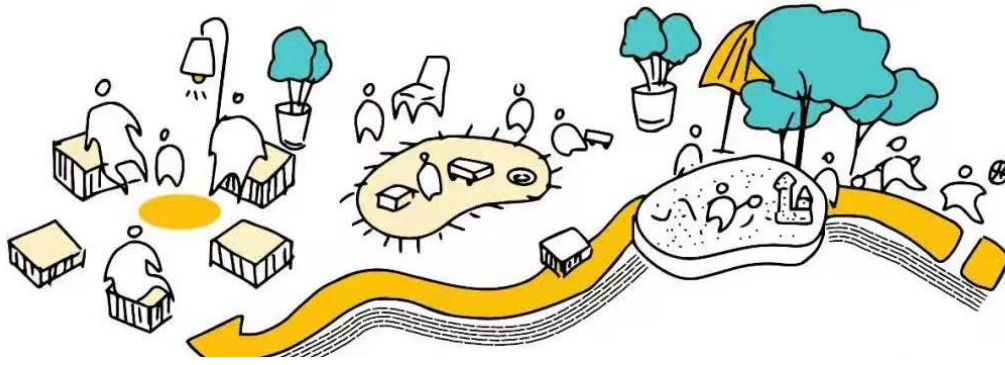
Regarding the block: the outdoor space is scattered, the waste products are invaded everywhere, and the pedestrian roads on the street are occupied by a high proportion. During the survey process, there was a strong sense of crowding. This cramped sense of space is not entirely due to the lack of public space in the community. Rather, it lies in the inefficient and disorderly use of space, the widespread existence of various negative spaces, with the nature of pseudo-crowding.

Fig.163 Intention map

⁴¹ Meet the basic consumption needs of community residents such as three meals a day, daily necessities, and family life services.

⁴² A business format that meets the higher-level consumer demand of community residents such as leisure, health, social interaction, entertainment, shopping and so on.

⁴³ Provides the circulation infrastructure of affordable or low-profit commodities and services that meet the basic living needs of residents, and public welfare-like commercial facilities that play a role in ensuring basic living, stabilizing market prices, and ensuring emergency supply.



Source: Research on Friendly Neighborhood Environment, Wang, 2021.

The spatial resources of the surrounding urban areas should be coordinated to create a mixed-function community. Improve the quality of community public space.

Improvement and upgrading of municipal infrastructure. Such as the transformation of water and electricity pipelines, the opening of public venues, and the addition of parking facilities.

Excavate the "forgotten" idle space. Including inefficient use of public green space, idle land, and dangerous old structures in old residential areas. Through systematic transformation, it is given new public functions. Create community gardens, leisure and fitness spaces and other functional forms that residents like to see. Stimulate the vitality of the community and increase the residents' dependence on community life.

Fig.164 Intention map



Source: Reconstruction of old streets in Shanghai, 2020.

Fig.165 Intention map



Source: *Reconstruction of old streets in Shanghai, 2020.*

Fig.166 Intention map

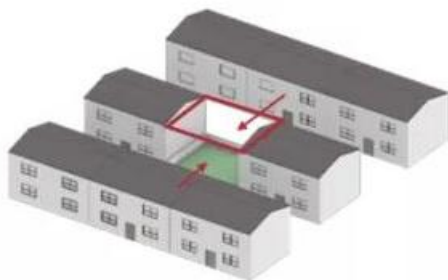


Source: <https://mp.weixin.qq.com/s/-sjGkDbAa1dvAez20jW0kg>

Public space set up traffic public space/square-type public space/greening public space. Different scales and functions are distributed in every corner. Improve the open space, increase the utilization rate, and be more dynamic to meet the needs of different types of people. According to different human body scales, create a rest and leisure space for the elderly and an entertainment space for the young.

Restore the style of the old street, demolish the old place and use it as a public space.

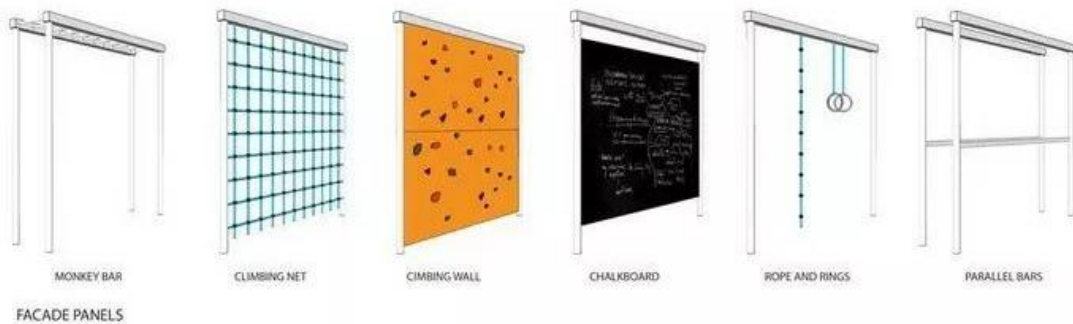
Fig.167 Demolish the old place



Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

In a relatively narrow area, I think should to consider making full use of the facade space.

Fig.168 Renovation of the facade



Source: <https://mp.weixin.qq.com/s/jua5Ns73rFuMC0CO93Ypfw>

It can be made into a highly interactive sports venue.

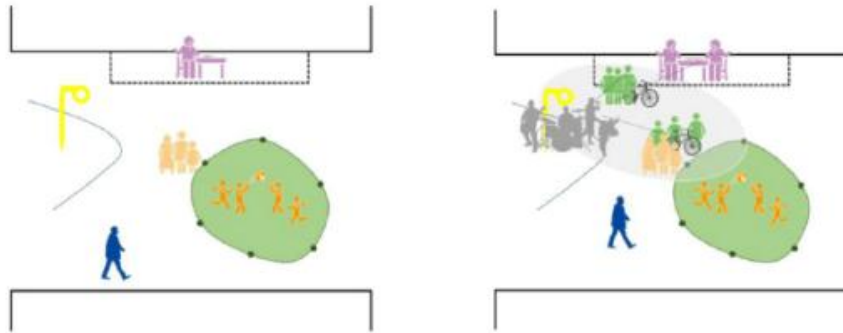
6.3 Flexible and fuzzy spatial boundaries

Dongguan Street lacks a large open space for activities.

Dongguan Street needs more gray space to make the public space more abundant and diverse, make the public space more effective. It not only has its own functionality, but also can flexibly transition with the neighboring space, increasing the probability of groups meeting in space and triggering activities. In this kind of space with fuzzy boundaries, people's walking routes and fields become random and unconstrained. The gathering function of the open space is also brought into play to host performances, public films and other events. People's consciousness domain is guaranteed and there is a gray matter pause space, which forms a complex space of various scales and meets the activity needs of different groups. Blurred space boundary is more likely to produce gray space, gray space and other forms of space combination to form a rich variety of changes. To create more possibilities of communication space places. Grey space is a platform for the natural transition and transformation of the surrounding heterogeneous space. The communication activities in the surrounding space attract people from other Spaces. Strengthen the fluidity and

use between Spaces, so that people's behavior and activities in different Spaces between the transition more fluid (Yang 2021) .

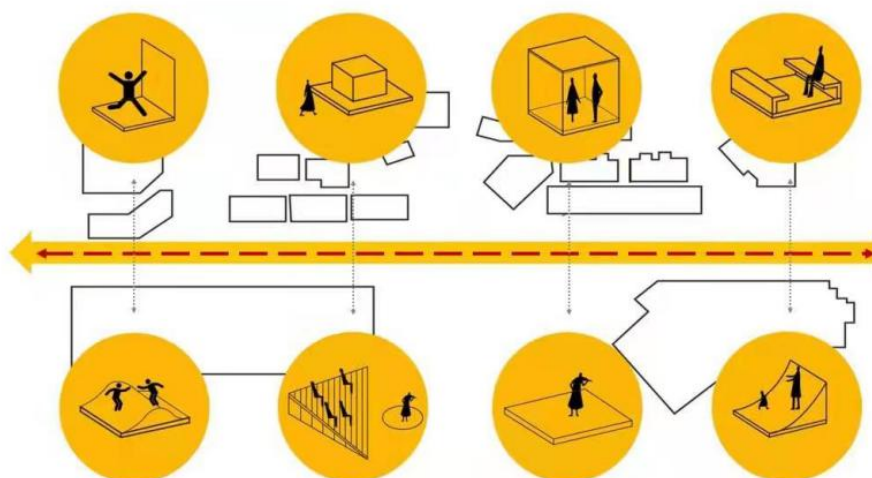
Fig.169 The interaction between space and people



Source: Research on the spatial integration of floating population, Liu&Li, 2020.

In my opinion, The blurring of space boundaries, the highly complex of functions, the plurality of structure dynamics, the changeness of time have a certain extent of influence on the occurrence of communication behavior and the degree of intimacy between people. The activities of the crowd in the space guide the space to play its essential value. The social interaction in the space will produce a $1+1>2$ effect, the areas of influence of activities overlap, prompting the derivation of other types of activities. Through the interaction between the crowd and the space, the whole space is also affected.

Fig.170 Change



Source: <https://mp.weixin.qq.com/s/Ht-ZDoj6wYrZRGdbWuW2uQ>

Change the more rigid and square space into a flexible, diverse and interactive space

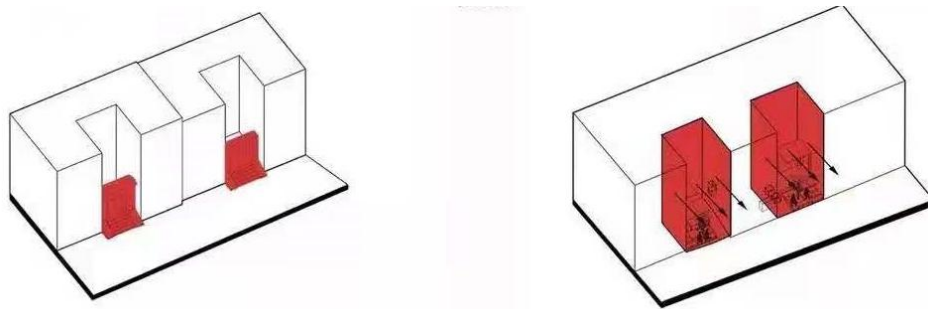
to break the rigid boundary.

6.4 Detail transformation of residents' entrance steps

Based on the preference of residents in this area who like to gather in front of their homes, I suggest to renovate the front of their houses.

The street need to change from rigid to flexible and interactive. Has a certain degree of toughness, flexible function conversion.

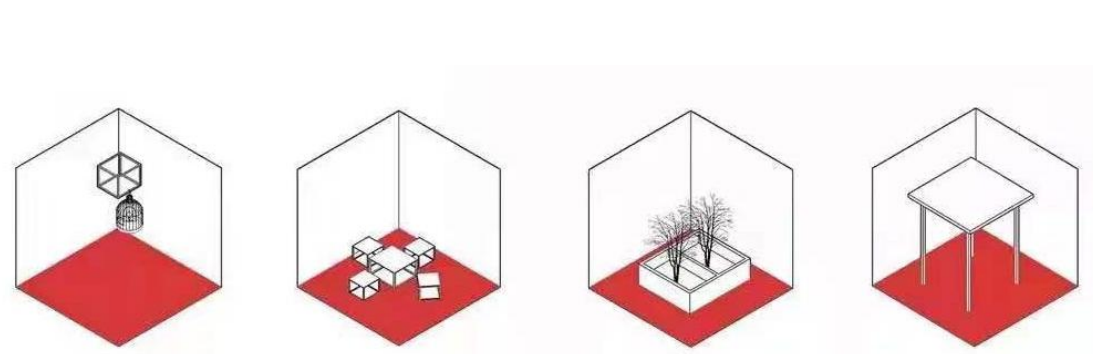
Fig.171 Entrance renovation



Source: <https://mp.weixin.qq.com/s/M3wQwEcd1Q5zxw2WEvyKyQ>

The complicated entrance steps take up the originally narrow space. Consider simplifying the steps and demolishing part of the courtyard wall to blur the original internal and external interface. Form a neighborhood space where can stay and communicate.

Fig.172 Element can be added



Source: <https://mp.weixin.qq.com/s/M3wQwEcd1Q5zxw2WEvyKyQ>

In the neighborhood communication space at the entrance, green plants can be planted, bird cages can be hung, tables and chairs can be added, and rain sheds can be arranged.

Fig.173 Intention map



Source: <https://mp.weixin.qq.com/s/M3wQwEcd1Q5zxw2WEvyKyQ>

6.5 Block functional layout

The planning should organically integrate the actual value of Dongguan Street, undertake the dual functions of society and the market that the community should have. Combined with the protection and utilization of old buildings in the block, it effectively attracts the display of history, brings more possibilities to the area.

In the core area of Dongguan Street, there are historical buildings listed on the government protection list. In order to continue the environmental features of the historical district of Dongguan Street, the historical and cultural features in the core area are protected. On the basis of protecting the culture and environment of the block, other controlled areas have been renewed and developed into multi-functional, mixed characteristic blocks with residential, visiting and sightseeing services. In my opinion, it is better to determine the main landscape development axis and highlight the main nodes. Strengthen the entrance image space. Continuing the road texture of the block to form the main development space of the block combining the main axis and the secondary axis. The block planning combines humanities, history, etc. in accordance with the coordinated development positioning, implements the functions, and carries out a reasonable organizational reconstruction.

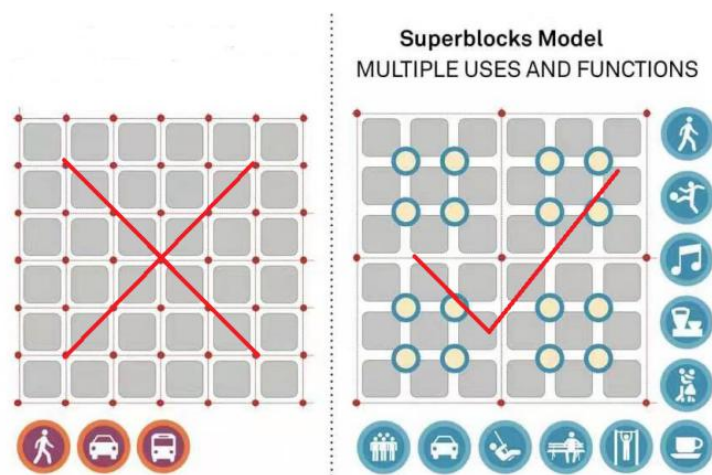
I have done more in-depth thinking about each part, based on the desire to preserve the good social network and historical element value of the region. Improve the model of "residential + industry + supporting facilities". In view of the overall situation of Dongguan Street, the content of the industry includes residential, commerce, cultural

tourism, leisure and entertainment, and activities. Bringing a richer daily life, it is also helpful to improve the overall economic level of the region, and enrich the population composition of the settlement and the vitality of the neighborhood. The rich functions of recreation and sports activities meet the daily needs of different types of people. The quality of life of residents has been improved, which has promoted the integrated development of residential areas and cities.

For residential area. Preserve the life and atmosphere. Maintain the close and harmonious relationship between the neighborhoods. Time-honored streets and lanes. Explore the historical stories of Old Dalian, continue the historical and cultural context, show the stories of Old Dongguan Street.

On this basis, take advantage of the historical advantages of regional culture to develop leisure and entertainment, tourism and so on.

Fig.174 Intention map



Source: Street View Research Center, Research about super blocks Model, 2021.

Pay attention to the edges and corners of the area. Link development with surrounding areas and systematically organize resources. Realize the maximization of the negative space utilization efficiency between the block and the surrounding adjacent units. Fully excavate the idle resources in the linkage area and conduct a systematic assessment. Let the old neighborhoods and surrounding units pull each other, radiate the new value of the old neighborhoods, and maximize the use efficiency. The negative space between blocks and units can take on new urban functions. Traditional urban functions have obviously lagged behind the new demands of the ever-changing

urban development. Through the joint development of old neighborhoods and surrounding units, the passive and inefficient spaces are actively utilized.

Between the old quarters and surrounding units: between the old blocks, commercial districts, office districts and newly built districts in the city. Because of mutual closure and separation, there are many negative spaces. Through joint development, it is possible to re-take the rest and other functions of the block.

Between the old community and the city: to meet the new needs of urban complex functions such as the balance of work and housing , the increase of leisure and recreation space. The types of business that the city needs can be added through transformation. This can not only enhance the value of old neighborhoods, but also meet the new functions of the city. In the residential land, small and medium-sized commercial land is interspersed, various traditional industries and commerce are mixed among them. It not only provides local residents with multi-level, multi-content and multi-form services, but also forms a cordial, pleasant, colorful, vibrant living atmosphere. Its fundamental purpose is to form a "work-living balance body" with mixed functions.

Fig.175 Jane Jacobs' thoughts on vibrant neighborhoods and short blocks



Source: <https://mp.weixin.qq.com/s/mmU-x1b0rYvT1ypEyHv1nQ>

Strengthen the infiltration relationship between plots and landscapes. The sight of the landscape should be coherent and not easily interrupted, so that it can attract people.

Fig.176 Infiltration relationship

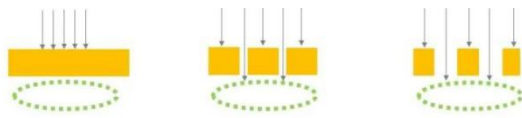


Fig.177 View



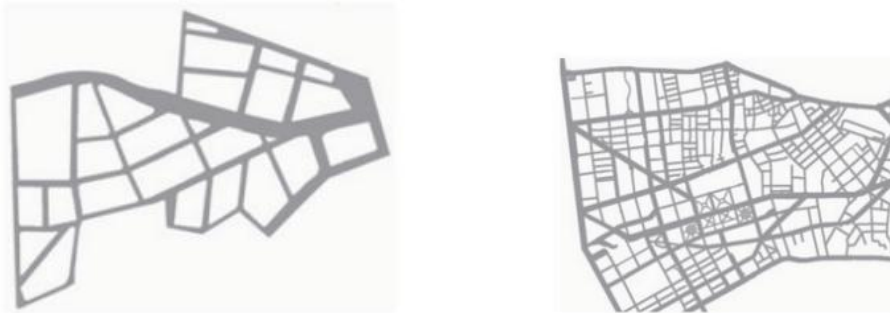
Source: Urban planning, Professor Wu's lecture, 2021.

6.6 Road design

Dongguan Street belongs to Xigang District. The future development of Dongguan Street should be carried out on the basis of the continuation of the regional texture. It can't be too obtrusive.

Dongguan Street is the link between Changjiang Road and Huanghe Road, connecting the two different urban structures of Zhongshan Square and Renmin Square. In terms of spatial form, the two areas have a clear spatial structure layout. However, the urban structure of the intersecting part is rather chaotic, and it is necessary to improve the urban road system for series integration. It makes the original chaotic area form a connection between structure and function.

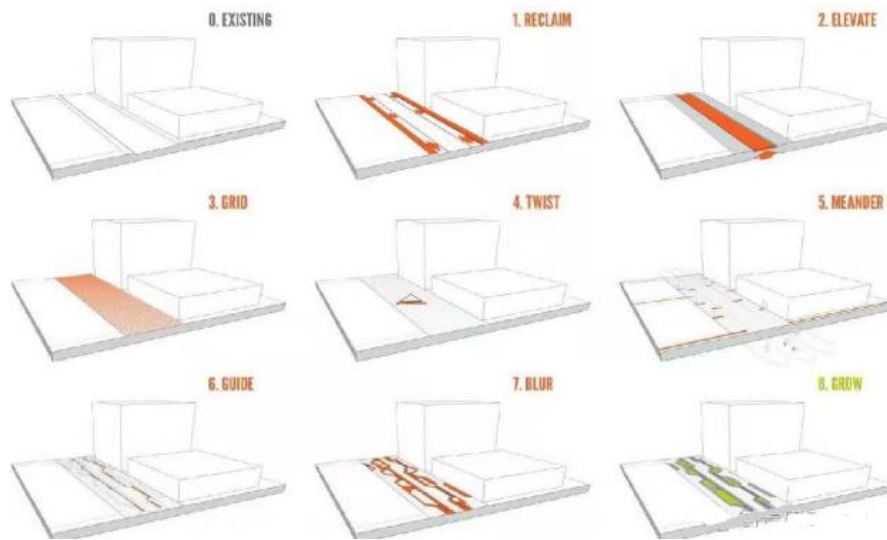
Fig.178 Road network planning of dongguan street Fig.179 Road Network Planning of Xigang District



Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

The street network structure tends to be integrated and accessible, the urban form changes from closed and conservative to modern and open. With the development of motor vehicle traffic, the urban street network is gradually adjusted, tends to be gridded to adapt to long-distance and fast travel. The scale of plots and street patterns are showing a trend of expansion. The average value of the integration of the old city has risen.

Fig.180 The progress

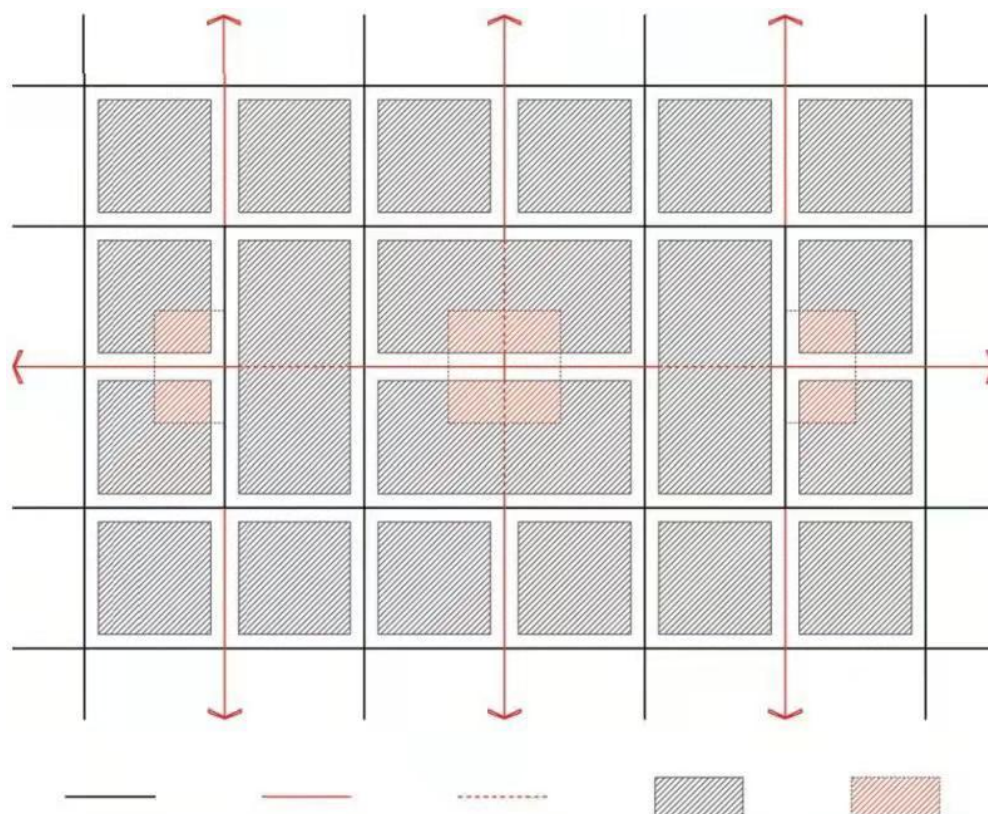


Source: Street View Research Center; Research on the development and renewal of blocks, 2020.

Eight design points: ①reconstruct the pedestrian space ②raise the vertical direction of the road ③site gridding ④twist the grid ⑤winding streets ⑥guide users ⑦fuzzy boundaries ⑧planting to create an urban oasis

In my opinion, base on the consideration of the passage of the elderly in the region and the development of future tourism. The establishment of pedestrian - based slow traffic system is more advantageous than the simple separation of people and cars. Although the separation of people and vehicles can ensure the order of the block and improve the safety. However, with the increase of the block size and the enlargement of the station, the single walking will bring the fatigue of the human and the single experience. Lounge areas, and open Spaces are added to the slow traffic system to enrich the block space. Landscape nodes are set at the end of the road and intersection points. Increase identification, attract the arrival of the crowd. On a visual level, it adds a connection within the block.

Fig.181 Intention map



Pedestrian road based on road system Public path provided inside the street Public path inside the building Schematic of building volume Public space

Source: https://mp.weixin.qq.com/s/u4X8syg_6MzVcIGkf7Jjxw

The area is located in the center of the city, during peak periods. There is a huge traffic volume on the nearby main roads. Through the addition and continuation of paths, the original relatively extensive pedestrian network structure is partially revised and refined, thereby improving the connectivity and selectivity of the entire ground-based pedestrian network.

Strengthen the multi-modal connection between the road traffic facilities in the renewal section and the road network of the surrounding neighborhoods. Consider the difficulty of regional parking, fully develop the underground space. Extend the underground space through the two main traffic roads on the north and south sides to Dongguan Street to alleviate the problem of parking difficulties; at the same time, through the demolition and transformation of the internal buildings in the renewal section. Make the branch roads into a ring and network, link up with the surrounding roads, and undertake part of the urban traffic relief function.

Fig.182 The organization of street traffic flow in the street

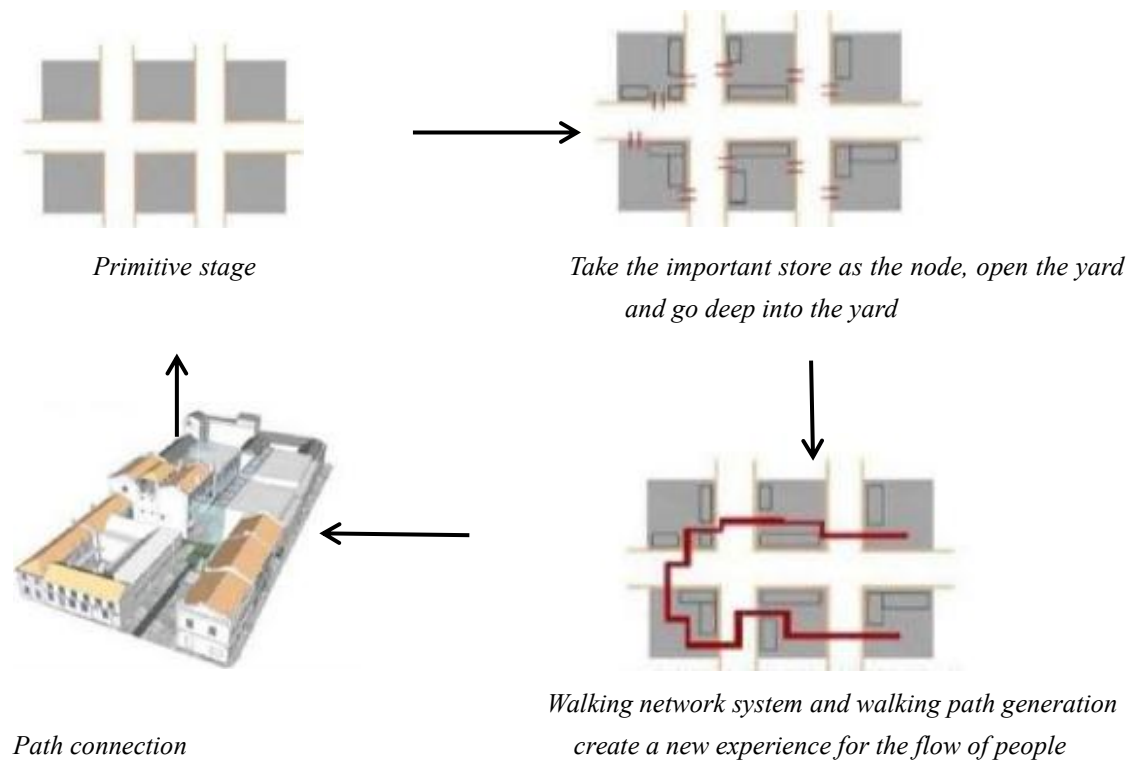


Source: *Research on the Spatial Renewal of Historical and Cultural Blocks Based on Place Theory — Taking Dalian Dongguan Street as an Example*, 2019.

Courtyard traffic reconstruction

Planning the horizontal traffic flow in the courtyard space also has the function of guiding the crowd's route. To avoid people walking arbitrarily in the space, there is no direction guidance.

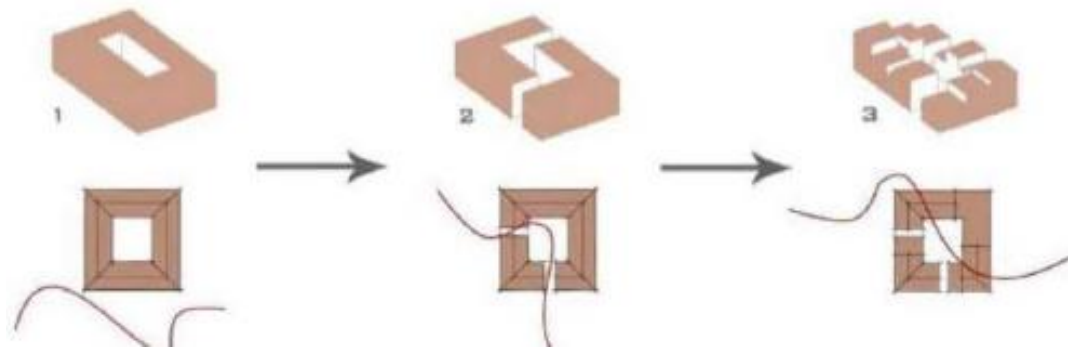
Fig.183 Courtyard traffic structure



Source: *Research on the Spatial Renewal of Historical and Cultural Blocks Based on Place Theory —*

Taking Dalian Dongguan Street as an Example

Fig184. Featured path generation



Source: Research on the Spatial Renewal of Historical and Cultural Blocks Based on Place Theory — Taking Dalian Dongguan Street as an Example

This is a good idea to open part of the courtyard, increase the openness of the area, increase walking routes, and improve the vitality of the area.

6.7 Regional protection and development (material + non-material) and preservation of collective memory

By reading Liaoning Province's Historical and Cultural District Protection Management Measures 2017, Liaoning Province's Historic Building Recognition Measures 2020, Dalian Historic City Protection Planning Standard 2020, other relevant standard and normative documents.

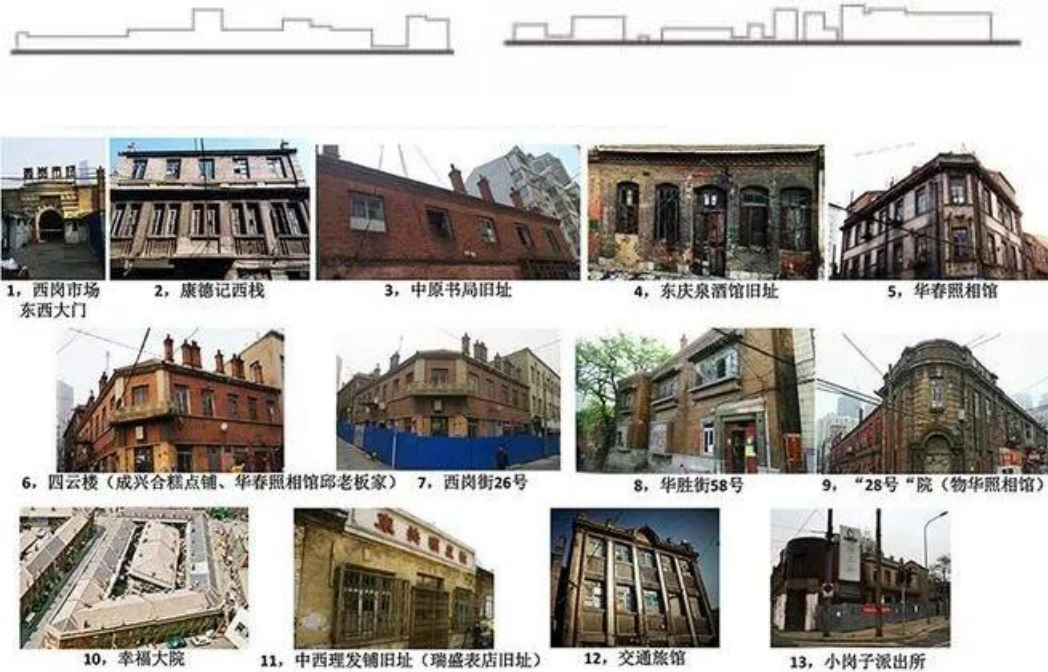
The elements of the block worth preserving

1. Old buildings with representative and cultural value.
2. Kerb stone: the interior of the narrow path, the distribution of kerb stone is very living.
3. Trams: Trams are one of the most representative modes of transportation in the region. Since the tram began to operate in this area in 1909, it has formed a beautiful scenery line with Dongguan Street.

Continuing the architectural and street style, It is currently the focus of regional reconstruction.

Reservation of the regional skyline

Fig.185 Skyline ,Historical and artistic buildings



Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

13 buildings with historical and artistic value. West Gate of Xigang Market, Kangdeji West House, Zhongyuan Bookstore Site, Dongqingquan Pub Site, Huachun Photo Studio, Chengxinghe Pastry Shop (Siyun Building), Wuhua Photo Studio No.28 Yard, Happy Courtyard, Zhongxi Barber Shop site (ruisheng watch shop site), traffic hotel and Xiaogangzi police station, etc. Another 52 are proposed to be recommended as historical buildings, of which 31 are to be listed as the next batch of conservation plans.

The collective memory of Dongguan Street is composed of many individual images of the environment, including many elements. It not only contains the memory carriers such as architectural landscape, community texture and space, but also contains the contents related to the memory subject such as residents' behaviors. In terms of time, it is the precipitation of the content of life in a certain period of time in history, showing the local characteristics in space and perceiving the authenticity.

The object of renewal is actually daily life itself. The renewal model and "configuration" constructed under the logic of the two-way interaction between society and space are re-understanding of the "authenticity" of space. "Authenticity" does not represent a certain point in time, but should be a continuous process from

ancient to present, from new to old and then to new. This is the most authentic aspect of daily life. Life is a continuum, it is renewed every day, as is the space. Under this kind of values, the fusion of the new and the old should happen at any time and in any space. The really reasonable state is that something new should happen in the old area; the new area should consider how to put the old scenes, old materials, and old habits into it. This is the essence of the city, and only the urban space created in this way is more attractive.

Preserve cultural places

The selective inheritance of these different cultures is the goal of the historical and cultural sustainable development of Dalian Dongguan Street. Therefore, these representative elements are consciously retained and displayed in the block space. The formation of space cannot interfere with the activities and living customs of people in the neighborhood.

While the functions of Dongguan Street will be updated and replaced, a certain number of indigenous residents need to be retained to prevent the "hollowing" of local traditional culture. It is conducive to the preservation and dissemination of traditional crafts, traditional ideas, and traditional folklore in the original state, and it provides the possibility to experience the living folklore culture more comprehensively and effectively.

Many shops have been passed down through a history of more than one hundred years. These time-honored brands have written the glorious history of modern national industry and commerce in Dalian, which is the most touching scene in the modern history of Dalian. It can not only continue the cultural context of Dongguan Street, but also enhance the attractiveness of the block through the revival of commerce. It is suggested that several courtyards with typical characteristics can be selected. Commemorative items, photos, preserved text materials, history books, old objects, life scenes and other restored models will be displayed in a centralized manner. Treasure part of precious collective memory, enhance the sense of cultural substitution.

In my opinion, in addition, the characteristic elements in the neighborhood are also

worthy of our protection. The special spatial model is also worthy of our recovery.

Fig.186 Details of window lintels and stitching



Source: Old Street in Memory, Ji, 2012.

Enlarge construction of characteristic living mode: There are many characteristic living spaces in Dongguan Street. Such as the courtyard space enclosed by the veranda, the exquisite and compact living space, and the interconnected neighborhood space. These are all functional spaces worthy of remodeling with typical old-fashioned Dalian life flavors. Enlarging and constructing these distinctive residential patterns is not only the focus of the protection and renewal of Dongguan Street, but also the soul of the construction.

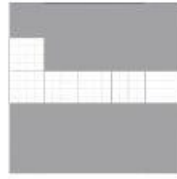
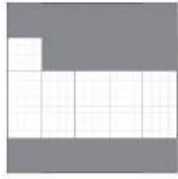
Interactive space creation: With the acceleration of the pace of modern life, the communication between neighbors has become less and less. Obviously, this is not the situation we would like to see. How to improve the interaction mode of the neighborhood, create a harmonious and intimate interaction space, we can learn from the experience of the old buildings in Dongguan Street. Open outer corridors and inner corridors; common inner courtyards and pleasant streets. So that the entire Dongguan Street has a good neighborhood interaction space, which also makes Dongguan Street very humane. Therefore, these existing spatial patterns in Dongguan Street should be preserved and restored, given more spatial value and significance.

Fig.187 Architectural form



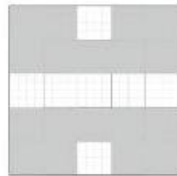
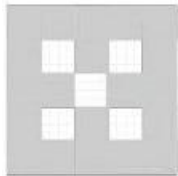
Courtyard space enclosed on all sides

Centralized shopping space



The traditional living street space preserved in the Japanese colonial period

Multi-storey residential space



Courtyard row living space

The mixed use space that bottom quotient goes up lives

Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

Repair the reserved building

Fig.188 Blueprint



Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

Retain the living form and living atmosphere

The renovation of the old shops

Fig.189 Blueprint



Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

When repairing damaged buildings, try to restore the facade of the street. For vacancies in the street interface caused by building damage. It is necessary to grasp the entirety through literature and historical photos, relying on computer modeling to assist in the design of the original site to fill, truly restore the original appearance of

the interface; for the originally discontinuous building facade in the streets, it should be based on the principle of respecting history and still retain its original appearance. In the processing of the entire transition interface, it is necessary to distinguish and integrate Dongguan Street with the surrounding urban environment, so that Dongguan Street is integrated into the larger environment, but it is still unique.

Fig.190 A blend of traditional features and modern elements



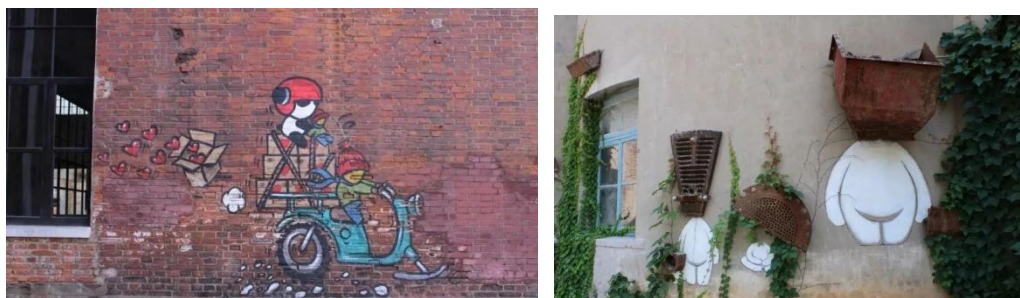
Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

Dig deep into traditional culture to activate endogenous power. An organic connection is formed between the new and the old, the dynamic and the static, the history and the modern. Let the historical heaviness and modern intuition perfectly combine.

Improve the vitality of the area

In Dalian Guangfeng Street, Bingshan Huigu, Manjie and other areas, graffiti has been used to increase the vitality of the neighborhood, while also providing opportunities for residents to participate in interaction. I think this approach can also be implemented in Dongguan Street. The form of graffiti is used to increase the color of the street and evoke the memory of life. At the same time, it can also attract more people to here especially young people. The negative space transformation of the country encourages more activities to beautify the regional environment.

Fig.191 Intention



Source: The news of Dalian, Dalian old street gets a new look, 2021.

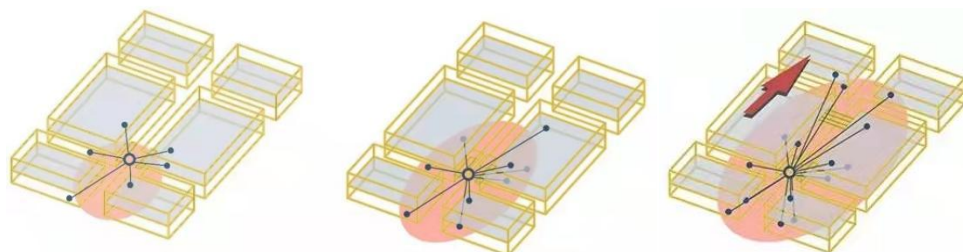
Take advantage of the cultural atmosphere and regional traditions of Dongguan Street.
Develop a cultural entrepreneurial industry, attract creative talents.

6.8 Public participation in the planning process

The construction of residential circles

Based on different personal backgrounds, hobbies and living locations, several small circles have been formed. Residents of different circles have different levels of participation in activities. Most of the local residents who have lived for a long time constitute the core organization members, that is, the first circle. Residents in the second circle include some non-local tenants, who are called by the residents of the first circle and have a high degree of awareness of the project. However, due to the difference in activity time, less participation in the renewal and transformation process. Residents in the third circle are estranged and hardly participate in activities. This requires the residents of the first circle to play a good leading role in leading and exerting their influence. Promote it to produce spillover effects.

Fig.192 The establishment of spatial order



Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

The establishment of spatial order is the primary task of neighborhood organizations and interactions between neighbors, and ultimately forms a spatial structure that matches the social structure. When the internal structural integration elements of the community are disintegrated, the unsuitable spaces will be reconstructed in order between the neighborhoods. This process is full of conflicts and struggles between various actors. The relationship between neighbors will be balanced by the integration of new forces after the conflict.

Fig.193 The structural hole model dominated by minority groups Flat model of multi-agent participation



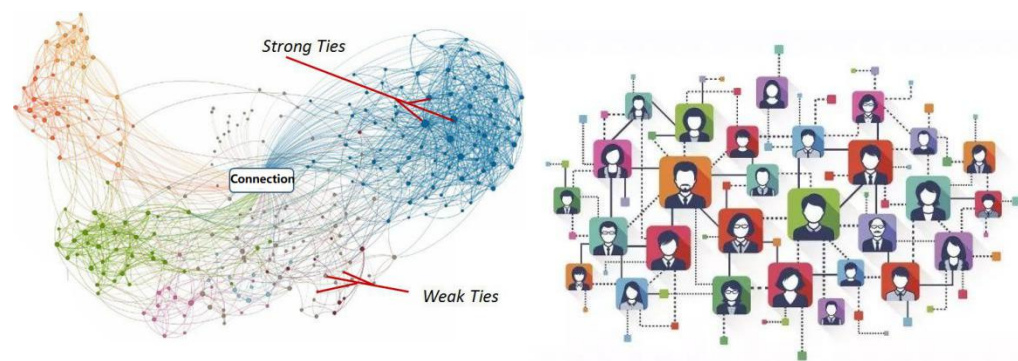
Source: Dalian Land and Space Planning and Design Co., Ltd. Urban Renewal Team.

Network characteristics of Dongguan Street: a structural hole model dominated by minority groups. Core-edge, there are structural holes⁴⁴. Ideal state: a flat model of multi-agent participation. Flat interconnection, no structural holes.

Social network construction

Social network is the formal and informal social connection formed by people in the process of long-term communication, including direct social connection between people and indirect connection formed by sharing physical environment and culture. In the built environment, weak connection is the basic feature of community residents' network, which can effectively promote residents' sense of community. Weak connection often refers to a state in which the residents of the community exist but are not too deep. It has more advantages in acquiring information, creating new connections, and acquiring resources. Conducive to the overall improvement of community social capital. For Dongguan Street, the weak connections established between residents in different neighborhoods can provide a link between different groups in the community, and its openness can promote trust and mutual assistance between residents, thereby enhancing the community and belonging of residents feel.

Fig.194 Connection



Source: UrbanxRural, 2021.

Social participation

⁴⁴ Structural holes are "a phenomenon in which one or some individuals in a social network have direct contact with some individuals, but do not have direct contact with other individuals, and there is no direct connection or disconnection in the relationship.

The development and evolution of the community is a self-organizing process. Only by returning the benefits of the community to the residents and relying on the strength of the residents can the continuation of the development of the community's physical space and social culture be realized.

Manipulation and therapy are fake participation, low-level participation. Informing, consultation is participation at the surface level. Placation is a high level of surface participation. Partnership, delegated power, citizen control are deep participation and cooperative participation (Arnstein 1969).

In my opinion, what we need to do is guiding residents to participate at a high level.

Cultivate the spirit of settlement. When the residents in the settlement can reach a consensus on the value orientation, norms , rules, moral evaluation, it will have a sense of collective and honor. Residents believe that the area is different from other, they express their feelings of identification and belonging to the residential area. It not only enables residents to care for and help each other voluntarily, but also forms a humane social network.

On the basis of the generation of spatial proximity and primary interaction effects, further interaction and homogenous agglomeration. Through the linkage of "locality", "service", and "emotion", the return of the neighbourhood as the essence of "home" is finally realized. The fundamental goal of community governance is to realize the return to the essence of the "neighborhood" of the community and form a group consciousness.

Community participation is a way to present local knowledge and enter the update strategy. Local knowledge is usually owned by community members, and these communities can be located geographically or associated with specific identification groups. Community knowledge comes in part from actual sights, smells and tastes, as well as tactile and emotional experiences encountered in daily life. Residents have more say. In many cases, the preservation and renewal of the old streets conform to public opinions and are closely related to the survival, culture and life vision of urban residents. Public participation in the preservation process is indispensable to maintaining the stability of the neighborhood. At the same time, public participation

should run through the process of planning, implementation and operation, its ways are also varied.

It can be carried out in various forms: expert discussion, public hearing, project exhibition organized by the citizen task force, public forum, etc. Residents make their voices heard through community advisory boards, wish surveys, and votes. Build an information platform to improve management transparency and residents' right to know. Take a bottom-up approach. Pay attention to the reasonable demands of residents.

Good participation is to allow disadvantaged groups to also have the opportunity to speak, so as to promote the different ideas and opinions of disadvantaged groups to enter the decision-making process. Urban renewal should create more opportunities to guide residents to participate, especially active participation. The increase of residents' participation enthusiasm is the basic force to promote the development of urban governance.

Process of public participation in renovation activities

A. Solicit opinions from residents. B. Collect renovation needs, formulate renovation plans, declare plans, publicize, and agree. C. Post-maintenance, participate in community management, establish an industry committee, manage and maintain independently.

Ideally, realize the self-management, organization and adaptation system of the Dongguan Street area.

①Self-control—in the case of external influences and changes, it can still maintain the operation of basic functions for a certain period of time.

② Self-organization—the system generally maintains a dynamic balance within the system, and forms a strong connection and interaction between the various parts of the system; at the same time, it can realize the efficient management and flow of resources inside and outside the system.

③Adaptive——have the characteristics of learning, summarizing, and enhancing self-development ability.

When the different main powers can return to their respective positions and perform

their duties, after the multiple main powers cooperate with each other, a healthy social network relationship ecological environment is finally established. So that the residents of the entire community are no longer isolated islands or atomized individuals, but a healthy network of relationships between residents. Thereby improving social relations within the community. It can also change the relationship between people and space in the community. Vacant public spaces will no longer appear, and public spaces will be used as physical social spaces for community residents. Increase the opportunities and frequency of interaction between residents. For now, more and more local associations in Dalian have also begun to organize cultural studies and exchange activities in old street. The purpose is to allow everyone to understand the old neighborhoods and continue to protect and pay attention to their development.

Fig.195 activity photo



Source: https://mp.weixin.qq.com/s/o0pL4hxAI_NkYKtyhKRSUA

Since 2015, many media have published relevant reports on Dongguan Street. Including the publication of "Window of Northeast" Hainan Diou wrote the "Dongguan Street Historic District" proposal; the CPPCC magazine published "Retaining Dongguan Street" proposal proposal; "The Peninsula Morning Post" published "A century of Dongguan Street was born in Dalian's modern history" "One First" and so on. They hope to continue the glory of Dongguan Street and hope that

more people learn about Dongguan Street.

It was worth emphasizing that in April 2021, the Dalian Environmental Social Organization filed the second public interest lawsuit against the protection of Dalian Dongguan Street (the first lawsuit was filed in 2016). The purpose of the lawsuit was to prohibit the house demolition and reconstruction projects brought by the protection of historic blocks and others from being included in the scope of urban reconstruction. This showed that more and more people and social organizations are participating and expressing their positions. This is beneficial for long-term development.

Government efforts in the planning process

The government needs to control the scale of management. Leaving it unchecked may result in failure to advance the renovation, damage to the interests of residents, failure to implement public facilities. The government manages too much, the finances are difficult to support, the market force cannot be used effectively, the community's main body power cannot be exerted.

With the support of the government, we will jointly solve public problems through community renewal. Form a governance community with public responsibilities, public norms, public trust and public values (Liao 2021).

In many foreign cities, many policies and government practices can also provide references. For example, Bordeaux, France, holds at least three symposiums with relevant departments and experts every year to summarize the advantages of population, history and culture. Use it as a method for publicity and exchange; the Lyon plan requires an evaluation every two years. Partial revisions are made on the basis of the assessment (Wang 2018). The Kyoto City of Japan update the evaluation objects, content of the reserve every year according to the actual situation, and also make corresponding adjustments to the plan with reference to the implementation status and evaluation feedback information. Record the specific conditions in the form of the annual "evaluation report". Coordinate various departments as a whole Work, forming closed loop of evaluation feedback-adjustment, implementation-re-evaluation and feedback (Zhang 2019).

For the complex situation of Dongguan Street. Multiple departments such as

I think it is better to build a network-based flexible construction support system for Dongguan street, present in the form of mobile device applications.

Fig.197 Intention map-regional announcement system



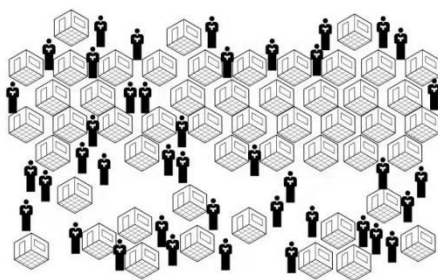
Source: <https://mp.weixin.qq.com/s/s8HgoJLeSrh0chEsw9q57Q>

Consider all aspects for more people

In the process of renovation of old streets, two groups have suffered the most. One is the elderly over 70 years old. The communities where they have grown up and lived for generations are facing changes. The second is young migrants, who will also face rent due to the block renovation. The rise or the dilemma of having to move to the edge of the city. And it will cause a chain effect. Continuous migration, continuous transformation, never ending.

One of the main reasons for this situation is that they do not care about housing issues during the renovation process. How to solve the housing problem of the general floating population needs to be included in the research framework.

Fig.198 Different needs

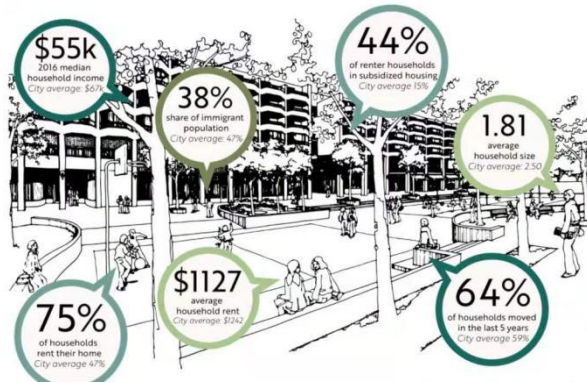


Source: *Research on Social connection, Su, 2020.*

In my opinion, it is better to consider enriching housing types in the next design plan.

The diversity of housing and income groups has led to a strong emphasis on community inclusiveness in the process of renovation and renewal. In particular, it provides diversified housing options for different income groups, and provides corresponding livable spaces to accommodate different lifestyles.

Fig.199 Schematic diagram



Source: <https://mp.weixin.qq.com/s/mmU-x1b0rYvT1ypEyHvInQ>

It is worth noting that the migrant population who rents densely in these places-the silent during the transformation. Because they do not have an urban residence registration, no real estate rights, etc., they are often excluded from the above negotiation mechanism. They are deprived of their right of residence during the transformation process, but they cannot get any compensation, protection, and there is no room for bargaining. As the pace of urban renewal accelerates and the scale of the city is controlled, the area where they can live is getting smaller and smaller, the housing cost of migrant workers in the city continues to rise.

Consider setting up some social security housing-public rental housing, affordable housing, resettlement housing, etc.

In order to prevent serious isolation of living space, the overall fairness of the occupation of living resources is achieved. So as to suppress or reduce the negative impact brought by the differentiation of living space. As a regulatory tool and public policy for the allocation of spatial resources, urban planning should appropriately control the differentiation of residential space in a planned way, handle the relationship between fairness and efficiency. By constructing a suitable living space development model, we can narrow the gap in the living resources of different classes and improve the living conditions of the low-income class.

It is better for the government provides a limited standard for low- and middle-income families with housing difficulties and families with migrants in difficulties, such as housing at a limited price or rent. It can further improve the living conditions of residents in this area. Mixing public rental housing, low-rent housing, and commercial housing in one area provides the possibility for regional diversified mixed living and provides physical space for class integration. Consider setting up long-term rental apartments for young people-to provide young people with the possibility of living in a youth home in the central city. Improve the regional age structure and enhance the vitality of the region.

At the same time, I think the management department should actively plan various service outlets in the area, expand the employment capacity by increasing the service outlets, and provide as many re-employment positions as possible. Ensure the basic livelihood of the people in difficulties in the region.

In terms of government community management

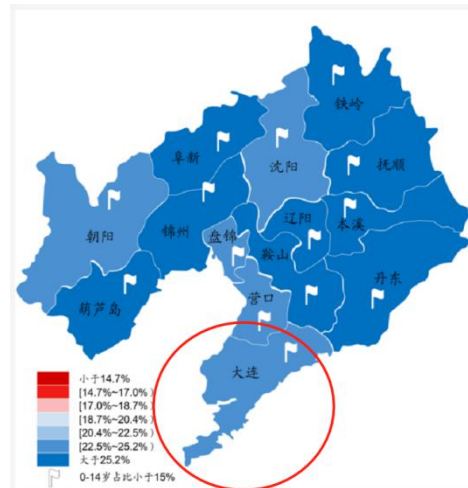
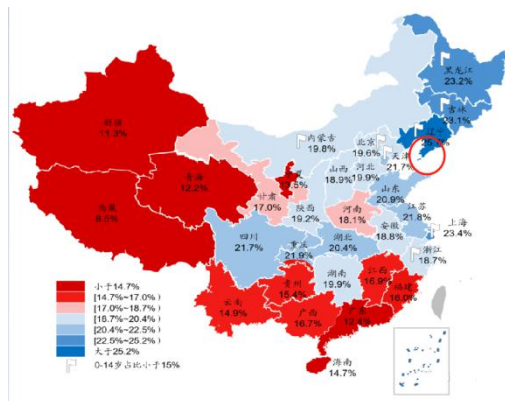
The strategies for fostering community identity are different in focus. The core of the local population community is to improve the personalized demand and supply of public facilities. Build an interactive platform through various community cultural activities. Due to the heterogeneity and mobility of the population, the core of the migrant community lies in the transformation of management models and the realization of equalized services. Build an interactive platform, actively play the role of organizing activities and providing services, create a warm community cultural environment.

6.9 Targeted Transformation (Directional Design)

As China pays more and more attention to universal design and the serious situation of regional aging, I think it is necessary to design for the elderly.

Age-appropriate public space design

Fig.200 Distribution of aging degree



Source: https://mp.weixin.qq.com/s/Ncrhe6cuU0yLEt0va_tuAA

According to the national census report of the publishing house in May 2021, the northeast region where Dalian is located is the most aging region in China, and the aging degree is higher than the national average. Building suitable for aging is imperative. Based on the population development report of Dalian and the surveyed population composition of Dongguan Street, it is found that the residents of Dongguan Street are mostly middle-aged and elderly. Considering the sustainability of the region's sustainable development and renovation, the special renovation of adaptability for old age is of great significance.

The increase in the aging population also increase the demand for high-quality aging facilities in Dongguan Street. The demand for community care and precision services based on social and cultural concepts urgently needs to explore coping strategies tailored to local conditions.

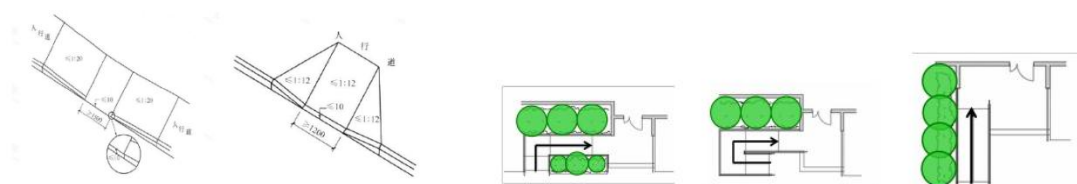
The General Office of the Dalian Municipal People's Government issued the "Implementation Opinions on the Development and Implementation of Dalian Elderly Care Service Projects" and the "Notice on the Effective Implementation of Barrier-Free Renovation in the Reconstruction of Old Residential Districts" in 2018. Included barrier-free construction as an important part of the renovation of old residential quarters.

The outer space of the residential area should be an important functional area for outdoor activities of middle-aged and elderly people. Part of the middle-aged and elderly people who engage in outdoor activities have requirements for safety, comfort,

and accessibility to the external activity space. Safety requires safe walking paths, recognizability and identification of the interface of the path leading to the event venue, etc.; comfort requires high environmental quality of the event venue, open space, complete facilities, etc.; accessibility requirements allow easy access to outdoor event venues, Urban green space and other spaces.

Consider adding the following facilities on Dongguan Street: set up ramps for barrier-free entrances and exits, curb ramps, barrier-free steps, handrails, etc. to facilitate the elderly to travel.

Fig. 201 Ramp



Source: Research on barrier-free Transformation, Qian, 2018.

Consider the physical function of the elderly, it is better to add additional seats in the outdoor public areas. At the same time, the seat design should conform to the physical function of the elderly. The seat height should be 300mm-450mm, and the width should be 400mm-600mm. Seats of "L", "one", "U" one table and four chairs are set. This layout is more conducive to communication.

In terms of floor paving: the integrity of the paving should ensure that the elderly can use the space normally during the activities; at the same time, in the choice of material, choose a material with relatively non-slip and water-permeable materials. Minimize the hard paving area and choose materials with stronger texture at important nodes. Try to choose wood for direct contact areas, avoid metal materials. It can ensure the safety of the elderly in space activities, increase the availability of space.

Lighting: In the selection of lighting system, should choose lamps with high intensity, high softness and suitable color. Add additional lighting fixtures to the public activity spaces frequently used by the elderly. Low-level street lights are equipped with reflective facilities, peripheral high-level street lights can avoid deep darkness, overlapping areas can reduce glare. This is a very friendly design for middle-aged and elderly people. We can set up voice-activated lights, lawn lights, etc. at some

important nodes.

Landscape: The ratio of evergreen trees and flowering shrubs should be about 1:3 to ensure a good view all year round. Plant selection takes into account seasonal changes, each time period can bring different sensory experiences to residents. Natural landscape can enhance the happiness of living, the natural landscape in the garden should occupy at least 70% of the proportion. The plant configuration should choose plants with strong ornamental properties. In view of the weak eyesight of the elderly, it is necessary to configure plants with a sense of color throughout the year. The color, shape, size and touch of flowers, fruits and leaves are emphasized with appropriate backgrounds to enhance the visual and tactile memory of the elderly. At the same time, choose tree species with large and dense shade as much as possible, which not only meets the necessary shading and wind protection, but also increases air humidity and creates an oxygen-rich environment. The elderly are extremely sensitive to temperature and need to distinguish between light and shade areas. Avoid flowers with strong fragrance, thorns and other dangerous flowers. Avoid bringing discomfort and danger to middle-aged and elderly people. Use plants as much as possible to release the negative oxygen ions and antibiotics needed by the human body to create a health-care living environment tailored for the elderly.

Fig.202 Age-appropriate facilities



Source: Repainted by the author.

Chapter7 Conclusion

Dongguan Street has formed a complex social network system during its development. After a long historical reform, it contains rich cultural heritage and traditional culture with considerable connotation value. These rich resources can bring support for later development, and also have a certain economic value. In the transformation, we must pay attention to these resources. We can't break the long-term development for immediate benefit, effectively combine it with modern elements. Give full play to their role and push the city to a new level of development.

7.1 Double effect——In the expected state

The positive aspects of transformation

The renewal can fully embody the cultural value of Dongguan Street. In the process of old city renewal, the government cleaned up Illegal buildings, restored historic buildings. It promotes the reasonable protection of physical and cultural elements, stimulates the enthusiasm for the utilization of traditional culture, and increases the cultural atmosphere of the neighborhood. Thus, the living environment of local culture can be improved. At the same time, improve the living standard and happiness of the residents in the region.

If the planning strategy is successful. For the city of Dalian, Dongguan Street is no longer an obstacle but an activation point. Through the transformation, it will become the name card of the city characteristics. To provide residents with a variety of living environment, to meet the residents with different living habits. Improve the urban temperament, increase the residents' sense of participation, identity and belonging. Taking the elderly as an example, the transformed public facilities can not only increase the participation of the elderly in the community environmental facilities, but also become a way for the elderly to cultivate their temperaments and exercise their bodies. It can also enhance the participation of community residents themselves in community reconstruction, and become more tolerant of the transformed environment.

In certain aspects, newly joined groups with higher socioeconomic status can expand social networks and frequencies, reduce the cost of social trust, and have better capabilities to make social norms more tolerant. But it may bring greater negative effects.

The negative aspects of transformation

If the transformation only pursues speed, it does not pay attention to details. In the process of physical renewal, It is easy to cause the disappearance of the original form of Dongguan streets, the fading of the traditional features of the region. Secondly, physical renewal leads to changes in social network, and the widening of streets weakens the neighborhood connection between residents on both sides. In addition, the loss of the original inhabitants makes the local cultural inheritance lost the carrier. An overly commercialized atmosphere threatens the authenticity of traditional lifestyles.

The reconstruction of Dongguan street has caused serious noise pollution. Widening the area of use is one of the important foundations of reconstruction. Whether by opening up the roads or widening the sidewalks are commonly used methods in the renovation process. Although this practice is to relieve the traffic pressure in the old residential areas and effectively improve the traffic congestion on the existing roads, it maybe affect the living environment quality of some residents to a certain extent.

The reconstruction process destroy the normal life order of the residents. Life order is a kind of criterion produced by urban residents in the process of long-term behavior and activities, which is not achieved overnight. In addition, the elderly account for most of the area, and the influence is increasing exponentially.

Traditional cultural characteristics are weakening. As mentioned above, it is affected by the renewal of the old city and the rapid economic development. Traditional features are being lost to varying degrees in terms of architectural form, business content, social structure, lifestyle and folklore. However, with the development of new forms of business, the perception image of this region will be gradually diversified. With the rise of the new cultural system after the transformation, the contact of different cultures influences. One culture will get the opportunity to adapt

to new living conditions from other cultures. Cultural exchange, transmission and integration occur in this process. It is possible that the traditional culture and resident network of the region will change.

The social costs that might arise

The inner emotional bond of the residents of Dongguan Street will lose an effective carrier, a vacuum may appear in daily public life, and the cohesion of the community may decline. At the same time, the aging living environment maybe decouple from the diverse interests of community residents, the endogenous renewal power of the community will be insufficient, and the daily life space maybe increasingly marginalized. The public spirit of the residents will decline, the introverted "acquaintance" life may develop into an open "unborn" society, the adjacent relationship may in fragments.

Traditional acquaintance community disorganization

In the original community of Dongguan Street, the familiarity and communication between neighbors inadvertently formed a strong regional culture and a strong sense of community identity. The formation of a regional social network is more like an organic community. Regional transformation will break the network of contacts between acquaintances and cause disorganization. Community support functions (help and support between neighbors) will gradually decline due to the decline in familiarity and trust. The safety and control functions of the community will also weaken. Society is a big classroom where you can learn role skills and adapt to socialized life. The premise for this to happen is to have a good interactive network foundation and living atmosphere. After the renovation, the unfamiliarity of the area will increase, which will have a serious impact.

7.2 Cognition and discussion - rethinking the renewal of the old street

The residential function of Dongguan Street is declining, the facilities are outdated and aging, and the comprehensive service level and environmental quality are

declining. It cannot meet the needs of modern housing. This has caused physical and social problems such as the weakening of the regional population structure, spatial decline, and regional poverty differentiation. Using the concept of coupled renewal, the spatial and social issues in the survey are refined. Adhere to the core-peripheral cycle system; continue the original social relationship; take the needs of residents as the foundation and encourage public participation.

Hope to realize the multiple social, economic and cultural benefits through the transformation. It should not only improve the local living environment and neighborhood image, but also realize the win-win situation of cultural continuation and economic growth.

From the study of the old streets in Dalian. In general, urban renewal will indeed change the appearance of the old city and greatly improve the living conditions of the residents. However, the realization of space reconstruction is accompanied by a large-scale population and function relocation of the block. It is likely to accelerate the process of "inner city gentrification".

Every resident has the right to enter the production of urban space. In the choice of space, residents are basically in a passive and subordinate position. With the rise of urban residents' public consciousness, residents need to participate spontaneously, protect their own rights and interests. Actively participate in the production process of urban space, reflect the public's thoughts in the process of urban renewal. To be specific, the quality of life of the resettled groups can be improved by forming perfect public supporting facilities in the resettlement areas. Satisfy their space rights and interests, minimize the sense of oppression of marginalization. Create the public space within the community, encourage spontaneous social activities, strengthen the emotional exchange of resettlement residents. Reconstruct neighborhood relations and rebuild residents' social network. Explore the establishment of affordable housing and other systems in the updated old cities to meet the basic expectations of residents.

In the reconstruction process of old street, the design needs to be completed based on residents' behaviors, which should be decided by the residents of this environment. Therefore, designers should carry out sufficient research and design on the basis of

the research results.

The characteristics of residents' behaviour need to be respected. In the relationship between residents and environment, a specific group of people is linked to a specific environment. When residents repeat activities for a long time, specific activity patterns and behavior habits are bound to appear. Designers should respect the behavior and habits of these specific groups when designing the residential environment. The design on such a basis can better meet the needs of residents. In the transformation process, how to coordinate among multiple stakeholders is also a difficult problem that must be faced; in the later governance, a set of reasonable, effective and feasible governance methods need to be explored.

Besides, street reconstruction should incorporate the residents and their living folk culture into the blueprint for protection. Get rid of the museum-like static and materialized model. Or consider how to combine the reconstruction of historic districts with the protection and construction of communities. The renaissance of street culture shifts from the protection of aesthetics and materialization to the respect and integration of the world of daily life. Residents and organizations collaborate with each other. Discover and share value in the historical environment handed down from the predecessors. Inherit and develop cultural landscape creatively. So that the urban culture has a sufficient social foundation in the face of power and capital. At the same time, it need to have a vision of "emotional governance". Fully consider the emotional structure and psychological feelings of the people. Pay attention to their psychological changes and emotional reactions. "Emphasis on the preservation, transplantation and reconstruction of the sense of belonging of the community."

Based on the perspective of sociology, the thesis analyzes the social environment of the old city in the process of urbanization. We can clearly understand the social functions of the old city given by the current space-time environment. Its unique cultural quality and regional cultural development potential. To explore and develop the space quality of the old street, guide the social function transition of the old street. Avoid the backward physical conditions, direct demolition and reconstruction of the fate. The reconstruction activities of the old city in the future are prospected, the

reconstruction methods are constantly improved while respecting the social and cultural environment.

All in all, the transformation of Dongguan Street is an important practical experiment for Dalian's urban renewal. The dilemma in updating the decision-making mechanism directly reflects many unreasonable and shortcomings in the process. Local governments and all parties in society have learned a lot of experience and lessons in the process. It is necessary to comprehensively consider the planning, decision-making in order to effectively improve the scientificity and practicability. Provide reference and experience for the subsequent transformation of Dalian Fengming Street and Liansuo Street.⁴⁵

Many historical urban areas in China face a situation very similar to Dalian Dongguan Street. Either leave some culturally protected buildings without historical environment, or the living environment in the remaining traditional blocks is poor and the space is fragmented. Due to the large differences in different historical districts, it is also difficult to form a unified approach. However, the spatial evolution of different time stages in the historical city and the spatial mapping of different cultural characteristics can provide ideas for the promotion of protection and renewal from multiple perspectives.

We should learn from the existing renewal issues. We also should consider the trade-offs between protection and interest balance. Fortunately, although the advancement of the times has erased many historical memories, it has also continuously improved the overall social awareness of cultural heritage and sustainable development. The rational and long-term use of the old street needs more attention.

⁴⁵ It has the same status as Dalian Dongguan Street, and the next street that the government will take the lead in renovating.

The appendix

Interview questions and answers.

A

Q: Can you recall the life and changes here? Are you satisfied with your current life? What do you think are the negative aspects that are in urgent need of improvement? Why do you choose to continue living here? Do you think security is the problem?

A: Before the 1990s, from Dongguan Street to the west was all the same "Chinese houses" . Most of the property rights of these houses are public property, and everyone pays monthly rent. The government will regularly repair the house. Since the 1990s, these Chinese houses have been demolished one after another. Because of the continuous demolition rumors, the repairs of the houses on Dongguan Street have gradually relaxed, and the old street has been declining year by year. Since most of the housing is publicly owned, no one is willing to invest in repairs. The living environment is getting worse and worse. Locals gradually move out and rent their houses to scavengers and migrant workers. Over the years, outsiders have carried out so-called renovations to the old building. The walls were demolished, a floor was added to the upper floor, and a simple house was added to the side... The old building was destroyed. Coupled with the long-term lack of management and maintenance, many old streets have become blind spots in the city. As the old residents of Dongguan Street, many people have deep feelings. The unfortunate thing is that it is not well protected, especially the central area.

Although the conditions of the houses here are not very good, they are quite accustomed. When I first moved in, the conditions here were quite good, but now the facilities are aging and the living standards of residents have improved. I still like the living atmosphere of the area. There is no idea of moving away, and even if I want to move, I don't have enough funds. It is hoped that after the transformation, there will be sufficient public entertainment space and more basic public facilities. It is hoped to improve the greening quality of the area and provide a better living environment.

In my opinion, there is nothing wrong with the security here. Rich people won't live

here, and there won't be any thieves. People here are almost old neighbors, we will take care of each other.

B

Q:What do you think of the internal environment? Can you feel the characteristics and specific atmosphere of the residential area? Do you have a good relationship with your neighbors? Do you choose to participate in activities with your neighbors? Do you think daily life is convenient?

A:We live in the outer area. The internal environment is not very good, but the rent is very low, which is very suitable for my current economic conditions. The transportation is very convenient to go work. In fact, I'm still very busy. I basically work outside and only come back at night.

I know that here are all historical buildings and areas, which were still well developed in the past, but they have not kept up with the development of the city. The residents here are mostly elderly, very enthusiastic and have living atmosphere. I would say hello when I met on the road, but because of time, I rarely stay together. Normal life is still very convenient, supermarkets, hairdressers, restaurants, are enough for me. The core area has been prepared for transformation very early, but there has been no progress.

C

Q:Why choose to move away? Why choose the area where you live now? What is the difference between two places of residence? Which do you like better? why?

A:Want to change to better living conditions. Because of financial constraints, they can only choose to live in suburban areas. The living environment and conditions of the current residence are much better than before. But now the place of living is far from the place of work, and it is difficult to integrate with other residents in the area. I used to like to play cards during breaks, but now I prefer to watch TV at home. Lack of breath of life.

D

Q:What are your expectations for the future development of the region? Any thoughts on the functional layout of this area?

A:I think this area really needs to be remodeled urgently, there are too many problems. It is hoped that this area can improve the environmental conditions, at the same time, the area will be transformed under the premise of preserving historical and cultural nature. There is a lack of outdoor activity places both inside and outside the area, public activity spaces such as parks can be increased.

E

Q:As a designer, what do you think about the characteristics of the physical space and social space of Dongguan Street? How to balance the needs of residents and the interests of Party A? What will you focus on? How can planners function at the community level?

A:On Dongguan Street, the composition of the buildings inside the city, the texture of the streets and alleys in the city, and the relationship with the space are all traditional. They are courtyards. In the past, on Dongguan Street, there was a big shop house where a big boss lived, behind which was his house. There were also poor people who lived in one small shop at the front, with no house at all behind them; After this kind of building form is formed, there will be neighborly and friendly relations between neighbors, and the so-called childhood friendship will be formed. Now our new residential building pays attention to the lighting, ventilation, sunshine, green belt, parking space. But the relationship between people is not valued. Dongguan Street a lot of detail decoration is also very characteristic. Although not very high-grade stone carving, are clay or simple decoration, but some of its details of the practice, now there is no. So it's important to leave a legacy. Some construction practices, such as the washing of stones, is the cement wall with gravel paving, wash the cement floating surface with water, the stone exposed, this is the old practice, now the old master will not do it. There are some brick decoration, brick laying method. Many of these things are important examples of what we need to leave behind. Its entire neighborhood is also a place to leave a lot of memories of the city.

Planners need a deep understanding of communities and communities. The ideal spatial state is the spatial community with the organic infiltration of community. To mobilize the endogenous forces of the community, this should be the common goal of

planners, managers and residents. The planner's job is to plan the issues. Guide the community to gradually form their own opinions and reach a consensus, take action. Through such small-scale cooperation, the development of the future will continue to occur. From activities that promote interpersonal communication, to co-building that improves the quality of life. The key to all this is that these activities must be spontaneous and natural behavior of residents.

Questionnaire

Chart. Basic situation

	Questions	Conditions							
Individual attributes	gender	male				female			
	age	0-17		18-40		41-64		65 or more	
	education level	no		primary school		Junior high school	senior high school		university
	family situation	living alone or with spouse				living with parents or children			
	living conditions	own house				rent			
	profession	state-owned enterprises	private enterprises	individual contributor	government worker	student	retired	unemployed	other

Chart. Neighborhood interaction analysis

Research target	Questions	Option	
		Yes	No
neighborhood communication	Do you know your neighbors?		
	Have you visited your neighbors?		
	Will you get help from neighbors when needed?		

Chart. Identity analysis

Research target	Questions	Satisfaction				
		quite satisfied	satisfied	general	dissatisfied	very unsatisfied
Community identity	Participate in community construction					
	It is the duty of every member to participate in community affairs					
	The activities of community organizations have played a great role in my development					
	Get involved in community elections whenever possible					
	Concerned about the media coverage of the community					

Chart. Do activities with

	Question	Place	Figure					
			colleagues	relatives	friends	neighbor	strangers	hobbyist
Concentration degree of public activity space	What public Spaces do you usually take part in in the community? Who do you do the activities with?							

Chart. Life satisfaction analysis

Research target	Questions	Reasons	Satisfaction				
			quite satisfied	satisfied	general	dissatisfied	very unsatisfied
Community resource satisfaction	Hardware facilities resources						
	environmental health						
	public security						
	service facility						
	playground						
	traffic condition						
	Service resources						
	recreational activities						
	sports activities						
	educational training						
	other activities						

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