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South China University of Technology

专业学位硕士学位论文

基于场域理论视角的城中村公共空间更新设计策略研究——以沥滘片区为例

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Public Space Renewal Strategy in Urban Villages Based on Field Condition Theory

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摘要

二十一世纪以来，经济的迅速增长带来了城市的大规模发展与建设。各个城市将建设作为经济发展成就的重要标准和指标，在建设速度和建设面积上一味地求快求广。在以改善居民生活环境为目的的城中村更新中，忽视了居民的实际生活体验和居民长期生活形成的场所记忆与空间感受，而没有考虑城市空间的复杂性、灵活性以及在未来的弹性利用，实际上限制了公共空间与人互相适应的潜力，破坏了城中村公共空间的场所精神历史文化氛围。

本论文从斯坦艾伦的场域状态理论视角出发，提出对城中村的公共空间进行整体上、分层次、有主题的更新，为城中村公共空间更新策略提供价值取向的补充。在场域状态理论指导下，以单体建筑作为节点并结合街道公共空间作为连接，尝试将理论所提倡的关于融入历史传统文脉、自下而上的设计、局部之间关系与能量流动、空间使用的灵活性和流动性等研究视角应用到城中村城市更新改造中，探讨在城中村地区提升环境品质、保存传统风貌、对历史建筑街区活化利用和提高公共空间系统完整度的设计策略。使城中村在享受到现代经济发展成果的同时，留存历史发展的精神纽带和构建完整的公共空间结构，利用公共空间的灵活性与流动性，加强公共空间向社会生活的渗透、人与公共空间的互动，实现城市公共生活的可持续发展。

关键词：公共空间；城中村；城市更新；场域理论

Abstract

Since the twenty-first century, rapid economic growth has brought about large-scale development and construction of cities. Cities have taken construction as an essential criterion and indicator of their economic development achievements and have been bent on seeking speed and breadth in terms of construction speed and area. In the regeneration of urban villages to improve the living environment of residents, the actual living experience of residents and the memory of place and spatial feeling formed by residents' long-term life are ignored without considering the complexity, flexibility, and flexible use of urban space in the future, which limits the potential of public space and people to adapt to each other and destroys the spirit of place historical and cultural atmosphere of public space in urban villages.

This thesis proposes a holistic, hierarchical, and thematic regeneration of public spaces in urban villages from the perspective of Stan Allen's field state theory, providing a value-oriented complement to the regeneration strategy of public spaces in urban villages. Under the guidance of the State of the Field theory, using single buildings as nodes and street public spaces as connections, the research perspectives advocated by the theory on the integration of historical and traditional cultural heritage, bottom-up design, the relationship between localities and energy flow, and the flexibility and fluidity of space use are applied to the urban regeneration of urban villages, exploring ways to improve the quality of the environment in urban villages, preserving the traditional landscape, revitalizing the use of historical building blocks and improving public space in urban villages. The design strategies are to enhance the quality of the environment, preserve the traditional style, revitalize the use of the historic district, and improve the integrity of the public space system in urban villages. The study also explores design strategies to enhance the quality of the environment, preserve the traditional landscape, revitalize and utilize the historical building blocks and improve the integrity of the public space system.

Keywords: public space; urban village; urban renewal; field condition

Content

Chapter 1 Introduction

1.1 Background

1.1.1 Explosive urbanization brings problems

Since the 21st century, China's society has been transformed and upgraded with economic development and industrial structure, and by the end of 2021, the urbanisation rate of the country's resident population was 64.72%[1]. The construction of "harmonious cities" has become essential for building a "harmonious society". In the process of rapid urban development, although the standard of living of the residents has been rising rapidly with the rapid growth of urbanisation, and the people's aspiration for a better life has been satisfied to a considerable extent, it cannot be ignored that the rapid development of urbanisation has also brought about problems such as uncontrolled urban form, insufficient quantity, and low quality of public space due to the high intensity of land development, etc. These problems are reflected in the construction process of urban villages, which has directly led to the destruction of the traditional fabric of urban villages, the breakage of the spiritual ties formed by the villagers' long-term life, the lack of public space and the dirty and disorderly living environment. The urban village areas have lost their foundation for sustainable development, the spiritual places that were anchored in the physical space have been suspended and are slowly dying out, and the traditional culture has lost its foundation.

1.1.2 Guangzhou enters an era of urban renewal

Since the end of the 20th century, the transformation of urban villages in Guangzhou has entered the vision of some scholars from the legal system and other entry points and has developed a transformation model; after entering the 21st century, the Guangzhou Municipal Government has issued policy documents one after another, marking the beginning of the transformation of urban villages in Guangzhou with institutional protection, clarifying the concept of urban villages and proposing the objectives of urban village transformation.

By the end of 2021, Guangzhou's urbanisation rate will have reached 86.46%, and according to the theory proposed by economic geographer Ray M. Northam in 1979, the

urbanisation path of most countries is an "S" curve, and after the urbanisation rate reaches 70%-80%, Guangzhou's urban development basically enters the re-industrialisation period. After the urbanisation rate reached 70%-80%, Guangzhou's urban development has basically entered a period of re-urbanisation. The urbanisation process has entered the middle and late stages. The era of rapid urban expansion in terms of incremental volume has passed to the era of stock development, i.e., urban renewal, and the development mode has shifted to the era of fine-grained development in terms of limited space. The focus of Guangzhou's urban development is, therefore, to improve the functions of living and work, optimise public facilities, and enhance the quality of urban life.

1.1.3 The Process of Regeneration of Lijiao Village

Lijiao Village has a long history. "There was no Henan, but first there was Lijiao" "Henan" means "Henan Island," which is the area south of the Pearl River in Guangzhou. In ancient times, the area of Lijiao was known as "Lijiao Bao" and "Lijiao Shui", which reflect the origin of Lijiao Village, which is based on water[2]. It is a dense network of water in the village. According to the Wei genealogy, the Wei clan has been settled in the Lijiao area since the Southern Song Dynasty and has been influential in the area for over 900 years. The Wei clan also began to build a large number of ancestral halls after the Emperor Jiajing of the Ming Dynasty issued an imperial decree allowing the people to "join the clan and establish temples", and over the course of its long history, the village has been dotted with different types of buildings from residential houses to ancestral halls to temples from different dynasties. After the reform and opening up, the rapid economic transformation of Lijiao Village led to the filling in of the village's original rivers and streams to form roads, leaving only one unexposed Lijiao River, and the water quality has been damaged and is no longer as clear as it once was. Only 13 of the village's 30 ancestral halls remain today, most of which are in a worryingly unused state or rented out as storage space for miscellaneous items; a large number of traditional houses have been demolished and built as "handshake buildings"; traditional street spaces have been taken up by illegal structures and stalls or turned into rubbish collection points in the campaign to separate and recycle waste, and residential spaces have been reduced due to the small spacing

between buildings. The space is further eroded visually and olfactorily by piles of discarded fabrics, cooking fumes, and rubbish due to the small spacing between buildings and is gradually abandoned and left unattended.

As the largest urban village in Guangzhou's Haizhu District, it was submitted for demolition and renovation as early as 1987 and was approved as one of the first urban villages in Guangzhou to be renovated on a pilot basis in 2001, with the first phase of the renovation project only formally completed and delivered in 2007. According to the previously approved renovation plan for Lijiao Village, it had a total planned site of 1,154,200 square meters and a total construction volume of 4,360,000 square meters, of which a total of 2,315,800 square meters of rebuilt houses and a total of 226,900 square meters of financing plots. However, the transformation plan does not sufficiently protect the village structure of the ancient village and still presents the development mode of large-scale demolition and construction. This has led to the loss of the traditional historical and regional character.

1.2 Subject and content of the study

1.2.1 Subject

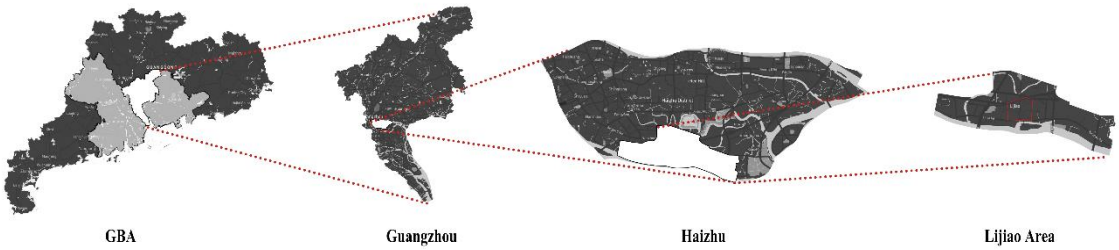

Fig. 1-1 Location of the site (Source: By author)

The Lijiao area occupies the last kilometer of the southern end of the new central axis in the overall urban development of Guangzhou, bordering the Pearl River back channel and located at the intersection of the "one axis, one belt" of Guangzhou (Fig. 1-1). The site of Lijiao Village, one of the ancient ports, was also a location of rapid commercial development, with the two rice machines located near the present Lijiao Pier Park being relied upon for rice processing after the founding of the state, and Lijiao Village's large market street serving as an

attraction for people to come and trade in goods. In the early twenty-first century, with the industrialisation of the village and the development of the textile business district of Zhongda, a complete textile industry chain developed in Lijiao Village, from fabric to finished products, and today there are large and small garment processing factories and warehouses for storing fabric and clothing in the village. The Lijiao metro station is also an important transfer station for the Guangzhou Metro's Guangzhou-Foshan line and plays an important role as a transport hub. In the early 21st century, Guangzhou's urban master plan proposed a strategic cross-cutting approach to urban development: "eastward, westward, southward, northward and central". As an important part of the "Haizhu-Lijiao Eco-city", the Lijiao area plays an important role in the 14th Five-Year Plan of Haizhu District.

The southern section of the central axis is currently undergoing a period of rapid urbanisation, and there are huge differences in the stages of development within the area, both in terms of modern buildings in the Guangzhou Tower area and in urban village areas such as Lijiao and Sanjiao villages. The rapid development of Lijiao Village after the reform and opening up of the city has resulted in the addition of streets along the tributaries of Lijiao River and the erosion of the unique water village charm; although some of the village fabric has been preserved, the addition of unauthorised buildings and piles of debris and rubbish have encroached on a large amount of public space, resulting in the scarcity of natural resources in the landscape and the low quality of public space.

The traditional historical and cultural atmosphere of Lijiao Village has gradually died out with the influx of foreigners, and the traditional clan and neighborhood community relationships within the village have gradually faded, resulting in the loss of the villagers' sense of belonging and the decline of the village's public space. At the same time, the convenience of modern transport and logistics and the development of the information age have led to a blind shift towards modern urban culture in the village, with insufficient attention paid to traditional folk culture, which is reflected in the lack of effective protection and restoration of a large number of traditional houses and the serious damage to public buildings such as ancestral halls and temples, making it difficult to maintain their traditional appearance.

In the past, some residents of Lijiao Village, through the Lijiao Economic Association, have submitted letters to the governmental authorities opposing the inclusion of old houses as historical buildings in order to participate in the process of urban village transformation in order to obtain financial benefits and compensation[3]. Although the current construction plan of the Zhuguang Development Group pays some attention to traditional and historic buildings, for example, the Wei Grand Ancestral Hall is protected in situ, most of the remaining traditional buildings are still demolished and rebuilt, preserving the separate ancestral hall but causing more damage to the public space of the street square with the ancestral hall as the hub, and the overall spatial tradition of Lijiao Village is still not scientifically The traditional spatial appearance of Lijiao Village as a whole is still not protected scientifically and effectively.

1.2.2 Research content

1. Urban villages and related concepts and design strategies for urban regeneration.

   The main focus is on the characteristics of urban villages in China and the problems arising from their development, as well as the limitations of urban regeneration in urban village areas, leading to design strategies and value propositions that can address the corresponding problems.

2. An exploration of Stan Allen's field condition as a guide and practice for design strategies.

   From the case studies, design strategies that reflect the values of field condition theory is derived and provides a feasible strategy for practical exploration.

3. The restructuring and renewal of the public space within the village of Lijiao and the transformation of the main body.

   Through the above theoretical analysis and strategy summary, the public space system of Lijiao Village is analyzed through the views of field condition theory and guides the regeneration of the overall public space and nodes to explore the regeneration and transformation strategy of Lijiao Village.

1.3 Purpose and significance of the study

1.3.1 Theoretical significance

The city as a long-term living practice its connotation is evolving with the times, with the level of economic development will produce functional adjustment to adapt, and the insertion of new local functions will also achieve the function of the expansion of new urban activities at the same time, the residents living in the city also often according to their local daily habits of urban space has a spontaneous transformation of the use of space, function, people, so the three The interaction between space, function, and people is a dynamic urban process that is complex, flexible and continuously developing. The complexity of the subject of urban design, the involvement of multiple stakeholders, and the long-term nature of urban development have led to a variety of theories of urban design that have long been under exploration.

Through the study of the field condition and the summary of some cases, this paper attempts to explore the perspective of the field and the thinking of information and material flow, the architecture and public space built by the elements of site texture, urban culture, activities, and behaviours that are integrated into the urban culture as a base, so that urban renewal can become a platform to carry activities, information exchange, and material exchange. By emphasising the forms between things, it is possible to study the dynamics of natural urban development, bringing theory and practice closer together.

The research exploration of field conditions will also be useful in informing and drawing on complex urban design theories such as master design.

1.3.2 Realistical significance

Although Stan Allen, the originator of the field condition, does not propose specific design tools and strategies and believes that a non-specific and vague theory is conducive to a more concrete and practical understanding and excavation of the site in practice, thus highlighting the design flexibility and mobility advocated in theory, through the interpretation and consideration of the cases, it is still possible to summarise the most important strategic tendencies contained in the cases, thus providing guidance for the extensive urban regeneration

activities and urban village transformation nowadays. This will serve as a guideline for the widespread urban regeneration activities and urban village transformation, avoiding the 'formal' and 'superficial' urban regeneration strategies in China and achieving a comprehensive, dynamic and scientific transformation.

Urban villages were originally a major problem in urban regeneration, always facing an awkward situation due to the current conditions such as property ownership, complex conditions, and the attitude of local governments eager for success. When real estate development enters the field of urban village transformation, commercially oriented development strategies often involve large-scale demolition and violent demolition, while villagers usually take a laissez-faire attitude towards the demolition of traditional buildings in order to obtain financial compensation from urban village demolition and transformation. This is not conducive to the continuation of the historical and traditional culture and appearance of urban villages.

1.4 Research Methodology and Framework

1.4.1 Research Methodology

The main methods studied in this paper are as following:

1. Literature Research

Through the study of domestic and international literature and related lecture content, the results and ideas related to the theory are summarised, and the graphical analysis and guidance methods guided by the theory are explored.

2. Case Study

The case studies referred to in the literature study are used to further analyse and summarise classic as well as modern competition schemes and practical projects from a theoretical point of view and diagrammatic analysis to develop common design strategies.

3. Site Research

Through field research and the collection of online information, the design site will form a more comprehensive understanding of the current situation of the site and further explore and

analyse the local relationships and spirit of place within site, providing direction for the previous design strategy and providing a basis for the next design exploration.

4. Design Exploration

Try to apply design strategies under the conditions of site-specific analysis to generate flexible and fluid design solutions as advocated by field conditions, providing some reference and comparison to real project practice.

1.4.2 Research Framework

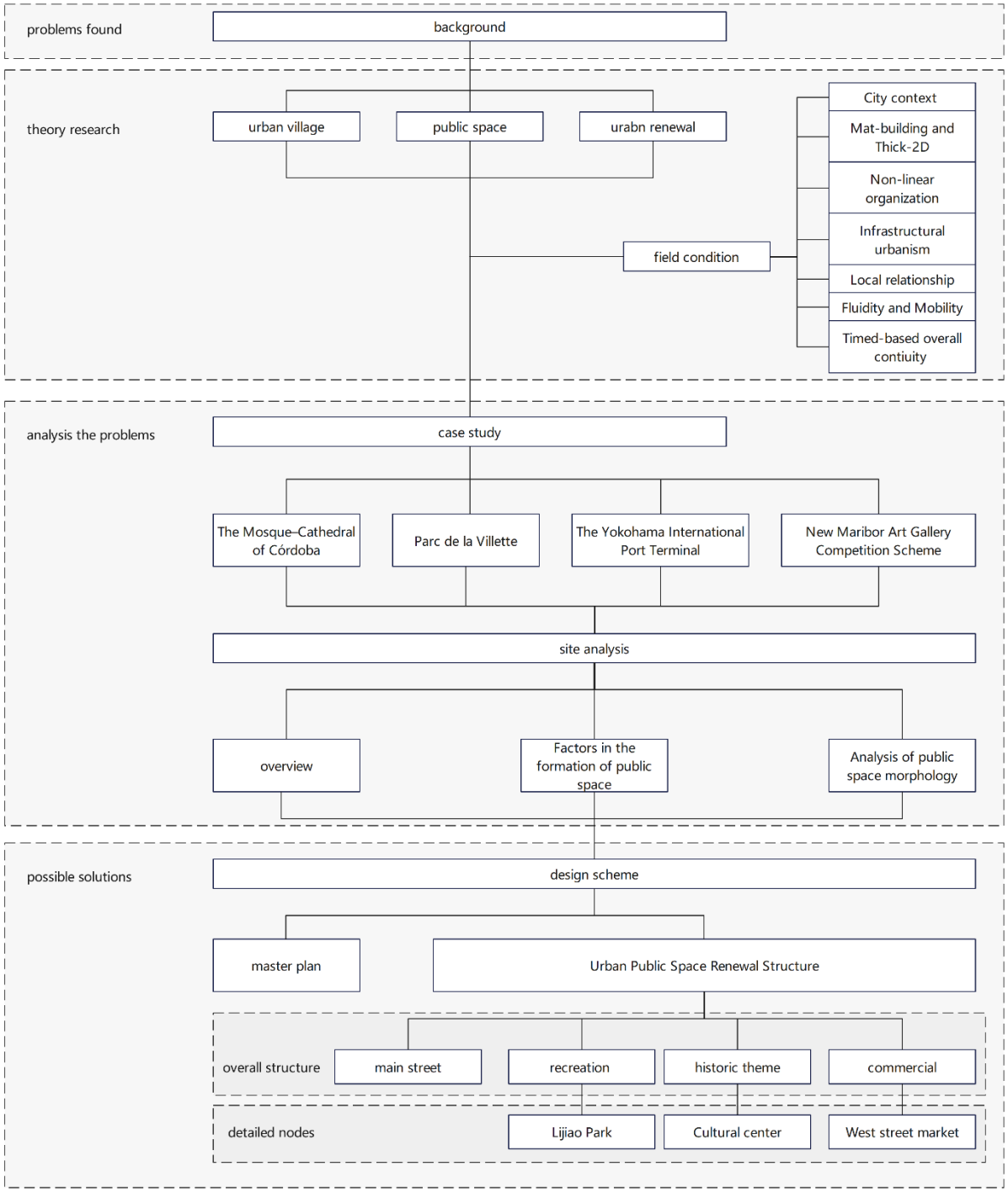

Fig. 1-2 Research Framework (Source: By author)

Chapter 2 Review of Relevant Theories and Field Condition

2.1 Urban Renewal

The introduction of urban regeneration as a social engineering discipline began in the 1950s in Western countries, and the evolution of Western urban regeneration thinking after the Second World War can be divided into three main stages as below:

1. The phase of the renovation based on the idea of form planning to demolish the old and build the new (the 1940s-1950s)

This phase was largely influenced by modern urban planning theory, which relied on technology to solve urban problems, such as Haussmann's Parisian urban renewal program, Corbusier's ' The Radiant City', Howard's 'Garden City' and CIAM's 'Modern City. "However, the urban problems that emerged could not be solved by static master planning because, as discussed above, the city is dynamically evolving territorial entity and a rigid masterplan As discussed above, the city is a dynamic territorial entity, and a rigid masterplan can only solve some of the existing problems, but in the development of the city a static and solid plan does not fit in and leads to more problems and inhumane and monotonous urban spaces.

2. The phase of progressive and comprehensive transformation based on humanist thinking (the 1960s-1970s)

The problems revealed by the previous phase of urban renewal thinking prompted scholars to shift their focus to a people-centered humanist ideology, exploring the need for urban renewal to address the decline of regional social and economic phenomena alongside the development of physical forms. The main scholars active in this time period were Jane Jacobs, who valued the construction of urban communities, and Louis Mumford, who praised medieval organically planned cities[4]. Organic planning, as promoted by the latter, means that the city does not set out towards a pre-formed goal but rather responds to the needs of society and is constantly updated, adapted, and integrated as those needs evolve, culminating in a harmoniously rich urban design[5].

3. The phase of harmonious multi-objective renewal based on the concept of sustainable development (the 1980s to the present)

With the development of globalisation, the depletion of natural resources, environmental pollution, and population pressure, the concept of sustainable development spans the economic, social, political, and cultural aspects of the world, and the idea of urban regeneration has been integrated into the thinking of sustainable development, and the theoretical orientation has become more oriented towards the goals of human settlement, ecological environment, and urban sustainability[6].

Wu proposed urban renewal in 1983, and in 1994 proposed three meanings of old city renewal: redevelopment, rehabilitation, and preservation[7]. Of these three, rehabilitation is the complete city to remove the unsuitable aspects, applicable to the valuable historical The three types of urban renewal are: rehabilitation, which is the removal of inappropriate aspects of a relatively intact city and is suitable for the conservation and adaptation of the layout of valuable historic cities; and conservation, which is mainly aimed at historic parts of old cities, and at the small number of objects that need to be protected[8]. These three meanings of urban regeneration need to be utilised in a prudent manner, depending on the specific characteristics of the urban environment.

In general, urban renewal is an important part of urban regeneration, aiming to enhance the quality of the city and improve the living environment through the comprehensive transformation of old cities. As an important element of urban regeneration, public space is an essential part of the daily life of urban residents, a place for social interaction, recreation, cultural activities and so on, a reflection of the specific characteristics of the area, as well as the cultural connotation of the city.

2.2 Urban Village

2.2.1 Similar concepts to Urban Village

Although there is no concept of an "urban village" in foreign countries, there are studies on "urban village" that are similar to urban sprawl, urban fringe, slums, urban villages, etc. For example, urban sprawl was initially evident in the United States during the period of suburbanisation and later in developing countries under the conditions of economic globalisation. It is defined as the blind expansion of urban space without organisation, without

prior planning, and without regard to the needs of infrastructure such as transport and services; while the urban fringe refers to the transition zone between urban and rural areas in terms of land use, social and demographic characteristics on the periphery of the built-up areas of large cities. The formation of slums is completely different from the mechanism of urban villages, but there are similarities in terms of environmental appearance, architectural conditions, community demographic characteristics, and infrastructure conditions, so the long-term research and transformation experience of slums abroad also has considerable reference value. Urban villages are often located in inner cities and transition zones and are gathering places for foreigners or migrants to enter the cities[9].

2.2.2 Urban Villages in China

The "urban village" is a special phenomenon in the process of urbanisation in China and is the result of rapid urban expansion since the reform and opening up[10]. From the perspective of economic and social conditions, "villages in the city" refers to a geographical entity with a distinct urban-rural dual structure formed after the rural settlements were surrounded by the urban construction land area where social relations are based on kinship and surname clans web[11]. In the preliminary stage of their research, scholars have focused more on the definition, characteristics, and formation process of urban villages. Li Zengjun and Xie Lusheng have pointed out that there are three modes of formation of urban villages, namely sporadic zoning, municipal zoning, and satellite city style, all of which suffer from short-sightedness in planning and construction, resulting in a chaotic layout and low rate of public facilities construction in urban villages, which will affect the coordinated socio-economic development and damage the image and face of the city[12].

However, the formation of urban villages in China is a coincidence of destiny. Although urban villages are the most stubborn in the urbanisation process due to the difficulty of transformation due to property rights and other issues, they are also the most vital cities area[13]. With the rapid development of cities, the security, health, and fire safety problems in urban villages have seriously affected the healthy development of cities and must be dealt with in a comprehensive manner with the participation of many parties. The issue of urban villages has started to attract more and more attention from the government and academia[14].

Urban villages are an important target for urban renewal and a typical representative of the lack of public space. Urban villages are old residential areas or clusters of buildings in the city, which are characterized by poor infrastructure, poor environment and lack of public space due to historical reasons. Therefore, the renovation and renewal of urban villages has become one of the priorities of urban regeneration work.

2.3 Public space

"The ideal state of "public" includes the removal of restrictions on time, place and users, and is an interdisciplinary concept with complex implications, as opposed to "private"[15]. "The concept of 'public space' only entered the discipline of urban planning and design in the early 1960s, appearing in (L. Mumford, 1960, 'The Social Function of Open Space' in Landscape magazine) and (J. Jacobs, 1961, 'The Life and Death of Great American Cities) and in subsequent academic writings[16]. Public spaces are spaces that provide services to the citizens of the city, whose image and substance directly influence the psychology and behaviour of the general public[17].

At the same time, the openness of public space to all people means that individuals who carry out activities in public space also communicate with others as part of the public space, becoming the context or medium through which others use public space. This process of experiencing and being experienced occurs simultaneously in public space, giving public space both an ephemeral and a co-temporal dimension[18]. As an important aspect of public space design, time is often used to improve the utilisation of public space through the organisation of activities at different times of the day, making it a space that is dynamic throughout the day and better able to provide services and social interaction for residents. The UN Habitat III document states the need to "strengthen awareness and improve tools and methods to create vibrant public spaces at the city level." The shape of public space also varies greatly from region to region in terms of urban climate and cultural influences[19]. (Fig. 2-1)

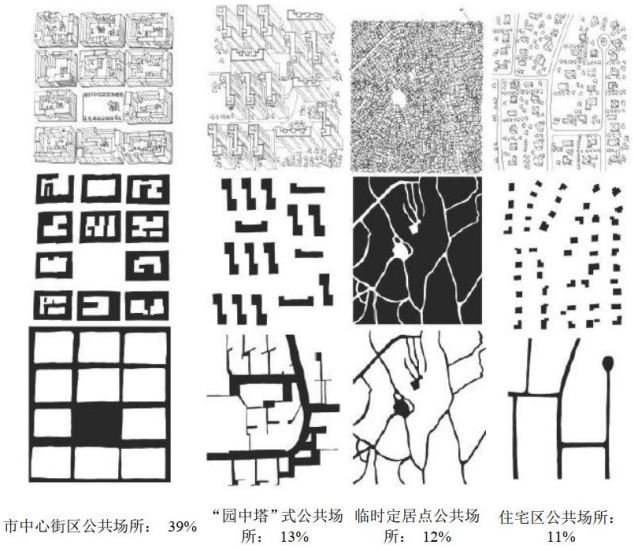

Fig. 2-1 Public space typologies（Source:UN-Habitat City Extension Showcase）

Urban space is the carrier and container for urban activities and is expressed as a system of distribution and interaction of all urban elements within the urban territory, which evolves dynamically with practice[20]. Public space is a container for social life, and there is an inevitable interdependency between the two. Public space provides a place for social activities but facilitates or restricts them due to its characteristics[21].

In the process of urban renewal, there is a close relationship and interaction between urban renewal, public space and urban villages. Urban renewal needs to prioritize the construction and improvement of public space in order to improve the quality and image of the city, while also focusing on the problems of urban villages and proposing integrated solutions to strengthen the construction of public space structure and improve the quality of life of residents. Therefore, urban regeneration, public space and urban villages are closely related to each other, and only when the relationship and interaction between the three are considered in an integrated manner can we provide more valuable suggestions and construction solutions for urban regeneration.

2.4 Field Condition

Field condition was first introduced by Stan Allen in 1995 in the context of a studio teaching at Columbia University, but before that, the concept of the field had been introduced and studied by some scholars, for example, Jeff Kipnis and Sanford Kwinter, Kwinter in The field describes a space of propagation, of effects. It contains no matter or material points but

rather functions, vectors, and speeds[22]. Stan Allen defined the field as a space of propagation, of effects which was summarised in “Field Condition” in terms of information, mobility, flexibility, and the relationship between localities.

“…any formal or spatial matrix capable of unifying diverse elements while respecting the identity of each. Field configurations are loosely bounded aggregates characterised by porosity and local interconnectivity. The internal regulations of the parts are decisive; overall shape and extent are highly fluid. Field conditions are bottom-up phenomena: defined not by overarching geometrical schemas but by intricate local connection”[23].

Through field condition theory, Allen attempts to redefine traditional concepts definitive of architectural praxis by subverting the relationships between figure and ground, object and process, invisible and visible, finite and infinite.(Fig. 2-2)

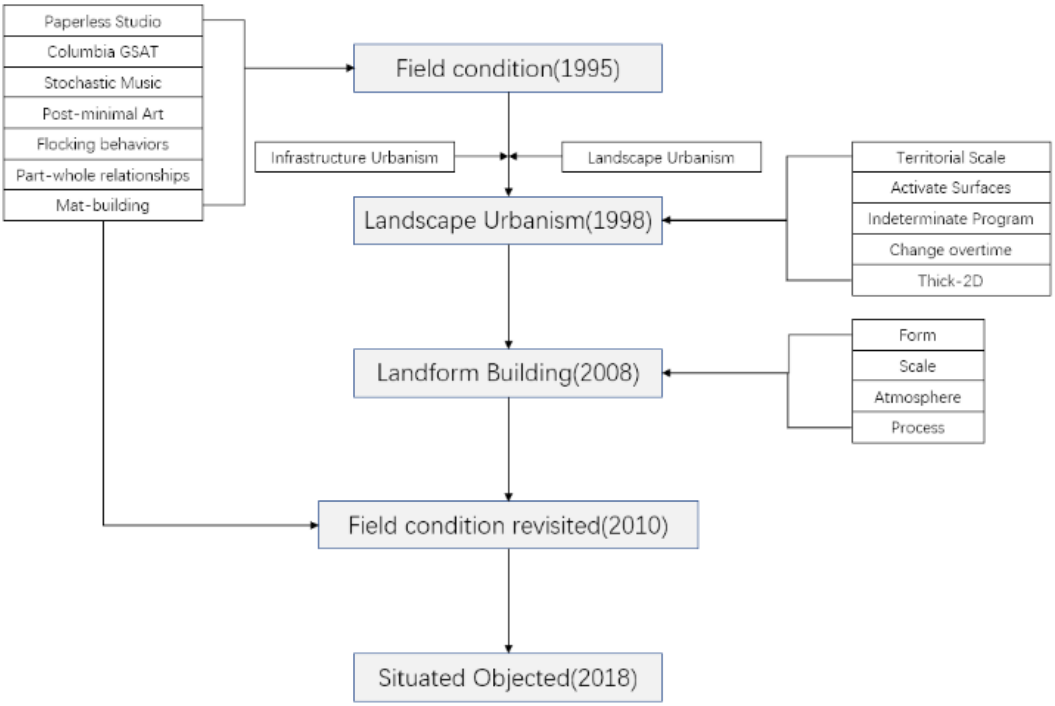

Fig. 2-2 Stan Allen’s Publications and View points

(Source: By author)

In terms of analytical tools, Stan Allen applies the method of diagrammatic design of field conditions from landscape design to architectural design, using the abstract diagram as a tool for thinking about 'organisational organisation', regulating space and events, forces and resistance, density, distribution, and direction, while in the process of analysis, the diagrams

exist only as placeholders, not in themselves similar to the elements they represent, and through this combination of diagrams specify the relationship between activity and form and organise the entire spatial architecture and function of the distribution[24]. The function of the diagram is to juxtapose spatial and activity influences through the relationship between things, giving the designed building a notion of the context and relationships of the site, allowing the building to communicate more closely with the whole site and the urban environment in the process of design generation, accommodating possible changes, adjustments and contingencies, and the final architectural design outcome to better sort out the resources, energy, and information in the site.

Richard T. T. Forman has also pointed out that architecture and landscape as an artificial ecology of the city is "not an indifferent architecture or "anything goes", but an organised framework that allows for change and evolution. " In Zhang Fenglan's research, it is suggested that the field condition approach to design is very flexible and has universal value, and may be applied to other areas[25].

Although Stan Allen acknowledges that field conditions cannot generate a systematic theory of architectural forms and compositions and that "the theoretical model proposed here anticipates its own irrelevance when faced with the realities of practice."[26], it is clear that the theoretical uncertainty and irrelevance of theory to practice is more conducive to exploiting the fluidity and extension of field. The theoretical model proposed here anticipates its own irrelevance when faced with the realities of the practice. The ideas advocated by Stan Allen's field condition can be summarised in the following seven points[27]:

1. Integration into the urban context.
2. Landscape and infrastructure urbanism.
3. The relationship between the forms of the matters and local relationship of things.
4. A bottom-up phenomenon concerned with mobility and flexibility of use.
5. Care about the time process.
6. Horizontal extension with Thick-2D.
7. Non-linear Organisational relationships.

2.4.1 Integration into the urban context

The context, derived from linguistics, represented a reliance on the exact understanding of context and was introduced into architecture by postmodernist architectural thinking in the 1950s, representing the historical and cultural context in which the building is located and its relationship to the site as a whole, suggesting the vertical 'chronology' of architecture as a continuation and expression of human history and the spatial It suggests the vertical 'ephemerality' of the building as a continuation and expression of human history and the horizontal 'co-temporality' of the building as a spatially harmonious coexistence with the site[28]. Postmodernist architecture borrows from the context in large part to bridge the gap between the prevalence of modernist architecture and the widespread internationalist styles that have led to a uniform and monotonous urban environment, hoping to restore the order and spirit of the original city through a focus on the context. Kevin Lynch believes that the city is a unique historical phenomenon and that each city has a different history of cultural development due to its geographical, climatic, cultural, social, and economic differences, ultimately forming an irreducible urban identity[29].The site environment not only reflects the spatial characteristics of the urban culture but also makes an important contribution to the shaping of the urban culture while carrying out urban activities[30].

Field condition emphasises the need to place architecture within the urban environment, to 'place' architecture in response to the characteristics of the site in terms of its surroundings, information, and material flows, so that the architecture that 'descends' on the site can accommodate, sustain and perpetuate the complexity and variation that develops in the course of urban development. Complexity and difference are the key drivers of architecture and urban development. As Stan Allen quotes, 'difference is the engine that drives urbanism', and 'the engine that drives urbanism'. The engine that drives urbanism' and 'the exacting design of initial conditions, coupled with the awareness of inevitable change, is a strategy to cultivate survival by adaption and co-evolution."[31]

Through the idea of 'situating architecture in a concrete urban context', Stan Allen further blurs the boundaries and scales of architecture and city, surface and form, program and event, process and change, and introduces the idea of landform buildings, noting that landform

buildings are the idea that landscape urbanism works in a more concrete architectural context, creating coherent interfaces on built-up land that are not clearly differentiated.

Stan Allen proposes five points for this perspective, including:

1. Dense layout: through dense layout to achieve space and form at the same time both flexible and rigorous relationship, to achieve "loose fit";

2. Dispersion (relaxation);

3. Base integration: through integration to solve the base environment;

4. Place environment: Using the formal and local relationships between things to integrate architectural space and the context of place ;

5. Post-collage: the use of different rule-driven collages to generate tension in space and activity, breaking the stable spatial rules so that the newly built building is reshaped and adapted to the place environment in the broken rule gap through the reorganization and re-adaptation of the original rules to occupy a place in the new environment[32].

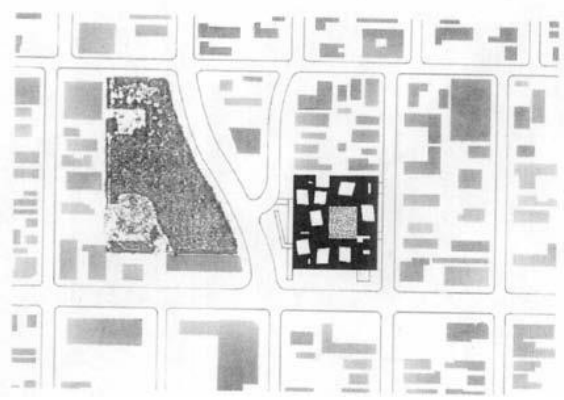

Fig. 2-3 KOMA urban context[32]

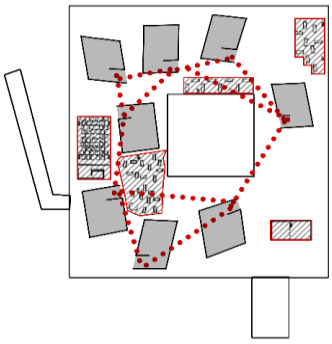

Fig. 2-4 The connection of Second Floor of KOMA

(Source: By author)

In the Korean American Museum of Art (KOMA, 1995), Stan Allen adopted a 'loose-fit' approach to the analysis of the urban character of Los Angeles, loosely arranging the physical and virtual spaces within a regular square volume with a seemingly random arrangement of similarly sized rooms on the first floor. Outside the rooms are various public spaces such as lecture theatres, cafes, and bookshops, which separate the rooms while maintaining a weak connection between them, a direct response to the character of the neighborhood in which they

are located.

Fig. 2-5 Miralles/Tagliabue Santa Caterina Market

（Source:http://www.360doc.com）

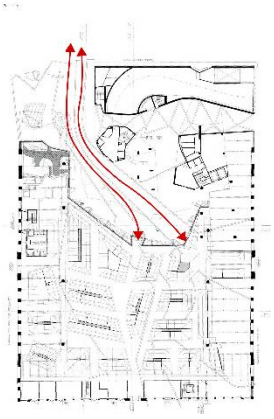

Fig. 2-6 Blurred spatial boundaries

(Source: By author)

Miralles/Tagliabue Santa Caterina Market is considered to be one of the most effective mat-building examples of reconfiguring the urban fabric. The huge patchwork of roofs provides the building with the ability to unify the units it covers, while its flat site strategy allows for a smooth flow of urban space through the building, where time and activity merge as variables in urban architecture[31]. The transformed Santa Caterina Market becomes an open public space, a functional corridor for the area, acting as a 'square' as part of the urban public space, providing the most natural space for recreation and living[33]. By capturing the flow of people, materials, and information on the site, the renovated market provides a suitable public space for new civic activities and is integrated into the existing urban fabric.

2.4.2 Landscape and infrastructure urbanism

Nijkamp, in 2000 divided infrastructure into physical public capital (e.g., roads, railways, airports, ports, pipelines, etc.) and intangible public capital (e.g., knowledge networks, communication, education, culture, etc.), which, despite being a definition in the field of economics, shows that connectivity and communication are important meanings of infrastructure[34]. Domestic research on the concept of infrastructure in the field of architecture has focused on landscape infrastructure, and mainly water ecological infrastructure applied to sponge cities to enhance landscape safety patterns[35] and green infrastructure for ecological land use and conservation facilities[36], both of which make use of the fact that infrastructure is

directly connected to the natural environment and acts as a medium of connection with the environment to regulate the relationship between localities, starting from the connection of elements and treating the field as a vehicle and framework for accommodating natural and human processes[27].

The emphasis on the role of infrastructure in the field condition proposed by Stan Allen is a desire to inherit the urban function of guiding flows and carrying information exchange and material exchange that infrastructure has on top of the function of buildings, treating buildings as the surface of the urban site environment and thus transforming the design of buildings into the building site itself. The infrastructural elements of the modern city are another example of field conditions in an urban context due to their inherent interconnectedness[31].

However, the connections of the infrastructure are not fixed and rigid but are constructed through a few fixed elements that are adapted to the state of the local environment and through the loosely variable connections between them. The choice of fixed elements is not random or arbitrary but is determined by the process of adaptation to the local conditions existing on the site, through which local relationships and connections are regulated and through the connections and platforms outside the fixed elements, which accommodate and guide urban activities.

Stan Allen has seven main points to make about infrastructural urbanism: 1. The infrastructural work is to build the site The basic modes of operation are the division, distribution and construction of the surface; the provision of services for future plans; the creation of networks of movement, communication and exchange, and the use of the landscape as a medium for infrastructure. 2. the construction of infrastructure is flexible and predictable, retaining loose conditions for development within a constrained environment of fixed points and changing over time. 3. infrastructure construction allows for multiple creators Infrastructure organises and manages complex systems of flows, operations, and exchanges and is able to control and regulate flows through specific systems. 6. Infrastructure systems function as artificial ecosystems, controlling the flow of energy and resources and adjusting the density and distribution of habitats. 7. Construction offers the possibility of fine-tuning the design of typical far and repetitive structures, urbanising them in an architectural way, progressively deeper at scale[32].

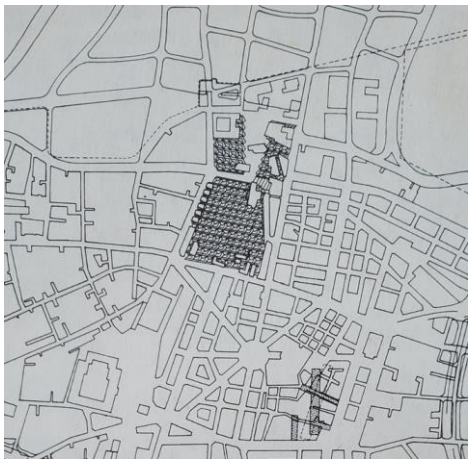

Fig. 2-7 the reconstruction of the Souks of Beirut

(Source: points + lines)

Fig. 2-8 Urban context of the Souks of Beirut

(Source: points + lines)

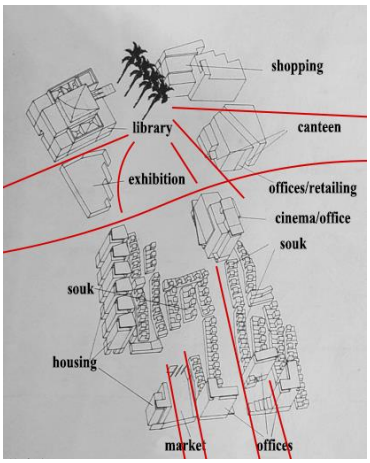

Fig. 2-9 The flow of the Souks of Beirut

(Source: points + lines)

In the proposal for the reconstruction of the Souks of Beirut, an extensive roof of repeatedly connected monoliths occupies the majority of the site area, and underneath it are various functional spaces such as libraries, shops, restaurants, retail, exhibitions, housing, offices and markets, which are scattered underneath the large roof, creating a city-like structure of architectural space within this market, while The building itself dissolves itself into a platform and framework for the above public functions, becoming an urban infrastructure that links functions and controls the flow of resources.

2.4.3 The relationship in-between and local relationship

"Form matters, but not so much the forms of things as the forms between things."

Stan Allen suggests that the field exists as a formal or spatial grid matrix, as this allows the integration of the different elements while achieving respect for each element individually. The elements in the field are loosely organised and linked together; these elements do not exist in the whole field system defined by their own natural characteristics but are defined from the relationships, connections, and material information flows between the different elements forming each other, from which two conclusions can be introduced:

1. It is meaningless to discuss individual elements in isolation; to fully understand the process of formation, development and decay of elements in a field, it is necessary to focus on the entire collection of elements that make up the field;

2. In design, it is close to meaningless to fully define the behaviour of the whole system in advance; the whole under field condition is composed of elements by their respective connections and relationships, a bottom-up process, and the form and content of the whole can be highly fluid, the basis for the existence and functioning of the field does not lie in the physical space, but in the information. The level of flow is secondary to the form of the whole, and at the level of architecture and urbanism, combining the different elements of the structural system in an algebraic and geometric way helps the different elements to form stable geometric relationships at the level of the whole, producing precisely regular axiality, symmetry and formal sequences, to the effect that the local relationships control the overall form.

For example, in the mosque at Cordoba in Spain, mentioned by Stan Allen, the axial space of the church gives way to an undirected spatial sequence, and in the subsequent expansion of the mosque, the original fabric is preserved intact so that the structure of the mosque is not destroyed and the relationship between the parts is stable, and the mosque as a whole achieves an overall form while maintaining a stable spatial structure The mosque as a whole has been extended while maintaining a stable spatial structure. (Fig. 2-10)

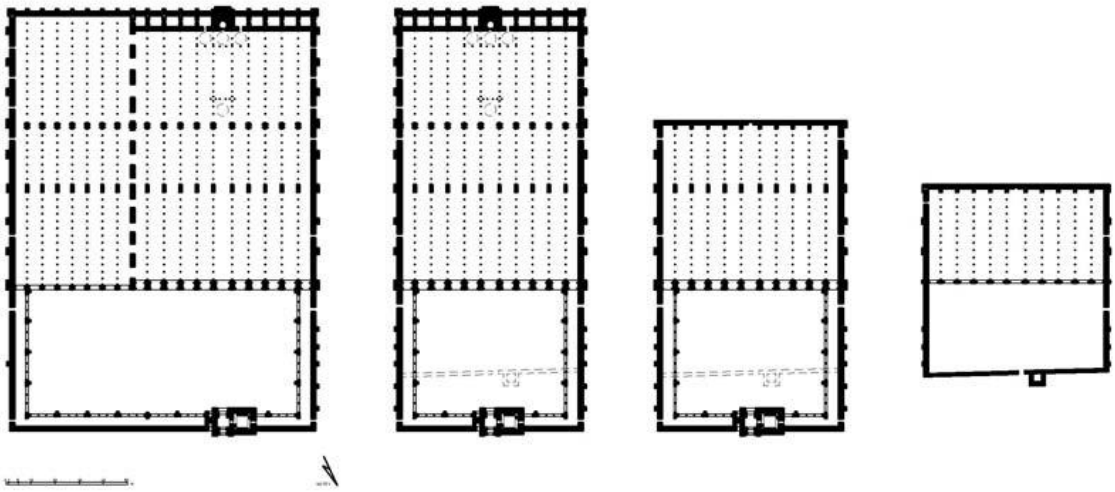

Fig. 2-10 The plans of The Mosque–Cathedral of Córdoba

(Source: socks-studio.com)

2.4.4 Bottom-up, mobility and flexibility in use

In modern urban development, planning and design have been reduced to a tool driven by efficiency, where the difference and richness of everyday life are replaced by planning symbols and where uniform functional symbols are used to unconsciously exclude the production of other meanings. The use of this tool has led to the redevelopment of a large number of old urban areas with only rigid spaces that are functionally homogeneous and fragmented peripheral spaces[37].

The series of introductory and instructional codes that emerge from top-down planning and design inevitably result in the experience of urban spatial diversity being limited to linear touring routes, which inevitably leads to a disconnection between design and site context by neglecting spaces outside the control of the routes. The emphasis on bottom-up spatial use is a reawakening of the idea that people are the mainstay of the city and that their activities are the main content of urban space. As the Machu Picchu Charter suggests: "The city does not exist only for macro purposes such as economic, political and military, but more importantly it exists first and foremost as a living space", and C. Alexander's "The city is not a tree " also argues that the unified physical plan of mass transformation separates the functions of the city and suggests that a complex, deep connection between the city and human behaviour should be sought.

The above briefly summarises the importance attached to public space and activities in

long-term urban studies. The flexibility of the use of public space naturally facilitates the users of the space to make spontaneous modifications to the space in the process of daily use to suit the users' activities. It is also conducive to the organic integration of people, nature and the environment.

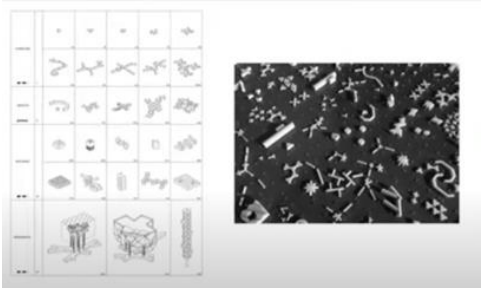

Fig. 2-11 The arrangements of events

(Source: youtube.com)

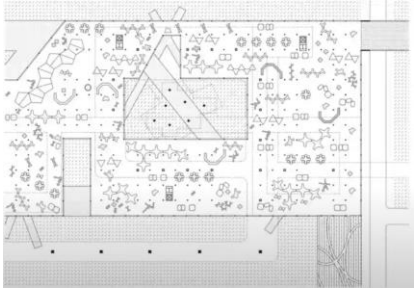

Fig. 2-12 One of possible programs

(Source: youtube.com)

In Detroit's regeneration scheme, Stan Allen considered the self-organised layout of the building to be important for the flexibility of use, so the programme was designed by simply placing the elements of the model until a pre-determined density was achieved, and even when the pre-determined density was achieved, the programme embodied in the model was not limited but is only one of many possibilities of use. (Fig. 2-11, Fig. 2-12) By pre-determining but not limiting the programme at the design stage, Stan Allen hopes to stimulate the vitality of places and architectural spaces, allowing the public space to be occupied by activity while refining the design from the bottom up, creating a diverse and fluid use.

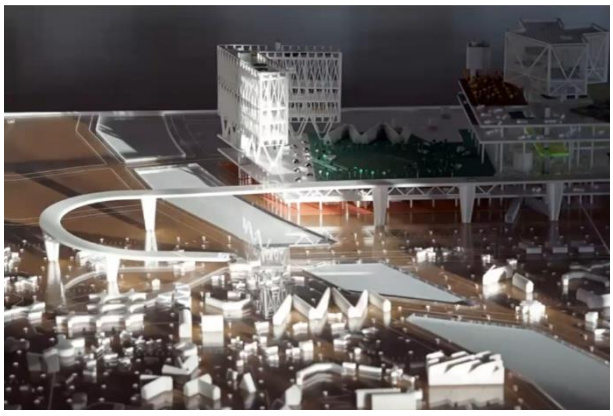

Fig. 2-13 Detroit's regeneration scheme

(Source: youtube.com)

2.4.5 Time Process

“The structure of the city is wrong...Only a structural change of the city could bring about the necessary order.”

—Ludwig Hilberseimer, 1949

The development of cities is a gradual process in which the way in which space is used changes in response to socio-economic development, and as field condition emphasises integration into the urban fabric and a focus on the relationship between localities, the boundaries within which architecture interacts with its environment are constantly moving, requiring architecture to be able to accommodate change, opportunity, and contingency in order to remain responsive to the urban environment. The process is a continuous structure associated with uninterrupted time, which develops through the integration of process into a 'time-space' framework, the basic content of which is the construction of relationships, which is expressed in urban design as the development of the city is enriched and changed by the continuous and relational organisation of the urban structure through time[38].

As in the case of infrastructure in the field condition perspective, although its default form is regular, it needs to be flexible to adapt to local variations when encountering local obstacles and specific site conditions, and to maintain the initial generative logic and stability outside the local sphere of influence, thus maintaining the stability of the whole.

Field configurations are loosely bounded aggregates characterized by porosity and local interconnectivity. The internal regulations of the parts are decisive; overall shape and extent are highly fluid[39].

2.4.6 Horizontal extension with Thick-2D

Through a review of Smithson's 1974 article 'how to recognise and read mat-building” and the emergence of a series of architectural practices in the late 1990s, Stan Allen realised that Nearly 20 years later, mat-building effects have not completely disappeared but persist and influence the architectural practice of the time[31].

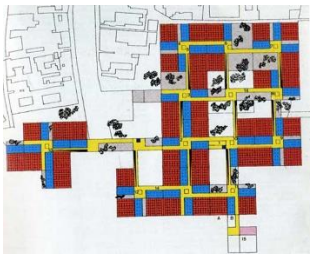

Fig. 2-14 Plan of Corbusier's Venice Hospital scheme (Source: socks-studio.com)

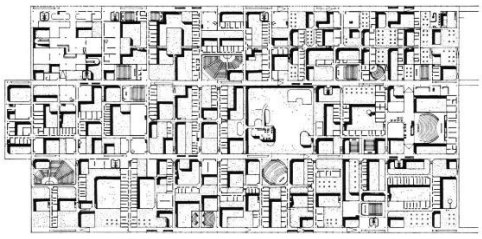

Fig. 2-15 Free University of Berlin (Source: socks-studio.com)

The mat-building is a prototype for high-density, low-volume buildings that respond to the urban fabric through continuous horizontal extensions, forming large-scale collective spaces with overlapping units that are closely linked to each other and on the basis of which the links between the activities within the building are reinforced[40].(Fig. 2-14, Fig. 2-15) The mat-building is a horizontally extended form, with repeated units or free planes forming the layout form, and then the topography is integrated with the building to form a 'landform building', breaking the separation between floors and interfaces, thus building a public space within the horizontal space that is conducive to intensive interaction between space users, enriching the spatial experience. In this way, public space is created within the horizontal space that is conducive to intensive interaction between space users, enriching the space experience[41].

“All grids are fields, but not all fields are grids. ”[32]

Stan Allen, in his study of the concept of mat-building and the geometrical constitutive relationships embedded in it, introduces the visual phenomenon of moiré, which is the formation of interference stripes when spaced objects are superimposed, into the theory through the superimposition of different organized “fields”, and further considers architecture as another 'field' superimposed on a 'field' based on the urban environment. In the process of superimposing, folding, and weaving the two planes of the field, the mutual interference will form stripes with no obvious shape pattern, which is reflected in the urban environment as the logic of different types of site construction brings a layer of artificial ecology and a blurring of boundaries between fields, as well as a wider and richer spatial experience.

2.4.7 Fluid organizational relationships

In contrast to functionalist architecture, which “easily degenerates into a machine-like assembly of parts' and 'modernism's desire to use the unifying paradigm of the brief to form a machine box with a certain definite function”, in order to realize the requirement for architecture to be able to accommodate the complexity and diversity of the city, it is necessary to design architecture from the viewpoint of change and fluidity.

In contrast to functionalist architecture, which 'easily degenerates into a machine-like assembly of parts', and 'modernism's desire to use the uniform paradigm of the brief to form a machine box with a certain definite function', Tschumi rejects the hierarchical causal relationship between function and form, which stems from deterministic thinking. This kind of thinking function-orientedly determines that spaces are 'endowed' with a uniform and definitive function from the outset of design and that they are all stereotyped and homogeneous, leading directly to the machinist process of modern architectural design, which in turn leads to a neglect of the realities of life, difference and flexibility, and is also a major cause of the dullness of modern architecture[42].

The architecture advocated by the field condition is not a linear, deterministic series of hierarchical spaces or single-line narrative spaces, but a permeable and open spatial structure that is non-linear, allowing the users of the space to move through it in an indeterminate and intersecting way, with a variety of directions and orders. It is only a system of buildings characterized by permeable boundaries, flexible interior relationships and a diversity of flow and circulation that can respond to the diversity of the new urban culture.

In the 1983 Tschumi’s design for La Villette Park, the three plan systems of 'point, line and surface' operate independently of each other, maintaining differences and conflicts that break up the notion of plan-spatial relationships, providing multiple combinations and substitutions for La Villette Park through a powerful conceptual framework of three layers. (Fig. 2-16, Fig. 2-17) Tschumi complexly overlays simple compositional elements but obtains a very orderly and grandiose overlapping composition, instead of ensuring the complexity and ambiguity of the parking place[43].However, this complex design approach is achieved by 'breaking up, 'separating', 'merging' and 'latticework'. The hybridization of the three systems of 'point', 'line'

and 'surface' provides only an abstract medium for redistributing and redefining the logic of the site through this non-existent graphic expression of the 'non-architectural' qualities of the buildings in the park[44].

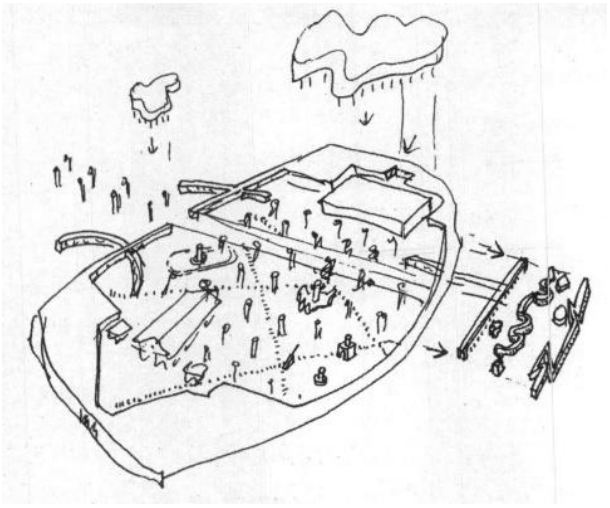

Fig. 2-16 La Villette Park Program of Bernard Tschumi[45]

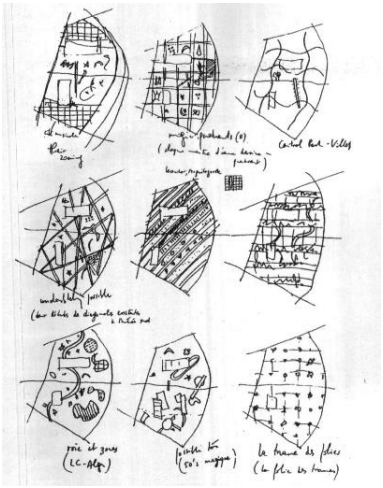

Fig. 2-17 Bernard Tschumi, La Villette Park

(Source: Architectural Review, 1307, 2006)

2.5 Diagram

2.5.1 Definition

In order to bring the space to the point of regulating and directing the material, information, and human flows of the site itself in a field condition's perspective, Stan Allen proposed to think about the "organization" of the site using the abstract mean of diagrams. Diagram is a graphic assemblage that specifies relationships between activity and form, organizing the structure and distribution of functions. As such, diagrams are architecture's best means to engage the complexity of the real，which has the ability to use the traditional skills of architecture for the organization of matter and space[24].

2.5.2 Diagram architecture

A diagram architecture is an architecture that establishes a loose fit of program and form, a directed field within which multiple activities unfold, channel but not constrained by the

architectural envelope. But a diagram architecture itself is not necessarily generated entirely through diagrams, which are merely tools for translating site information and design conditions into architectural form.

2.5.3 Endogenous diagram

The endogenous diagram design method is a method that uses diagrams to process design information and translate the results of analysis into architectural form. The graphic design method is used to translate the design conditions of the site and the analysis of the base ontology into spatial form when designing spaces[46]. The diagrammatic design method allows for the analysis and integration of various perspectives in field condition, generating spatial forms from diagrams that are closely related to the information of the site, bypassing the design of the physical building, and directly realizing the construction of space and function, making the building a platform for public activities and functions, a node for local relationships, and an urban infrastructure that controls the flow of resources.

2.6 Summary of the Chapter

The key issue in the transformation of urban villages is the conflict of economic interests of multiple subjects. Nowadays, as villagers' awareness of preserving their traditions strengthens and scholars have explored and researched urban village renewal models and strategies over the years, the transformation of urban villages is no longer the blind demolition and transformation previously undertaken by developers for the sole purpose of economic interests. The historical and traditional culture of the villages is playing a unique driving role in the cultural and creative industries, online business and B&B tourism with the times, which also places a higher demand on the development and transformation of urban villages to truly preserve and integrate the style and appearance of the traditional historic districts, the living atmosphere and public activity spaces characteristic of the villages into the sites in a scientific and effective manner during the process of transformation and utilisation.

Although Stan Allen's field condition does not directly give specific architectural design techniques and techniques, it is clear from the perspectives and many examples that the examples and proposals presented in the field condition process are not entirely consistent with

the perspectives but are mostly architectural proposals based on a few of the perspectives, taking into account the concepts advocated by the other perspectives.

The complex correspondence between architectural strategies and the theoretical perspectives actually suggests that the field condition has already achieved what it advocates: through the platform of field condition, the seven perspectives are nested in each other and contribute to each other, and the complex connections between them are what makes field condition a concept, for example, in order to achieve the purpose of integrating architecture into the cultural fabric of the city, the building must communicate and connect to the original cultural fabric of the site so that it does not become an island after completion. The building will then be connected to the site and will evolve with the activities and events on the site, carrying more activities and enriching and enriching the presence of the building on the site.

The concept of field condition is like an infrastructure that accommodates these different perspectives without limiting the strict logical relationship between them. This is perhaps also the approach of field condition to the field of cities, landscapes and architecture: "It is not the things that matter, but the relationships between them".

The analysis of the seven perspectives of field condition lays the foundation for the following case studies and the design strategies used in them. However, field condition is not a paradigm for architectural design or urban regeneration but rather a dynamic grasp of the material information flow of the site environment, a guide to the bottom-up initiative of the users of the space to use the public space, and an emphasis on local elements and local relationships, so that the result is an architectural design that serves as a platform for urban life activities, avoiding becoming a vague and contentless form.

Chapter 3 Case Studies and Design Strategies

In this chapter, the theoretical perspectives of field condition are analysed in both classic and contemporary cases, each with a focus on the field theoretical perspectives highlighted in the case and scheme design. Although field condition does not directly generate specific approaches and strategies to guide design, through the study of previous design thinking, one can gain a deeper understanding of the role of theoretical perspectives in the generation of schemes and discover the common design logic guided by the perspectives in the cases, and use the logic and perspectives to reflect each other in practical exploration to achieve the purpose of using field condition to guide urban regeneration and architectural design.

3.1 The Mosque-Cathedral of Córdoba

Fig. 3-1 The Mosque–Cathedral of Córdoba

(Source: socks-studio.com)

The Mosque–Cathedral of Córdoba, officially known by its ecclesiastical name, the Cathedral of Our Lady of the Assumption, is the cathedral of the Roman Catholic Diocese of Córdoba dedicated to the Assumption of Mary and located in the Spanish region of Andalusia. Due to its status as a former islamic mosque, it is also known as the Mezquita and as the Great Mosque of Córdoba.(Fig. 3-1)

3.1.1 Horizontal extension with Thick-2D

The pattern of organization of the Great Mosque of Córdoba is an additive mathematical

relationship, an organisation based on and extended by an initial grid orthogonal system of colonnades and arcades. The initial form of the mosque had been clearly established: an enclosed forecourt, flanked by a minaret tower, opening to a covered space for worship (perhaps derived from market structures, or adapted from the Roman basilica. The enclosure is loosely oriented toward the qibla, a continuous prayer wall marked by a small niche(the mihrab).

Although the Great Mosque of Córdoba has undergone four major expansions in the last eight hundred years, this basic self-similar organisation has been maintained and the spatial feeling and activity within the mosque has been perpetuated, thanks to the grasp of local relationships and the fixing of local rules of composition during the expansions.(Fig. 3-2) The whole is enlarged by the reproduction of the prototype, and the building as a whole takes the form of an open field.

As Rafael Moneo commented: "I do not believe that the court of a mosque has been destroyed by all these modifications rather I think that the fact that the mosque continues to be itself in face of all these interventions is a tribute to its own integrity"[26].

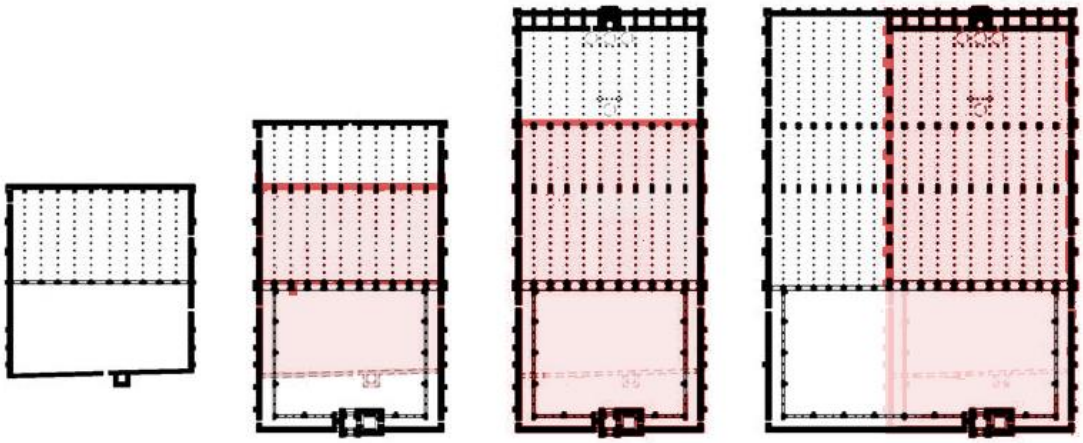

Fig. 3-2 The expansion process of The Mosque–Cathedral of Córdoba

(Source: By author)

3.1.2 Local relationship and fluid organization

The walls of the entire mosque are supported by columns and pierced by arches, and the almost grid-like organization of the planes defines a sheltered homogeneous space within the mosque, which flows in a clear vertical and horizontal orthogonal orientation, with columns

punctuating the equal spaces at the intersection of the two directions. At the same time, the space perceived by the visitor expands and contracts regularly as it moves, and at the boundary, the entire western wall opens out onto the courtyard so that the entrance space to the Grand Mosque is also spread out evenly and flatly, further weakening the directionality of the space.(Fig. 3-3) So that despite the axial, marching spatial sequence that characterizes the Christ Church in the Grand Mosque itself, it still gives way to the Córdoba Grand Mosque The initial undirected space, 'one after the other'.(Fig. 3-4)

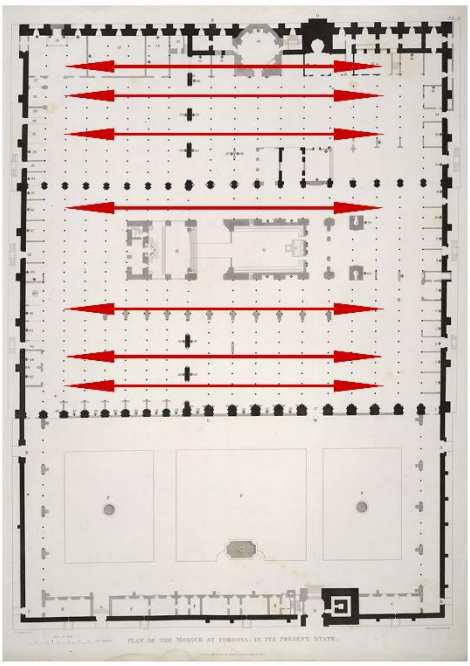

Fig. 3-3 Homogeneous space

(Source: By author)

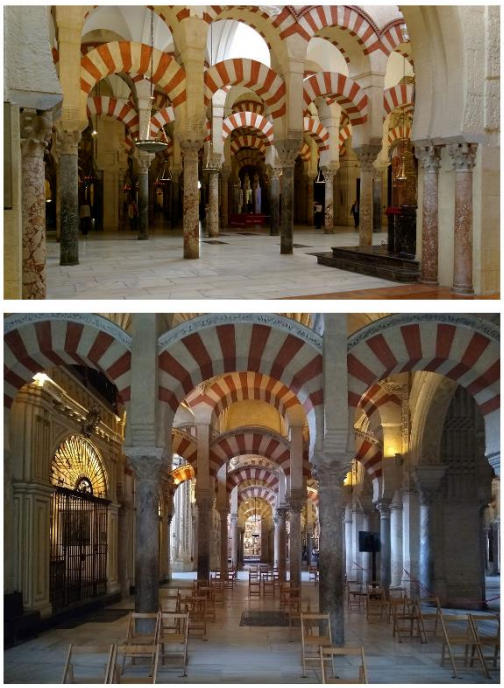

Fig. 3-4 Interior photos

(Source: google map)

3.1.3 Summary

The case of the expansion of the Great Mosque of Córdoba maintains the similarity and unity of the internal spatial form and structure through a coherent and homogeneous expansion process. However, the internal space of the mosque is not entirely homogeneous, but is formed by the combined effect of the enclosed forecourt and a series of homogeneous spaces under the domination of the forecourt. (fig. 3-5)

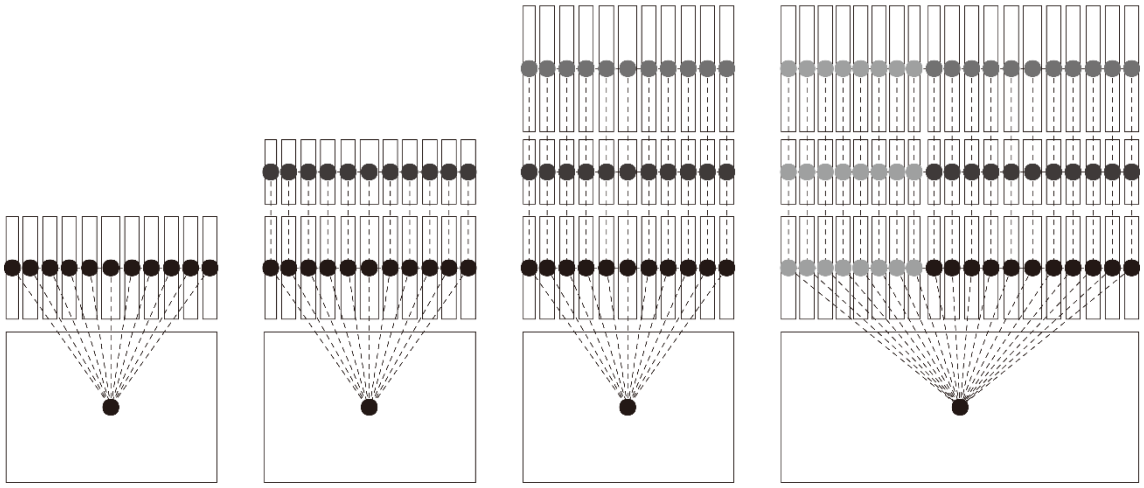

fig. 3-5 Diagram of the Expansion Process

(Source: By author)

The expansion of the interior of the mosque is always under the control of the original spatial order of the Grand Mosque of Córdoba due to the role of the forecourt in guiding the overall space, and this is an important reason why the mosque has been able to maintain its spatial morphological identity in spite of its expansion.

3.2 The Parc de la Villette

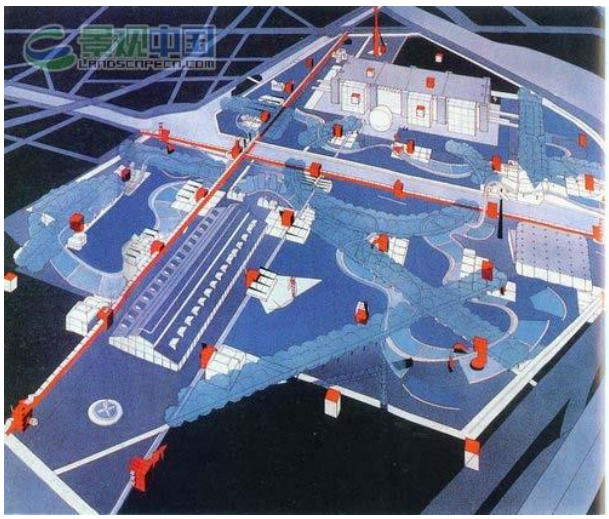

Fig. 3-6 La Villette Park

(Source: landscapecn.com)

The Parc de la Villette is an important work by the deconstructivist architect Tschumi, completed in 1987 and located in the northeast of central Paris. (Fig. 3-6) At over 1,000 metres

in length and 700 metres in width, the entire Parc de la Villette building is a vast and complex project of cultural and recreational facilities. By abandoning the original monumental composition of the park site and by overlaying three separate systems, each corresponding to a different aspect of the lot, the scheme is highly scalable and malleable.

Through the 'non-architectural' design technique of 'point', 'line' and 'surface', Tschumi dismembered the components of the building into a series of notations belonging to different levels. The building's program is then reconstructed according to strict logic. These three systems express different elements:

1. The 'dots' are red foliage on a 120m grid of dots, which have no fixed function and are 'spaces in a game waiting to be played. The dots are seen by Tshcumi as the points for actions, plans and events[47].

2. The "linear" system is the backbone of the park, consisting of two promenades, several straight avenues, a central loop and a streamlined path called the "cinematic walk";

3. The "surface" consists of themed gardens and irregularly shaped lawns, which are not fixed in function and are used freely by visitors.

The three separate compositional planes are superimposed according to their own systems of order and character, and remain distinct and conflicting, dissolving any possibility of defined, pre-determined function and use. This composite scheme redistributes and redefines the relationship between the building and its environment so that the park can be seen as a continuous building, but in contrast to the traditional sense of 'continuous architecture', in La Villette Park, Tschumi provides more of an abstract medium, using the montage technique of cinema to organise events. This shifts the responsibility of architecture from providing a functional space to organising social activities and events, making the building a vehicle and platform for activity.

3.2.1 Fluid organisational relationships

Tschumi's 'event-space' of 'defamiliar' rejects the establishment of pre-determined, correspondent relationships between behaviour and use and spatial patterns, function and form, preferring instead to create a 'split' between them. "The 'event-space' is opposed to the

establishment of pre-determined, correspondent relationships between behaviour and use and spatial patterns, function and form, preferring instead to create a 'split' between them, creating events and shocks through uncertain, disjointed combinations. It is a principle of heterogeneity: diverse, separated, and conflicting elements are grouped, breaking the apparent coherence and stability of the composition and contributing to the instability of the plan[48]. A technique similar to cinematic montage allows each segment of La Villette Park to maintain its own independence while ensuring the diversity of the different combinations of segments, but the logic and expression of the whole remain recognisable because the superimposed different elements are still subordinated to the goal of a whole.

In the same way, that film montage assumes the local autonomy of the fragment and constitutes the cinematic image with its fragmentary, discontinuous, and rapid movements, so in La Villette Park, through the construction of a fragmentary tour of three superimposed systems, a series of coherent spaces is formed by the final combination of events in a state of variety, fragmentation, indeterminacy and unfixed function. Such spaces are very different from the linear, deterministic spaces of modernism, where 'function determines the form and is oriented towards the construction of fragmented events that are more attuned to the reality and complexity of life.(Fig. 3-7)

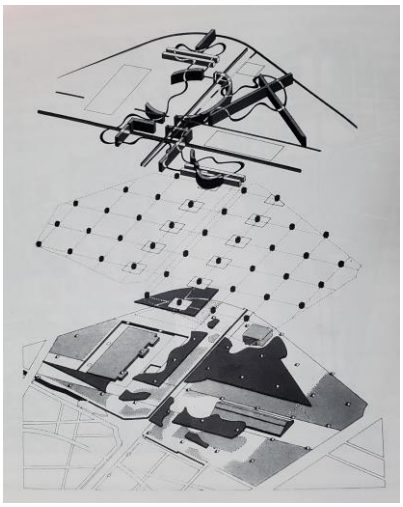

Fig. 3-7 La Villette Park

(Source: The works and thoughts of Bernard)

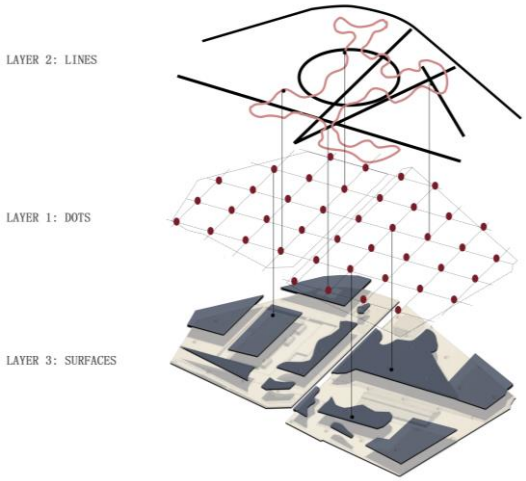

Fig. 3-8 Superimposing Diagram (Source: By author)

From the perspective of experiencing architecture, although the layout and route of the building are pre-determined as a linear one-way continuous flow, each person's perception and

experience of the building space is still non-linear and transient, and the overall perception of the building is also obtained by stringing together multiple fragmented spatial experiences. The architectural space constructed from the perspective of events is conducive to the interaction with the activities and events of the site, completing the information exchange and material exchange between the building and the urban environment, enabling the building to be integrated into the site in a more harmonious manner.

3.2.2 Summary

The organisation of space in terms of activities and events is an important feature of The Parc de la Villette, enabling users to experience space not only in terms of its scale, interface materials, colours and other physical characteristics, but also in terms of the activities and events it can carry, unifying activity, space and memory and forming a spatial perception rooted in the characteristics of the site, making space a real platform for events and activities. The urban space formed by the superimposition of different spatial systems from different activities can meet the needs and experiences of visitors and users for the 'fragmentation' and 'variety' of space, meeting the needs for authenticity and complexity of urban space.

3.3 The Yokohama International Passenger Terminal

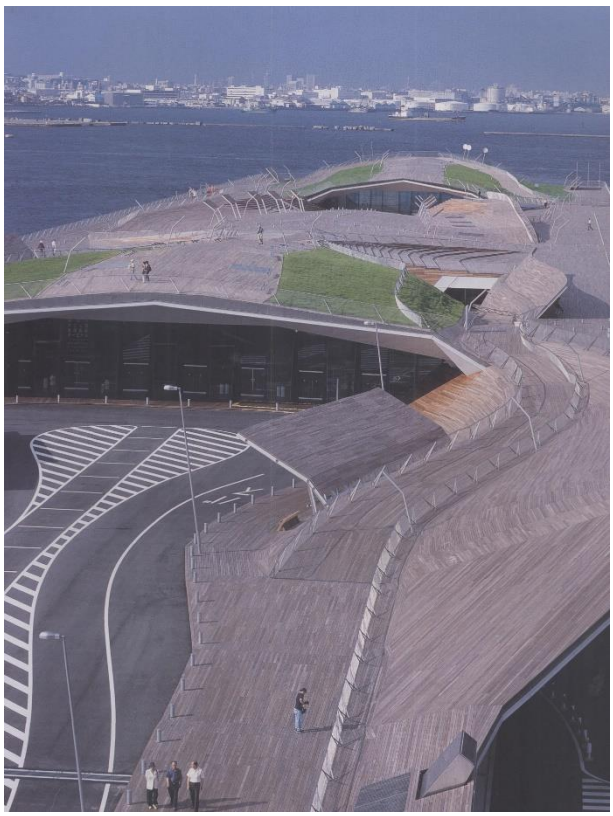

Fig. 3-9 Yokohama International Passenger Terminal

(Source: worldarchitecture.org)

The Yokohama International Passenger Terminal, built in 2002, is a new type of urban amenity designed by FOA.(Fig. 3-9) The scheme proposes to design the building as a continuation and extension of the terminal landscape rather than as an object detached from the fabric of the terminal site, fulfilling all the functions of the terminal while creating a large urban park on the roof[49]. The project is considered to be a symbol of the contemporary landscape architecture's renaissance, breaking away from the earlier structuralist rationalism of mat-building and developing a geo-landscape strategy around the concepts of generating architectural organisation from flow diagrams and avoiding the idea of semantic 'doors'.

3.3.1 Infrastructure and Landscape Urbanism

At a time when architecture was widely used to organise spaces along functional flow lines, the Yokohama International Passenger Terminal was initially a research project, and FOA was

more interested in the possibility of using this transport infrastructure as a dynamic area without structural directionality. By transforming the traditional flow structure of the terminal from a linear flow diagram to a 'no return diagram' with multiple paths. (Fig. 3-10)

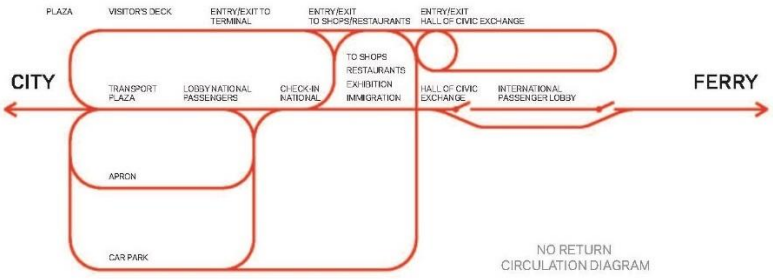

Fig. 3-10 no return circulation diagram of Yokohama International Passenger Terminal

（Source: archdaily.com）

FOA wanted to provide a specific spatial expression for the building through a circular flow structure and came up with the concept of a 'hollow site', where the marina is an extension of the urban ground, and the whole building is covered by a low, flat, origami-like undulating sheet metal roof, with individual paths inside the building for people with different purposes, which There is no physical endpoint, but rather a connection to the urban field[45].

The internal spaces of the building are controlled by a profile every 5 metres to create a smooth 'continuous but not identical space[50]. The interior of Yokohama International Passenger Terminal also uses as little as possible of the traditional separating elements of architecture, such as walls, columns and beams. The entire observation deck of the building becomes a fully open public square integrated with the adjacent park and an extension of the coastal landscape.

The integration of architecture and landscape is thus twofold: firstly, in terms of the physical form of the building, which is concealed beneath the folded, flowing surface; and secondly, in terms of the function of the landscape, which allows the public to use the passenger terminal in the manner of an urban landscape space when not using the transport function of the building, through the open space of the roof after the concealment of the form, achieving a continuous experience of landscape space and urban site.

3.3.2 Time progress

The internal flow of the Yokohama International Passenger Terminal differs from the dedicated, isolated flow of conventional transit buildings, which are designed to be functional and oriented towards passenger wayfinding and to eliminate other flow possibilities where possible in order to increase transport efficiency. The internal circulation of the Yokohama International Passenger Terminal is interwoven, allowing for a rich spatial experience by switching between the different functional streams and providing opportunities for personal interaction or access to public spaces such as the rooftop observation deck and multi-purpose hall. A variety of non-traditional passenger terminal functions are also compounded within the building to serve both passengers and non-passengers, such as the open terminal floor for concerts, markets, fashion shows and book fairs, and the open roof terrace for public events such as gatherings, car shows, fireworks parties and outdoor concerts.

So the Yokohama International Ferry is not only a building used by the public for transport purposes but also a public building that is used for more public events than just transport. As the city grows and changes over time, the functions of the terminal and the events and activities that take place in it change, and in addition to the fixed function of passenger transport, the public space of the terminal can be freely used by the public according to their own needs. The flexibility of use and the fluidity of space of the Yokohama International Passenger Terminal are fully reflected. The space constructed by the building becomes a whole that intertwines the functions of transportation and the richness of urban activities, and this whole remains variable while remaining relatively stable at the local level.

3.3.3 Summary

The Yokohama Terminal uses infrastructure as a platform for activities and events, a similar approach to the spatial organisation of La Villette Park, but with the emphasis on the integration of space with the urban environment to introduce urban activities and events, thus strengthening the integrity and coherence of the internal and external urban spaces of the building. The internal spaces of the building are also flexible and fluid in use, combining multiple urban functions to serve the public as well as visitors and accommodating a wide range

of activities at different times of day.

3.4 New Maribor Art Gallery competition entry

Fig. 3-11 Maribor Art Gallery competition entry

(Source: archdaily.com)

In the 2010 competition for the new Maribor Museum of Art in Slovenia, Stan Allen's proposal was the first to realise the integrated field condition, the part-to-whole concept and the symbolic architectural form, and is characterised above all by an adequate sensitivity to the city's eclectic historical context.

The scheme is connected to the banks of the Drava River and the adjacent gathering places by an open, flowing public terrace on the ground floor, which flows into each other for flexible use; on the first floor is a whole sequence of galleries made up of similar monoliths, all with a pentagonal plan (a typology of plan that Stan Allen favours for its repetition and a high degree of flexibility) and a form that is in harmony with the surrounding historical tradition. (Fig. 3-12)

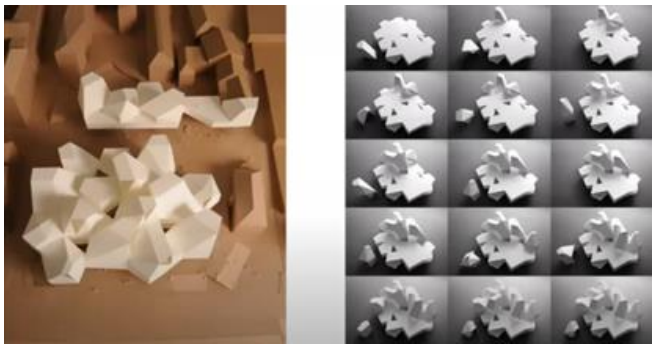

Fig. 3-12 Model photos of Maribor Art Gallery competition entry

（Source: archdaily.com）

The different roof heights, orientations and angles of inclination of the individual units have been carefully designed to meet the different exhibition needs of the gallery; the combined pentagonal planes can also be linked to form a large continuous space for temporary exhibitions, with the loosely connected areas providing light patios on the ground floor and terraces on the first floor.

3.4.1 Urban Context

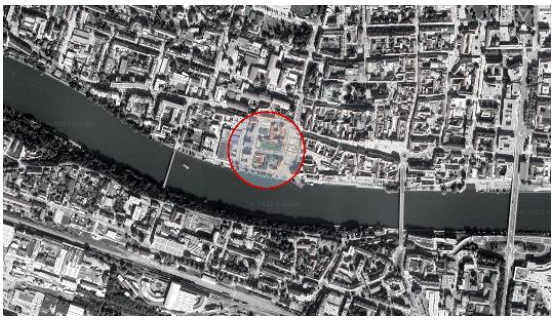

Fig. 3-13 Location

Fig. 3-14 Aerial view of the site

（Source: archdaily.com）

The New Maribor Art Gallery competition entry responds to the urban context of the site in two main ways:

1. self-similar typology with sloping roofs.

2. the open first-floor space.

The typical urban fabric of the city can be seen in the urban context surrounding the site, which expands over time in the form of relatively separate, rhythmic blocks, while the buildings within the blocks have a distinctly similar typology of sloping roofs. Rather than simply imitating the form of the sloping roof, Stan Allen's scheme is a patchwork of pentagonal plan monoliths that occupy the middle of the site, each with an approximate sloping roof feature, which in its entirety responds to the contours of the urban block facade.

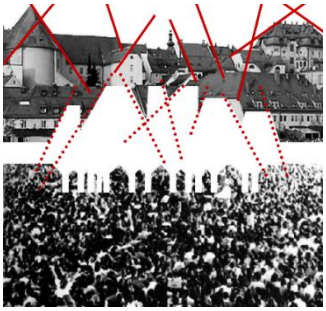

Fig. 3-15 Sloping roof (Source: archdaily.com)

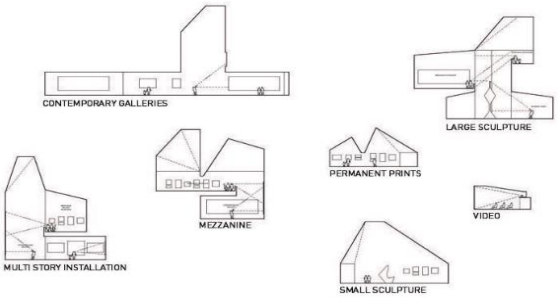

Fig. 3-16 gallery typologies (Source: archdaily.com)

The strategy of the ground floor space focuses on raising the volume of the museum to open up the ground floor to the urban public space, maintaining continuity with the city field. The flexible pentagonal plan outlines the public space at ground level without the clear boundaries of a traditional urban square but instead forms a permeable and porous boundary with the internal space of the first floor of the museum, further strengthening the connection and communication between the interior and exterior.

Fig. 3-17 Functional diagram of Maribor Art Gallery competition entry

3.4.2 The relationship in-between and local relationship

As already mentioned above, the scheme is made up of a number of pentagonal planar monoliths that are approximated by stitching together; as Stan Allen points out: a grid is a non-centralised expansive system, but the grid is the same at any given point[51].

New Maribor Art The Gallery competition entry produces a part-to-whole effect through the interrelationship of the monoliths as exhibition halls, where the monoliths with their sloping roofs fade into the whole through the simplest form of the pentagon, which has an unstable characteristic, and where the unity of the building is maximized, the spatial character of the individual units is retained through the different heights of the roofs, "continuous, expansive,

repetitive system but produces difference locally within an overall coherent system. "

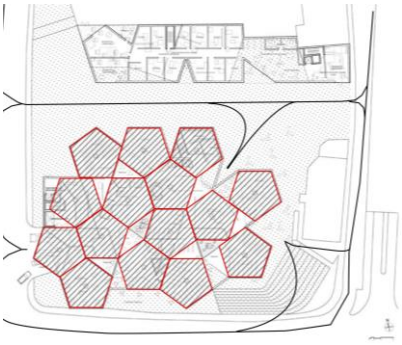

Fig. 3-18 Ground Floor plan division

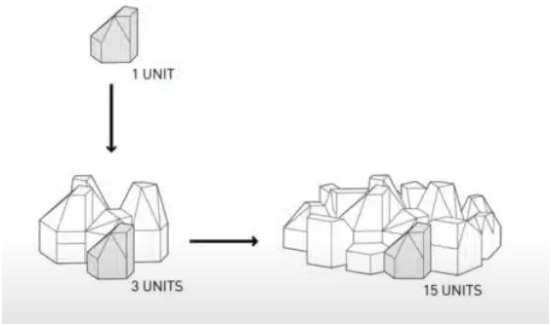

Fig. 3-19 Unit combinations

（Source: archdaily.com）

3.4.3 Summary

The new Maribor Art Gallery integrates the building space into the urban fabric and environment through the roof form and the openness of the ground floor. The self-similar pentagonal plan dissolves the specificity of the internal space of the building for users and visitors, and instead integrates the feeling of flowing space into the urban space in a repetitive plan form, completing the dissolution of the building itself.

3.5 Summary of the Chapter

This chapter analyses and summarizes four architectural cases and proposals that characterize the field condition perspective in various ways, exploring the connections between the field condition from perspective to practice and the relationships between the perspectives and providing some practical comparison and reference for the realization of the perspective of architecture from a local perspective, focusing on the relationship between form and form rather than the form itself, and non-linear organization.

These four cases have a considerable time span, reflecting the fact that field condition is not an entirely new concept but rather a collection of several similar reflections and perspectives, a collection that is summarized by Stan Allen as field condition to guide the process of architectural design. If the terminology of the ideas is further abstracted and only the ideas themselves are retained, the summary of the cases shows that the focus of the field condition is

on flexibility and mobility.

The use of flexibility and mobility modulates the form of the building itself so that it blends in with the urban fabric of the urban environment and so that the new building does not disrupt the urban space, and through the modulation of form, the site environment and landscape can be introduced further into the internal space of the building, urbanizing the building space and enhancing its public character. The buildings that are introduced into the site environment will naturally relate to the surrounding local urban environment at the boundaries, manifesting as material exchange and information exchange, and carrying part of the random urban activities in the flow of space, thus enriching the spatial experience and generating the superimposed moire effect of "field". This process and human activity are mutually influential: the activity space will be created out of nothing due to economic and social development and will be used to continue existing activities and stimulate new ones in the new public space. People also localise their use of public space over time, in the long or short term, to make the most of existing public space and to develop new and innovative ways of using it.

Architecture and urban design have something in common; architecture under the theory of field condenses the urban effect and aims to regulate and direct the flow of people, material and information in the urban environment, making architecture an extended infrastructure rather than a mere monumental image, by considering architecture as a medium between the urban artificial environment and the natural ecological environment, combining the landscape and avoiding or even replacing the traditional "wall" that serves to vertically divide space, and eventually becoming a UwA - "Urbanism without Architecture".

Chapter 4 Site Analysis

4.1 Overview

4.1.1 Location

The Pearl River Delta city group includes Guangzhou, Shenzhen, Hong Kong, Foshan, Zhongshan, Jiangmen, Macau, Zhaoqing, Dongguan, Huizhou and Zhuhai, and is one of the three major economic circles in China (Bohai Economic Circle, Yangtze River Delta Region and Pearl River Delta Region). Economically, since the reform and opening up, it has become a gateway for capital inflow with the geographical advantage of being adjacent to Hong Kong and Macau and has been able to develop its economy rapidly, forming a PRD city group with a high degree of economic concentration. And in 2018, a document issued by the Chinese Party Central Committee, "Opinions of the State Council of the Central Committee of the Communist Party of China on Establishing a More Effective New Mechanism for Coordinated Regional Development", proposed that the new model of regional and urban development should be driven by the central city, driving the interaction and integration between regions.

Guangzhou, as the capital city of Guangdong Province, has a very important position in the PRD city group and metropolitan area and is the central city of the PRD economic circle. It shows "explosive" urbanisation led by rural urbanisation Features, where the rapid development of traditional rural areas into urbanisation and the rapid expansion of urban areas gradually "[52].

In order to meet the needs of rapid urban development, in the 1990s, Guangzhou government chose to bypass traditional villages for urban development, due to the difference in ownership between collective land and state-owned land, which led to difficulties in management and monitoring during urban development, and the high economic and social costs of transforming rural areas, resulting in the formation of lots of urban villages.

Lijiao Village is in the Haizhu District of Guangzhou, the southern riverfront area of "Henan Island", connected to Haizhu Lake Park and Haizhu National Wetland Park in the northeast and the riverfront in the south, with rich landscape resources.

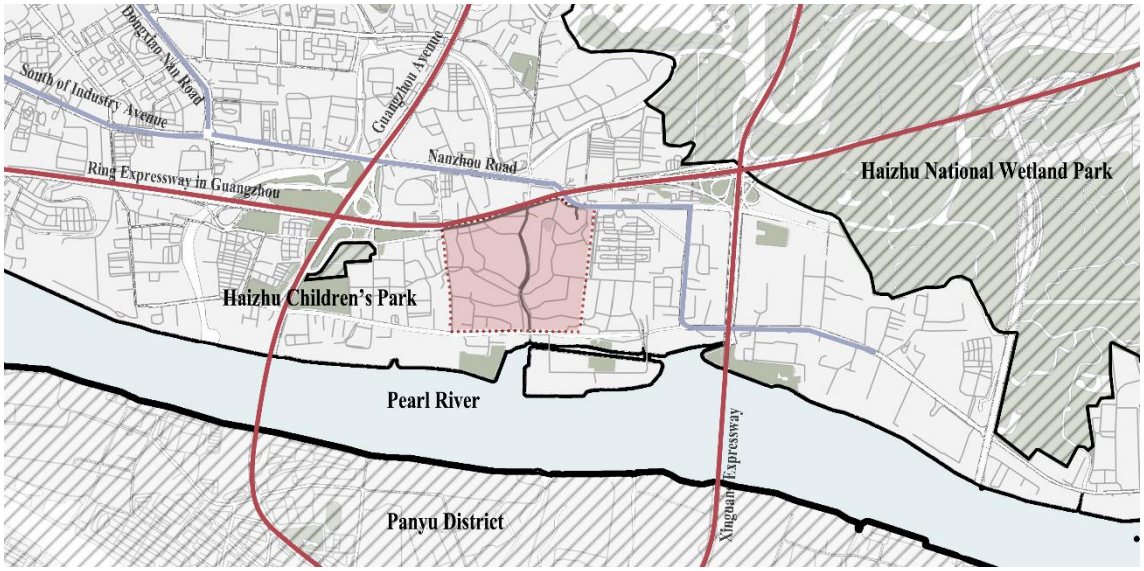

Fig. 4-1 Location of Lijiao (Source: By author)

4.1.2 History

The village of Lijiao has a long history, and as the saying goes, "Before there was Henan, there was Lijiao". The word "Li" is a Guangzhou dialect term for "the branch of the river downstream of the Pearl River", while "Jiao" is a dialect term for a branch of the river and is often used in place names. The combined name "Lijiao" has the function of referring to a specific body of water[53].

Fig. 4-2 Location of Lijiao Bao[54]

The village has been in existence for nearly 900 years and is home to two major clans, the Wei and Luo, as well as other groups with surnames such as Yan, Bai, Zeng, Tan, Guo, Chen,

Liang, Feng and Yuan. The Wei clan has been settled in the area since the Southern Song Dynasty, and through the efforts of generations, the Wei clan has been integrated and dominated the local community through 'naturalisation' and 'shifuisation', and together with the local Luo clan, they control the 'Lijiao' area in the historical memory of the local community. "

In the course of the Wei clan's development, the Wei clan became integrated into local society and dominated the area. It also absorbed other Wei clans that were not originally "of the same blood", expanding the clan's power and creating its own historical memory and cultural identity. The Wei elite gradually built up the Wei clan through clan practices such as genealogy, ancestral hall building and ancestral tomb restoration, which led to the social integration of the local community around Lijiao Village in the form of a clan and eventually to the formation of a local clan organisation.(Fig. 4-3)

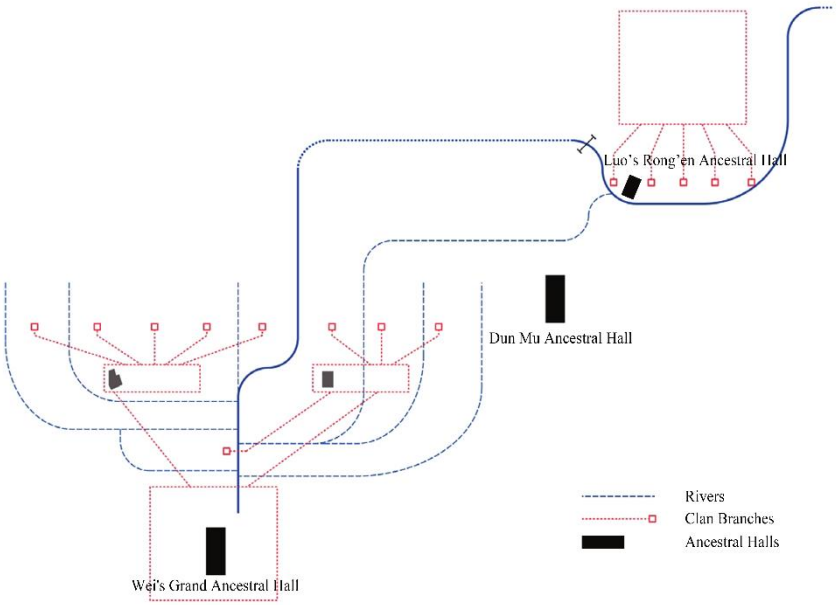

Fig. 4-3 Clans and River Layout[55] (Source: By author)

Since the Ming and Qing dynasties, the local Wei's and Luo's of Lijiao, together with the surrounding local clans, actively reclaimed the Lijiao area, the latterly known as Luoxi, Dasha and Shangjiao, and the subordinate farming population these areas gradually developed into subsidiary villages and became independent villages, changing the geographical boundaries of Lijiao and the process of village autonomy[54].

During the Opium War, the Wei Clan Ancestral Hall was shelled by the British because of its size, and Lin Zexu also set up a stone gate to block the waterway in Lijiao; later, during the Sino-Japan War, the hero Wei Guoyao opened a school here and carried out anti-Japanese activities. The village was designated as an old liberated area by the Guangzhou municipal government in 1950, and the primary school was renamed Wei Guoyao Memorial Primary School in 1994.

It was only at the beginning of the founding of PRC that the Guangzhou Municipal People's Government officially divided and adjusted Lijiao Township, including Lijiao Village and Dashi Street. Dashi Street in Lijiao became the only distribution point for materials from the three townships of Lijiao Village, Xinjiao Village and Sanjiao Village, as well as the Hong-'an rice machine, which helped nearby villagers process rice; Nan'an Square at the southern pier was also where villagers repaired their boats.

In the late 1980s, the land in Lijiao Village was rapidly expropriated and built upon, and as it was located in a new development area on the outskirts of Guangzhou, the low rents attracted a concentration of migrant workers. After the SARS epidemic, the filling in of the river to prevent the spread of infectious diseases also resulted in the filling in of the branch river, which had little water flow, thus disintegrating the original water township of Lijiao. The main industries in the village were small textile workshops, housing for rent and a large number of self-employed catering services, which gradually became more and more crowded and polluted.

However, due to the large area of the village, the complexity of the interests involved, and the lack of acceptance by the villagers, the transformation of Lijiao Village took a long time and even came to a standstill in the middle of the process. It was only in 2018 that the process was put back on track thanks to a series of incentives from the Zhuguang Group and community participation activities.

4.1.3 Social economic

After the reunification of the southern Han Dynasty, agriculture was promoted and developed in Lijiao, and the village developed rapidly under the active cultivation of the local Luo and Wei clans and some small clans. The village also produces a wide range of river fish,

such as worms, snails, and hairy crabs. At the time of the founding of PRC, Lijiao was the southernmost administrative township on the outskirts of Guangzhou, with fertile fields and lush fruit forests. In the old days, the people of Lijiao were good businessmen and practised a dual-regime model of operation, reclaiming tidal land and transforming mudflats into good fields so that crops and cash crops could be grown, and using the dregs of the distillery operating in Lijiao to raise pigs.

The well-developed water network and convenient water transport in Lijiao provided a good basis for commercial development and was an important transhipment point for the sugar and rice industries in Panyu at the time. Rice farming in Lijiao also made the local rice mill a place for nearby townspeople to process their rice, and some of them traded directly at the rice shops in Lijiao after processing.

After the land reform in the new China, the two rice machines in Lijiao, Hong'an rice machine and Limin rice machine helped to process rice in all directions and attracted a large number of people to come here for commercial activities. One hundred-eight shops of all sizes, 154 stalls of hawkers and six teahouses and eateries were located on Da Shi Street at that time, and since then, Lijiao has been on the road to commercial development[54]. The shipbuilding and repair industry in Lijiao, where water transport is the main mode of travel and commercial transport, is well known, and the Lijiao Ship Repair Yard in Nan'an Square continued to repair ships until the 1980s.

During the wave of industrial development after the founding of New China, the Dunmu Ancestral Hall, once the largest ancestral hall in Lijiao Village, was demolished and converted into a refractory factory. After the reform and opening up, a large number of foreign workers moved into Lijiao Village because of the convenience of rent and industry, and villagers were also motivated by rent to demolish their houses and set up buildings. With the expansion of Guangzhou's urban development, new buildings and residential areas rapidly increased and replaced traditional houses, and a situation emerged where urban land and traditional villages coexisted, and Lijiao gradually became a village in the city[56].

As the peripheral urbanised areas gradually expanded, Lijiao Village transformed itself in line with economic trends, forming a diverse industrial agglomeration, and with the increase in the number of workers in the village, a well-established commercial area, ground floor

residential areas and cultural and entertainment venues were formed, and urban culture further eroded the culture of the traditional village. 1990 saw the formal establishment of the Lijiao Economic Development Corporation to coordinate the development of village enterprises. This was followed by the establishment of the Lijiao Wire Drawing Factory, the Xinchao Hardware Factory and the Zhujiang Galvanized Pipe Factory, which became important economic pillars of Lijiao Village. In the mid to late nineties, the village's economic and industrial structure was transformed, and the village began to develop a warehouse and rental market, and the construction of new industrial areas and specialist wholesale markets gave the village's economy a new impetus.

In 2010, Lijiao Village covered an area of 4.5 million square metres, with a household population of 30,000 and a resident and floating population of over 70,000, making it one of the largest urban villages in Guangzhou. And in the 7th National Census Bulletin (No. 2) of Haizhu District published in 2021, the population of Nanzhou Street (Dongfeng Village, Lijiao Village and Sanjiao Village in Xinjiao Town) reached 161,415, ranking fifth in the district. Compared to the 6th National Census in 2010, Nanzhou Street, where Lijiao Village is located, had the highest population growth, with an increase of 76,689 people[57].

4.1.4 Public Transportation

Fig. 4-4 Surrounding bus and metro lines (Source: By author)

Public transport around Lijiao Village is relatively well developed, surrounded by a number of bus lines and night bus routes, with services covering a wide range of hours and basically meeting the needs of the applicable population at all times. The main metro station is the Lijiao metro station, located at the southern boundary of the site, which serves as an interchange station for the Guangfo Line and Guangzhou Metro Line 3, and carries most of the commuter services and transportation of people in Lijiao Village.

4.1.5 Building condition

Fig. 4-5 Urban fabric and mixed fabric areas (Source: By author)

The village of Lijiao is located on the edge of the eastward expansion of urbanisation in the Haizhu district and is characterised by the assimilation of the urban fabric along the western and northern borders as a result of industrialisation, the settlement of the garment industry and the development of warehousing and logistics. Large-scale factories, warehouses and shopping malls have been integrated into the public life and spatial structure of Lijiao Village through the rapid economic development and urbanisation process, intervening and becoming important spatial nodes in a certain area through material production, storage, exchange and information circulation, with activities such as commerce, entertainment and industrial production overlapping within the nodes, reflecting the flexibility and complexity of urban development.

4.1.5.1 Current building condition

Most of the existing buildings were built during the period of rapid development after the reform and opening up, main frame and brick buildings, with some traditional brick and timber buildings and a small number of temporary buildings, a variety of types and different conditions

of buildings are mixed in the site.

Fig. 4-6 Brick building (Source: Photo by author)

Fig. 4-7 Brick building (Source: Photo by author)

Fig. 4-8 Brick building (Source: Photo by author)

Fig. 4-9 Temporary building (Source: Photo by author)

Fig. 4-10 Brick building (Source: Photo by author)

Fig. 4-11 Brick building (Source: Photo by author)

4.1.5.2 Current state of existing traditional buildings

The construction of ancestral halls has been a sporadic process since the Song dynasty, and after the Emperor Jiajing of the Ming dynasty allowed the people to "join clans and establish temples", a large number of ancestral halls were built on Henan Island (now Haizhu District). At the same time, some of the clans that had moved in from abroad also took advantage of the construction of the ancestral halls to complete their 'localisation' and identify with the local culture[54].

Fig. 4-12 Street view of the Wei Clan Ancestral Hall (Source: Photo by author)

The Wei Grand Clan Ancestral Hall is 28 metres wide and 72 metres deep, with five rooms and five into[58].It covers an area of more than 10,000 square metres, facing north and south, facing the Pearl River and backed by the inner rive. It was first built in the 22nd year of the Ming Dynasty (1594), completed in 1629 and rebuilt in the Qing Dynasty, and is located in Lijiao Village, Deputy Siyao. "It was restored in 1998, and in 2004, after six months of restoration, it was given a new look and designated as a Guangdong Provincial Cultural Relics Protection Unit in 2012. It is currently closed to the public outside the Wei clan due to the epidemic and construction work.

Built between 1796 and 1820, the Chengzhai Wei clan Ancestral Hall, facing south and opposite the Li Ming Wei Gong Ancestral Hall, has been relatively badly damaged, with its brick façade and internal space used as offices for the Lijiao Fifth Economic Co-operative Society, but is now also derelict and unused, and the square in front of the hall is used as a parking space.

Fig. 4-13 Street view of the Chengzhai Wei Clan Ancestral Hall (Source: Photo by author)

Liming Wei clan Ancestral Hall was built in 1879, facing south, the architectural style has also been damaged to a certain extent, the main entrance part of the outer wall after painting

and stickers, by asking the surrounding villagers know that during the holidays people will come to visit.

Fig. 4-14 Street view of the Liming Wei Clan Ancestral Hall (Source: Photo by author)

The traditional style of the Qizhou Wei Gong Ancestral Hall, which was built in 1563, is relatively well preserved, but it has been left unused for the daily drying of clothes, and the square in front of the Ancestral Hall has been turned into a space for piling up debris and parking.

Fig. 4-15 Street view of the Qizhou Wei Clan Ancestral Hall (Source: Photo by author)

Fig. 4-16 Photo of the interior of the Qizhou Wei Clan Ancestral hall (Source: Photo by author)

The Yushi Wei clan Ancestral Hall, also known as the Geqiao Yongsi Ancestral Hall, was built in 1588 and is in relatively good condition, but the outer wall has been used as a fixing for electrical cables to pass through, and the street style has been damaged. The larger square in front of the ancestral hall is hard-paved, and in the corner, there are villagers drying their clothes and piling up rubbish. The open space is not used effectively, and the quality and function of

the space need to be improved.

Fig. 4-17 Street view of the Yushi Wei Clan Ancestral Hall (Source: Photo by author)

Fig. 4-18 Panoramic Street View Photos of Yushi Wei Clan Ancestral Hall (Source: Photo by author)

Built in 1628, the Yisuo Wei clan Ancestral Hall faces east to west and is similar to other ancestral hall is in its current state of use. The external structure is relatively intact, but the front plaza was used as a parking space, and a canopy was added to the façade to provide protection from the sun.

Fig. 4-19 Street view of Yisuo Wei Clan Ancestral Hall (Source: Photo by author)

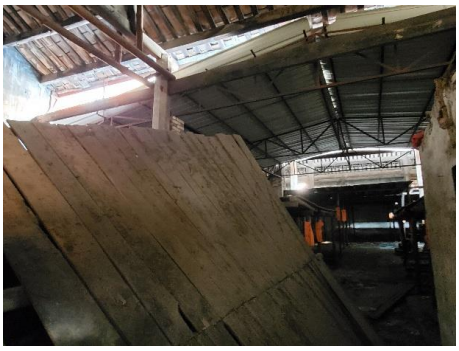

Fig. 4-20 Photo of the interior of Yisuo Wei Clan Ancestral Hall (Source: Photo by author)

Xinhe Wei clan Ancestral Hall was built in 1697, also called Fangqian Wei Clan Ancestral Hall. The interior of the building is now vacant, and the square in front of the ancestral shrine is used by villagers as a parking space for rent to increase their economic income or for their own use.

Fig. 4-21 Street view of Xinhe Wei Clan Ancestral Hall

(Source: Photo by author)

Built in 1736, the front square of the Shiya Wei clan Ancestral Hall is now divided into parking spaces with an intact and well-preserved interior, which is temporarily used as a nucleic acid testing site.。

Fig. 4-22 Street view of Shiya Wei Clan Ancestral Hall(Source: Photo by author)

Fig. 4-23 Photo of the interior of Qizhou Wei Clan Ancestral Hall(Source: Photo by author)

The Zhiyu Wei clan Ancestral Hall was built between 1736 and 1795 as the ancestral family hall of the martyr Wei Guoyao. It has been converted and utilised as a branch of the

Haizhu District Library, with a small amount of fitness equipment and information boards in the front square, a small reading room and a teaching room for calligraphy and painting, and a table tennis table in the centre of the space for the villagers' entertainment.

Fig. 4-24 Photo of the interior of Zhiyu Wei Clan Ancestral Hall(Source: Photo by author)

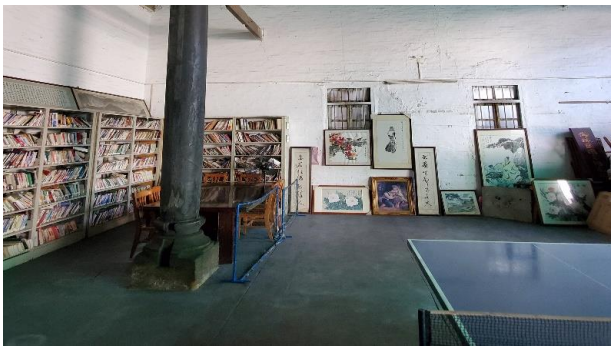

Fig. 4-25 Photo of the interior of Zhiyu Wei Clan Ancestral Hall(Source: Photo by author)

The youngest of the ancestral halls, the Zhiyan Wei clan Ancestral Hall, was built in 1929, and the original front square of the hall has been occupied by disused temporary warehouse, which have completely lost its function as a centre of public space.

Fig. 4-26 Photo of the interior of Zhiyan Wei Clan Ancestral Hall(Source: Photo by author)

The Julai Wei clan Ancestral Hall was built in 1626 and is now used by the clan to post couplets during the New Year, and the interior is vacated for gatherings.

Fig. 4-27 Photo of the interior of Julai Wei Clan Ancestral Hall

(Source: Photo by author)

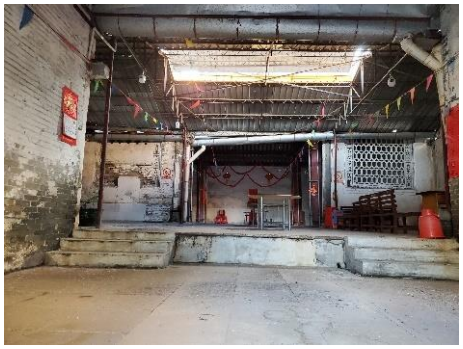

Fig. 4-28 Photo of the interior of Julai Wei Clan Ancestral Hall

(Source: Photo by author)

As a traditional water village settlement and a key water transport area near the Pearl River, it has been customary to build various temples to pray for the protection of the villagers' safety since ancient times. On festivals, villagers would make offerings to temples in the district, and on important days such as Godness's Birthday, villagers would hold a grand parade of floating colours to invite the gods into the palanquin to perform the village patrol. With the development of the times, the former temple buildings such as Tin Hau Temple, Pak Tai Temple and Cat Temple have all been destroyed and disappeared into history, and only Pak Tai Temple and She Kung Temple remain.

Although the temple still has space for worship, there are sanitation workers inside for their daily activities, and villagers often sit and relax in front of the temple close to the road. A temporary canopy has been erected at the side of the temple for the sanitation workers to park their vehicles, and a small refuse station is located at the back of the canopy.

Fig. 4-29 Street view of Pak Tai Temple (Source: Photo by author)

Fig. 4-30 Photo of the interior of Pak Tai Temple (Source: Photo by author)

Fig. 4-31 Street view of Pak Tai Temple (Source: Photo by author)

The roof of the temple, which is covered with tarpaulin due to its age, is still used for worship activities, but the space is too small and cramped to meet the worship needs of the villagers, so the façade of the factory building a short distance away is also used by the villagers as a place for worship, but the problem remains the low quality of the space. This situation is partly a reflection of the space and its use condition.

Fig. 4-32 Street view of She Kung Temple (Source: Photo by author)

Fig. 4-33 Street view of She Kung Temple (Source: Photo by author)

Fig. 4-34 Street wall used like a niche (Source: Photo by author)

Zhaochang Hall is a typical three-room, two-porch dwelling built of brick, wood and stone and constructed in the form of a wall with a shelf purlin, which is flexible in arrangement and economical in materials. As one of the first houses listed as a historical building in Guangzhou, the decoration of Zhaochang Hall is well preserved, with the landscape patterns on the eaves clearly visible and the walls spanned by cables only, and with little damage.

Fig. 4-35 Street view of Zhao Chang Hall (Source: Photo by author)

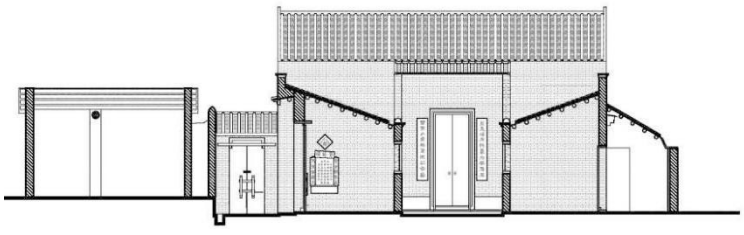

Fig. 4-36 The façade of Zhao Chang Hall

(Source: “Special chapter for the protection of historical and cultural heritage in the Lijiao area of Haizhu Bay”)

There is also a linking of two famous houses within the village, which is included in the Lijiao Village Traditional Historic Clue.

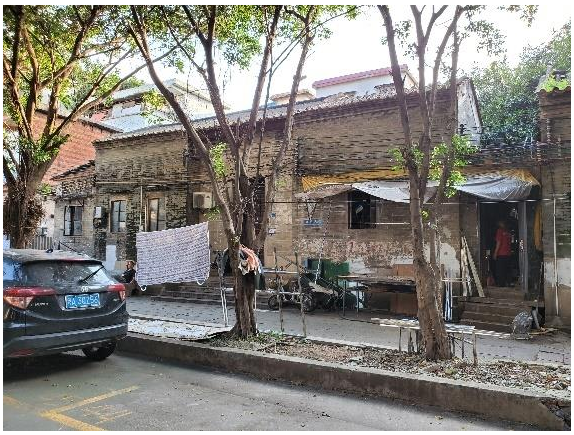

Fig. 4-37 Streetscape of traditional style buildings

(Source: Photo by author)

Fig. 4-38 Streetscape of traditional style buildings

(Source: Photo by author)

4.1.6 Interpretation of the upper plan

The document "New Urbanisation Plan of Guangdong Province (2021-2035)" points out that Guangdong Province is in a critical period of promoting a new type of urbanisation with people at its core and needs to continuously push forward the high-quality development of urbanisation. It will accelerate the transformation of the urban development mode, optimise the urban development pattern and build a quality living circle with high-quality public services, livability, workability and tourism so as to meet the new expectations and requirements of the people for a better life.

For the old urban areas with functions that deviate from demand, low efficiency of use and low environmental quality, we should adopt comprehensive transformation and micro-transformation to promote the transformation of "three districts and one village" and push forward the urban renewal process, reviving old spaces, improving functional quality and releasing development vitality. The old neighbourhoods that are in a position to do so should be developed into neighbourhood economies and characteristic street scenes, and local historical and traditional cultural resources should be explored to create cultural and

commercial pedestrian streets with high-end quality and diversified business forms so as to develop them into distinctive and high-quality cultural and tourism commercial consumption clusters.

At the same time, public service resources are integrated, public resource allocation is improved, and the quality of life and vitality of old neighbourhoods are enhanced. Under the goal of building a low-carbon and ecological green city, the plan proposes to improve the quality of urban parks, strengthen the renewal and transformation of urban micro-spaces, build "pocket parks", community sports parks and street squares, and create a system of micro-spaces and micro-green spaces.

Guangzhou is one of the first national historical and cultural cities, and as the birthplace of the Guangfu culture, it has a long historical and cultural background. In Guangzhou's urban development planning, the preservation and continuation of the city's historical heritage, the shaping of the urban landscape with Lingnan characteristics and the creation of a humanistic city with distinctive regional characteristics have always been one of the most important aspects. Since the end of 2013, Guangzhou has published a number of batches of historic buildings, and has prepared detailed conservation plans such as the "Protection Plan for the First Batch of Historic Buildings in Guangzhou" as a technical basis for conservation management in accordance with the State Council's Regulations on the “Protection of Famous Historical and Cultural Cities and Towns and Villages”, “Guangzhou's Regulations on the Protection of Guangzhou's Famous Historica”l and “Cultural Cities and the Measures for the Protection of Guangzhou's Historic Buildings and Historic Landscape Areas”. The technical basis for conservation management is in Lijiao Village; there are historical conservation buildings such as the Wei Clan Ancestral Hall, the former residence of Wei Guoyao, Zhaochang Hall and other clues of traditional style buildings, which are the focus of conservation and renovation.

Fig. 4-39 Land Use Planning in Lijiao Area (Source: www.gzlpc.gov.cn)

At the third meeting of the Fourth Session of the Guangzhou Planning Commission's Regional Planning Committee, it was pointed out that the focus of the transformation of the Lijiao area is on the continuation of the urban axis, the shaping of innovative spaces and the continuation of the original authentic places. Under the vision of creating an innovative digital science and innovation bay, Lijiao will be transformed into a wetland Cantonese living experience area, opening up the first floor of the community, incorporating leisure and other functions, creating a slow walking area, releasing the vitality of the neighbourhood, creating a "sit-down" public space, and making both sides of the boulevard a place to gather for life[59].

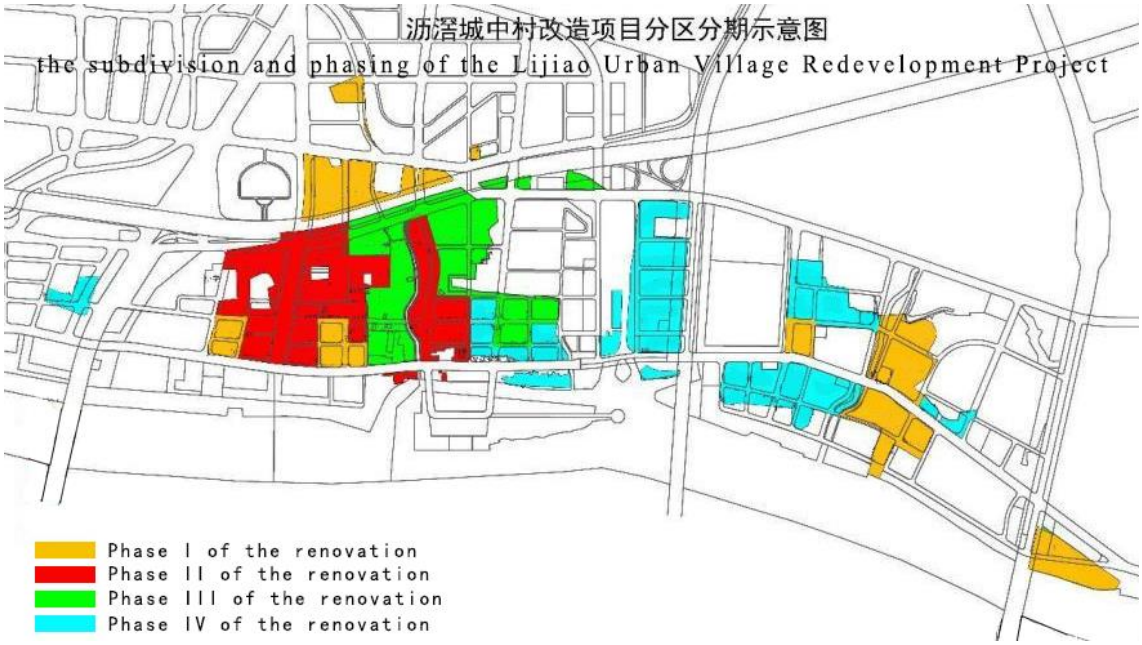

Fig. 4-40 The phasing of the conversion project[60]

Fig. 4-41 Rendering of Lijiao Area (Source: www.sohu.com)

4.2 The Influence of Historic Waterways on the Spatial Pattern of Lijiao

The field of architecture mainly studies the characteristics of villages from the perspective of spatial forms, such as village morphology, spatial structure, architectural layout, distribution of public space, etc. The geographical environment is the most important of the factors influencing the formation of village space[61].

The Pearl River, on which the village relied for its livelihood, provided a large amount of sediment to fill the river, ample water for citation and irrigation, and waterways for navigation, so water transport became the best option for the villagers to get around. The high tides of the river brought fertile nutrients to the farmland and also the risk of flooding and flooding, so villagers worshipped temples and ancestral shrines at the nodes of the river to pray for the blessing of the gods and ancestors, and so the banks of the branching waterways carried a large number of temples and altars for worship, and on weekdays they served as places of leisure and recreation for the villagers.

Lijiao Village is a typical Lingnan water village with a dense network of water and is a typical net-type water village[58]. The main street is located along the River, and the secondary roads are perpendicular to the River and the main roads. The north-south Lijiao River connects the Haizhu Lake and the Pearl River system and has a relatively good ecological environment.

(Fig. 4-43)

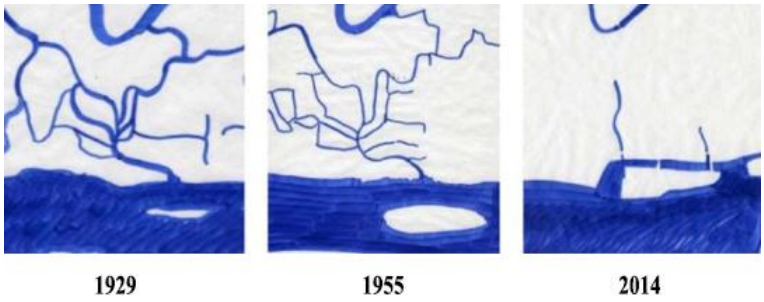

Fig. 4-42 Changes to the river at Lijiao Village

(Source: “Special chapter for the protection of historical and cultural heritage in the Lijiao area of Haizhu Bay”)

Fig. 4-43 Map of Lijiao Village in 1929. (Sources: Map of Guangzhou City, 1929)

The branch chambers of Lijiao River spread in a branch-like pattern from the main River to the east and west, dividing Lijiao Village into several areas of varying sizes, such as Yiyue, Eryue, Huanxiu Fang and Central District Square. The branching system of Lijiao River creates a distinctive village pattern, dividing the village into areas such as Yiyue, Eryue, Central District Fang, Huanxiu Fang, Ma Lou Street and Zhoujinli. (Fig. 4-44)

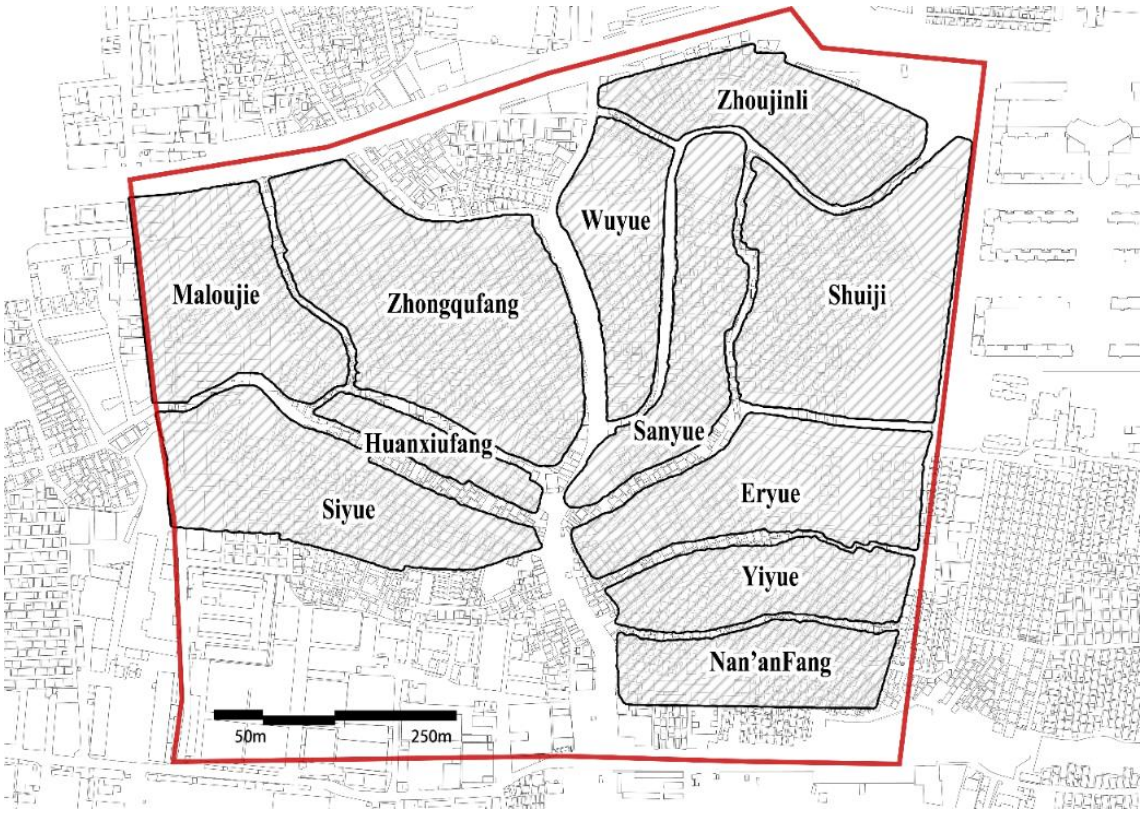

Fig. 4-44 Block Division of Lijiao Village (Source: By author)

At the intersections of the rivers and streams, large and small ancestral shrine buildings were built, such as the Tin Hau Temple, the Pak Tai Temple and the Wei Clan Ancestral Hall. The ancestral hall and the square in front of it are the main open nodes in Lijiao Village, and the ancestral hall, together with the ancestral hall and temple buildings, form the key to the spatial organisation of the Lijiao water village settlement. The Wei Ancestral Hall and other ancestral halls are distributed along the River and waterways, while the Pak Tai Temple and other temple grounds are distributed along the boundary, 'manning' the various areas of the village and forming the spatial pattern of Lijiao Village.

The Wei Grand Clan Ancestral Hall, the centrepiece of the village layout, faces the Pearl River waterway, while other ancestral halls face the village's large and small rivers and surges, and the Tin Hau Temple "guards" the village's Tai Shi Street towards the main Lijiao River. For a long time, the rituals surrounding the ancestral shrines and temples have occupied an important place in the public life of Lijiao Village, and these historic and traditional buildings and the surrounding public space have become the anchor points of the public space system in Lijiao Village, from which they expand outwards to form the basis for other public spaces.

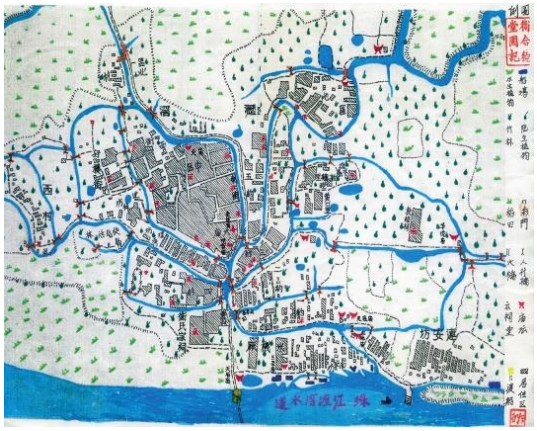

Fig. 4-45 Wei He De Hall Diagram[55]

The overall architectural layout of the village has a 'comb-like pattern', with the main street distributed along the River, carrying the main traffic function of the village together with the River. The entrances to the residential houses open to the lanes, serving as a transition space from the public street space to the private villagers' own house space.

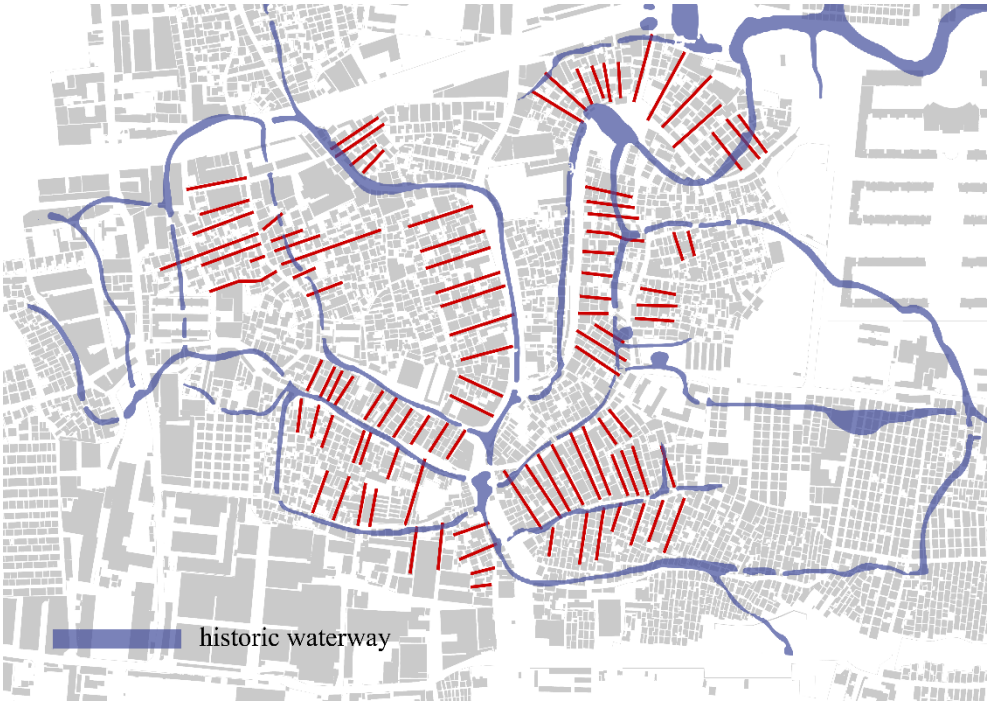

Fig. 4-46 Historic waterways and village fabric

4.3 Analysis of different types of public space

The current public space pattern of Lijiao Village is mainly composed of three kinds of function-driven spaces that overlap and interact with each other: public recreational space based

on the function of living and leisure, historic space centred on traditional buildings and ancestral halls, and commercial space inspired by commercial and retail activities.

Fig. 4-47 Functional divisions (Source: By author)

4.3.1 Public Recreational Space Structure

Due to the high density of construction in Lijiao Village, the recreational public space in Lijiao is manifold but fragmented and discontinuous, which mainly creates the collage of recreational space in Lijiao Village. (Fig. 4-48)

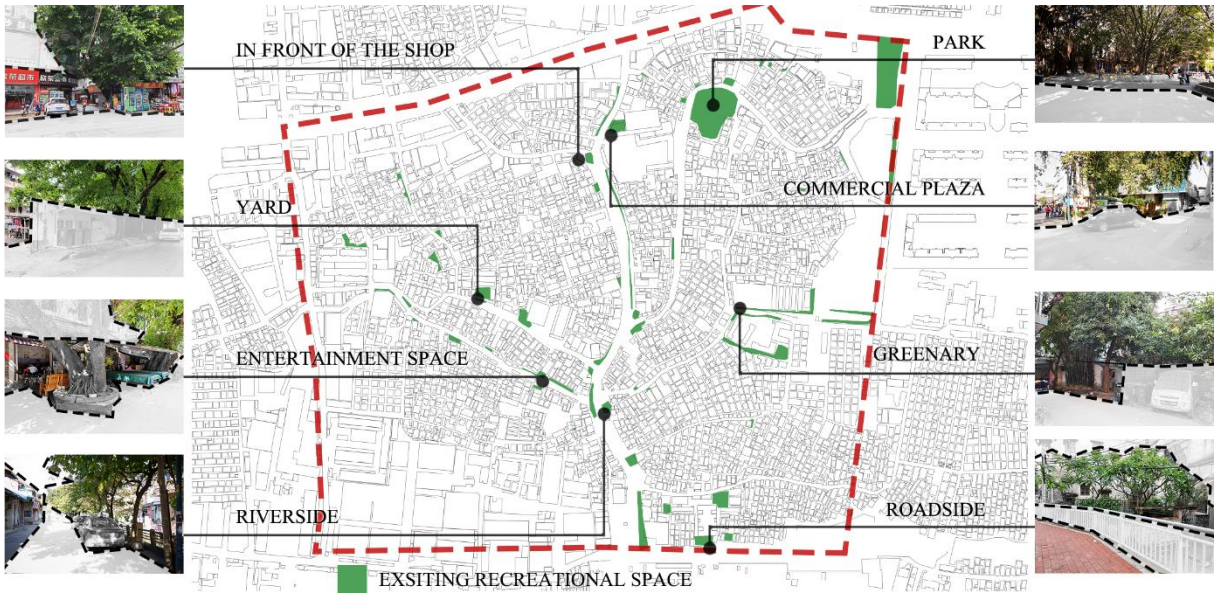

Fig. 4-48 Typical kinds of recreational space (Source: By author)

As a space for the daily life of residents, recreational spaces are scattered at the intersections of various streets in Lijiao Village, and serve as a gathering place for people to relax and visit, flowing to the surrounding area with the gathering point as the centre and constituting the most common flow of people and information within the site. Due to the high density of buildings in Lijiao Village, there is only one relatively large and concentrated recreational space, Lijiao Park (Fig. 4-49, Fig. 4-50), while others are small and only scattered at street corners and intersections. These recreational nodes serve as fixed points and landscape infrastructure in Lijiao Village, carrying the daily leisure of villagers and the sightseeing and recreational functions for tourists. At the same time, these nodes are usually transformed from the bottom up by villagers to meet their daily needs, creating spaces for drying, retailing, chess and card games, fishing and landscaping, thus bringing the flexibility and mobility of public space into acting as a buffer zone to bridge the gap between different scenarios of use in Lijiao Village, thus enhancing the integrity of the village's public space system.

4.3.1.1 Local Relationships of Lijiao Park

Fig. 4-49 Lijiao Park entrance(Source: Photo by author)

Fig. 4-50 Lijiao Park interior space(Source: Photo by author)

The Lijiao Park, for example, receives pedestrian flows from the surrounding streets through the park gates and uses the fitness equipment, tree ponds, pavilion seats ,and open spaces within the park as a venue for pedestrian activity. At the same time, the green landscape of Lijiao Park serves as a division between pedestrian flow and activity within site. It serves to organise and integrate the activity space of the site.

The centripetal space of the circular open space at the centre of the site also interacts with the flow of people through the site, creating a radial force that changes the shape of the activity space.

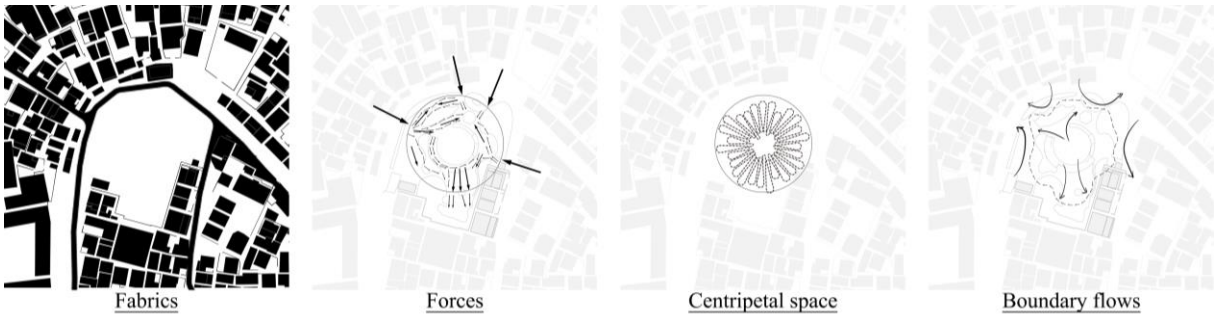

Fig. 4-51 Diagrams of the park (Source: By author)

4.3.1.2 Local Relationships of the Street

The village streets, as the central space of daily life for the residents, are scattered at the intersections of the streets and shops along the streets in Lijiao Village and serve as a gathering place for people, where the residents can gossip, rest and visit, and move around the area with the meeting point as the centre, constituting the most common flow of people and information within site.

The public space on the street is the central public space and infrastructure in Lijiao Village

and it is the most essential boulevard for the exchange of people, materials, and information flows. The waterfront landscape was once a place for villagers to relax, chat and play chess and cards, and it carried the traditional charm of Lijiao Village.

Fig. 4-52 Diagrams of the node public space (Source: By author)

The streets are also a part of the village network. The three-level structure of the "main street-street-alley" suggests the distribution, alignment, and interrelationship between the primary and branch chambers of the traditional water village of Lijiao, as well as the spatial structure of transport in Lijiao formed over the years by the waterways.

The comb-like pattern of the Lingnan water village responds to the interweaving of the village streets, and the villagers have used the plots of land in front of their doors to transform the public space over time, resulting in a more varied landscape of life and street activities. (Fig. 4-53, Fig. 4-54, Fig. 4-55)

Fig. 4-53 Greenary of public spaces in the street(Source: Photo by author)

Fig. 4-54 Recreational facilities of public space in the street(Source: Photo by author)

Fig. 4-55 Greenary and recreational facilities of public space in the street(Source: Photo by author)

This transformation of the public space enriches the type of street activity, superimposing the site's primary "field" of traffic activity with "fields" of recreational activities such as sitting,

landscaping and sports, creating a thicker field and blurring the boundaries between street and activity space.

The village has a main street, and the three-level structure of the “main street-street-alley” in Lijiao Village serves as an important living space for residents. (Fig. 4-56)

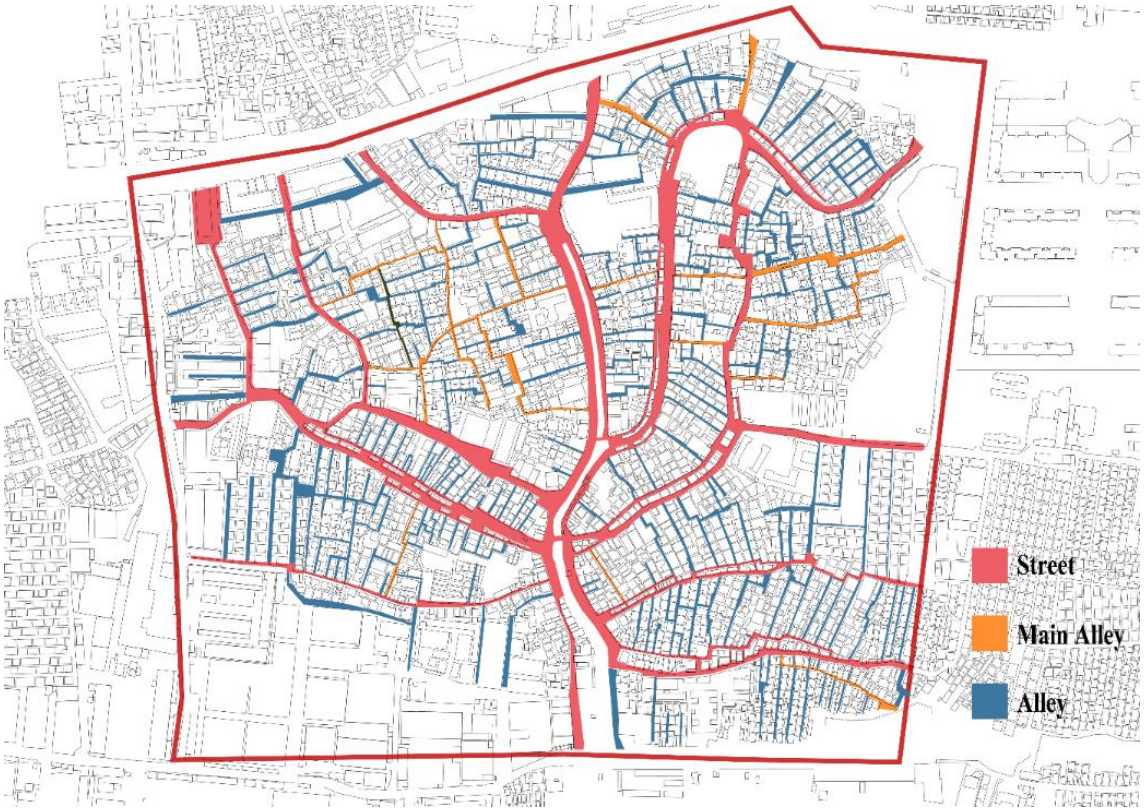

Fig. 4-56 Current Street system level of Lijiao Village (Source: By author)

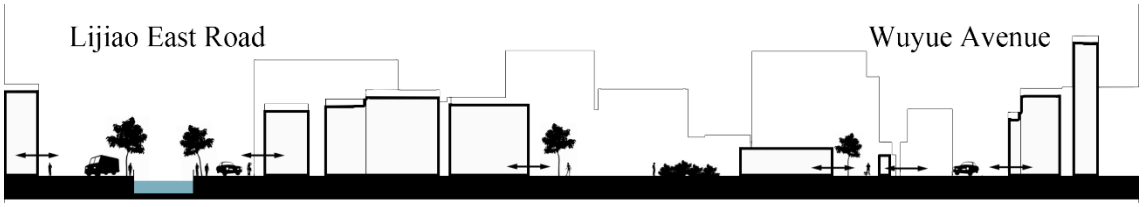

Fig. 4-57 Main Street section (Source: By author)

The main street is oriented north-south and runs along both sides of the River, usually at a scale of 4-10m. It acts as the backbone of the infrastructural traffic structure of Lijiao Village, connecting it to the secondary road network. (Fig. 4-57) The localised distribution of shops along the main street is the site of the greatest concentration of people and activities. (Fig. 4-58, Fig. 4-59)

Fig. 4-58 Current status of Lijiao East Street (Source: Photo by author)

Fig. 4-59 Current status of Wuyue Street (Source: Photo by author)

The main alleys are secondary roads directly connected to the street, and the main alley and alleys form the transition area from private residential to public space. (Fig. 4-60)

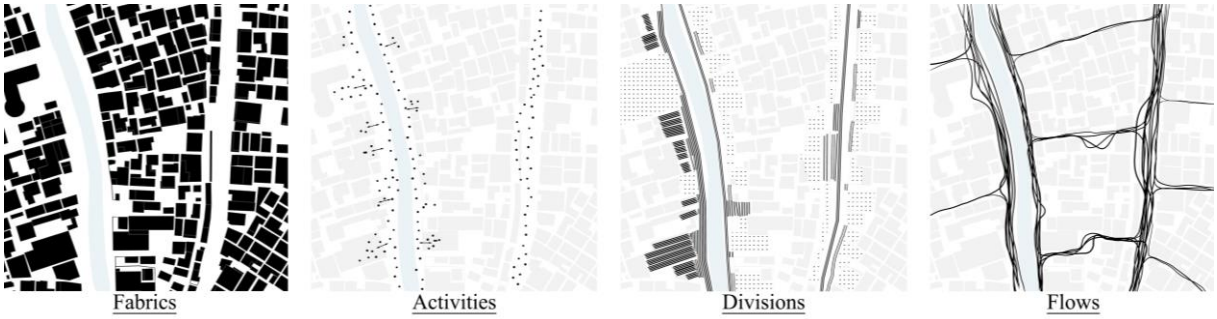

Fig. 4-60 Diagrams of the main street public space (Source: By author)

The public space of the streets and lanes is mainly for the function of passage, and the shops on both sides and the greenery at the wall enrich the viewing experience, connecting and continuing the field of the Lijiao Village site, which is an integral part of the construction of the overall field of Lijiao Village. (Fig. 4-61, Fig. 4-62, Fig. 4-63, Fig. 4-64)

Fig. 4-61 The main alleys in front of the workshops (Source: Photo by author)

Fig. 4-62 The alleys in front of the residences (Source: Photo by author)

Fig. 4-63 The alleys for passing through (Source: Photo by author)

Fig. 4-64 Diagrams of the street public space (Source: By author)

4.3.1.3 The Connecting Function and “Comb layout” of Lijiao Village

In field condition theory, the relationship between localities is crucial in connecting buildings to the surroundings and people to theirs. The streets and alleys do not function as an orthogonal system that blurs the directionality of the site as suggested by Stan Alen, but rather as a 'comb layout' of the Lingnan water village, which is a local adaptation of the orthogonal system of field condition and works better with the natural topography. (Fig. 4-65)

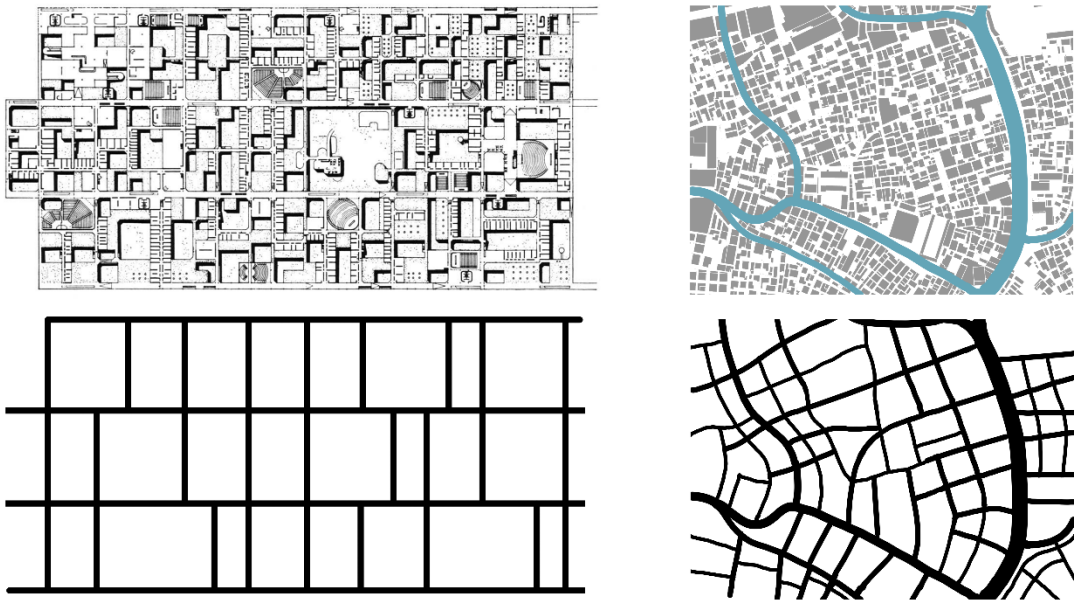

Fig. 4-65 orthogonal system of BFU(left) and comb system of Lijiao Village(right) (Source: By author)

As the public space has a strong connection and transition function with the surrounding environment, it can be a node for villagers' living space and historical and traditional cultural nodes, forming a continuous and livable spatial structure system of "residential-commercial-recreational-historical-recreational-commercial-residential" in Lijiao Village. This structure presents a relationship of different areas of functions in Lijiao Village that there is only little

buffer zone between their adjacencies. (Fig. 4-66)

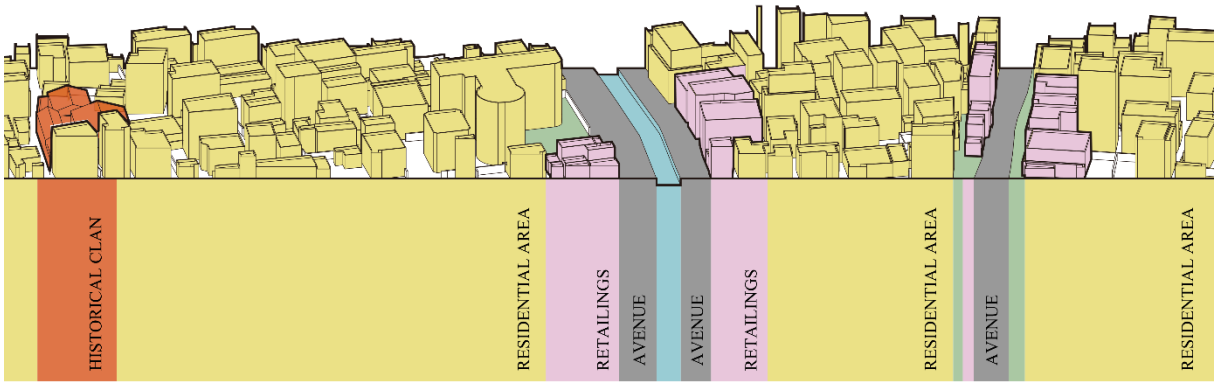

Fig. 4-66 current situation of spatial structure system(Source: By author)

4.3.1.4 Goals: Make the public space complete and continuous

Fig. 4-67 Fragmented Recreational space (Source: By author)

Despite the variety of recreational and leisure public space forms in Lijiao Village as described above, the structure of public space has become fragmented and discontinuous due to the high density of construction and the destruction of the traditional river channel.(Fig. 4-67) According to the field condition theory, a homogeneous and continuous spatial organisation is needed to be restored for the free extension of space in the horizontal direction, to expand the

space for citizens' activities and enrich urban activities.

4.3.2 Historic Space Structure

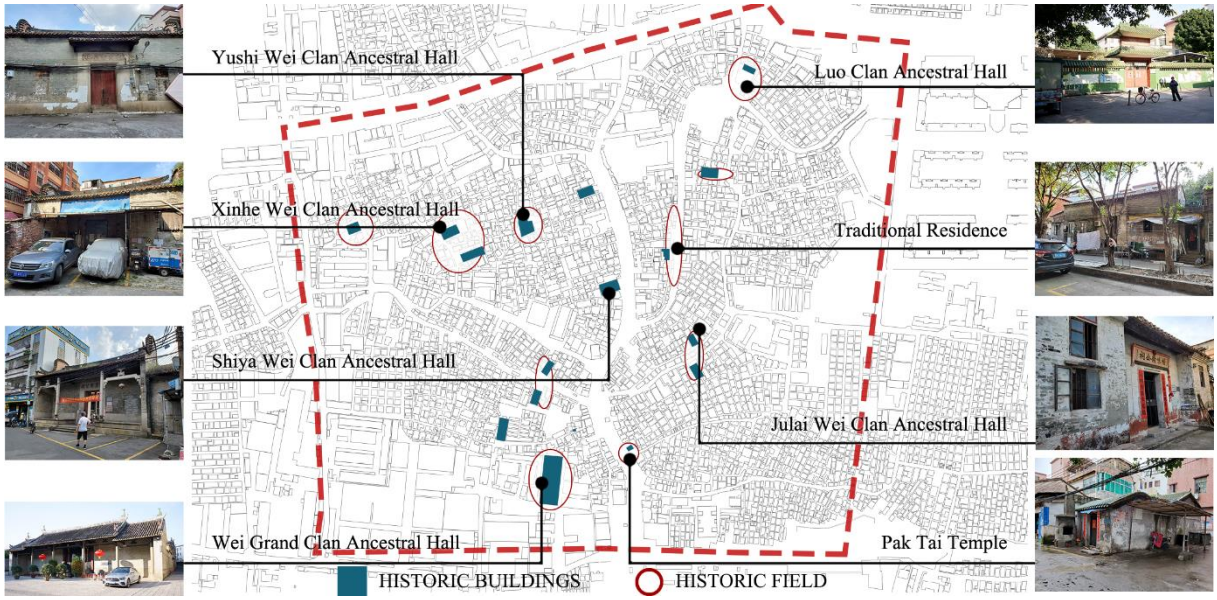

Fig. 4-68 Historic Space Structure (Source: By author)

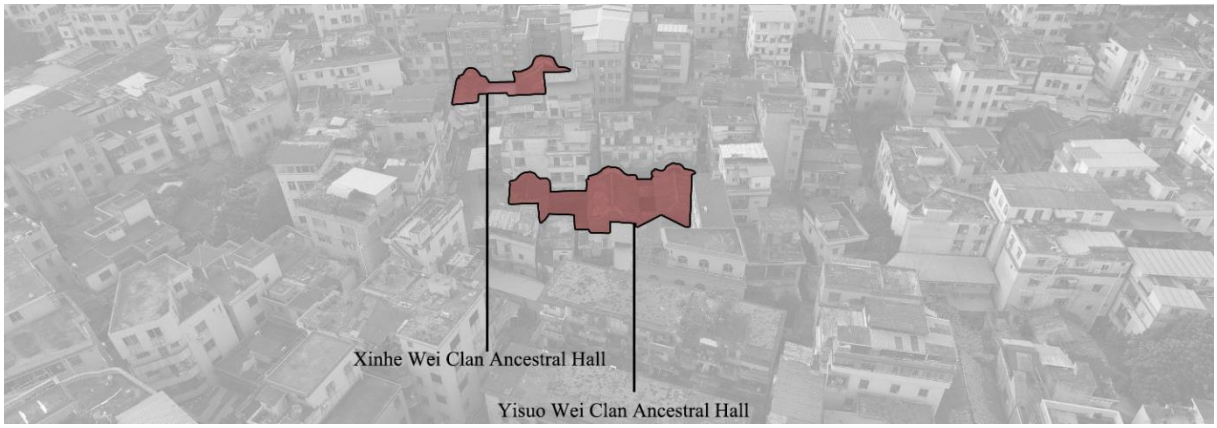

Fig. 4-69 the Panorama Photo of Xinhe and Yisuo Wei Clan Ancestral Hall (Source: By author)

The relationship between the existing historic and traditional buildings and the environment is fragmented(Fig. 4-68, Fig. 4-69), with a lack of field-level connections between the historic and traditional buildings and modern buildings and a simple and crude splicing of the historic and cultural field and the residential and living field, which not only results in the abandonment of the historic and traditional buildings in the current situation, but also in the destruction of the potential for further enhancement of the quality of public space in the future. (Fig. 4-70, Fig. 4-71, Fig. 4-72)

Fig. 4-70 the Collage view of Yushi Wei Clan Ancestral Hall (Source: By author)

Fig. 4-71 the street view of Xinhe Wei Clan Ancestral Hall (Source: By author)

Fig. 4-72 the Street view of Yisuo Wei Clan Ancestral Hall (Source: By author)

The original spatial pattern within Lijiao Village centred on the ancestral halls and other historic and traditional buildings, cannot continue to develop and continue with the temporal progression of the development of the village as a whole due to its fragmentation from the surrounding environmental field, which has caused more significant damage to the preservation of Lijiao Village's history and culture, the transmission of spiritual civilisation and the development of the public spatial pattern of the water village. (Fig. 4-73)

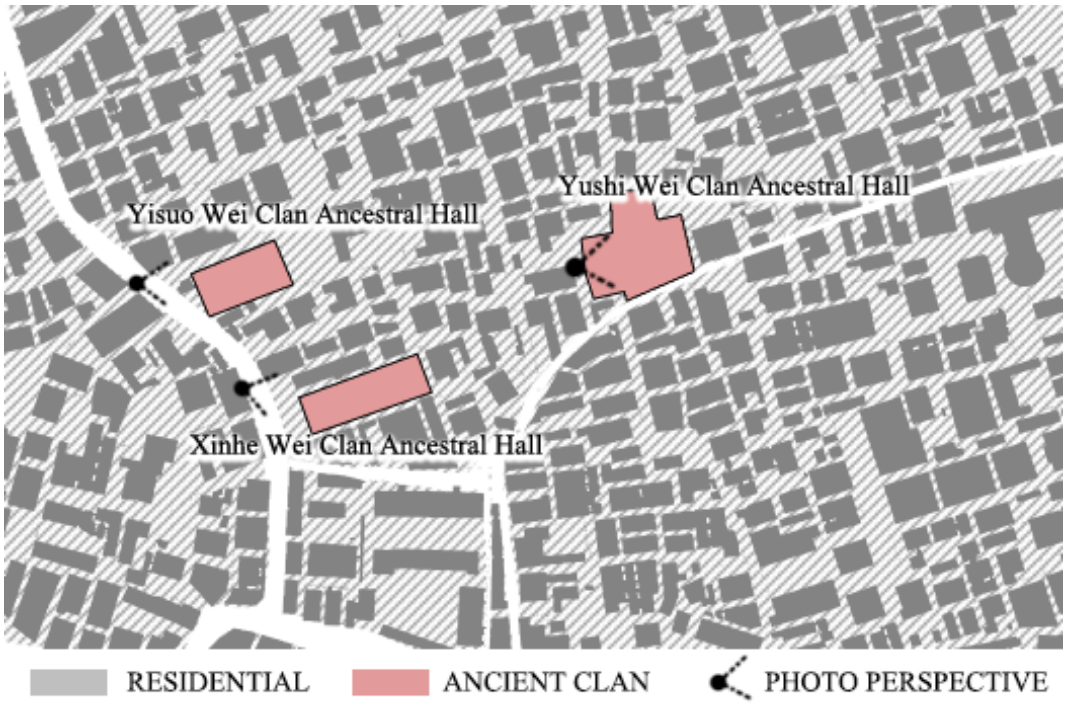

Fig. 4-73 The Fragmented Context Between Residential Area And Historical Area (Source: By author)

4.3.2.1 Goals: Forming a unified urban context

From the field condition theory, building a complete and harmonious urban context in Lijiao Village is necessary. Therefore, traditional buildings such as ancestral halls, houses, temples, and surroundings should be integrated into the urban context through careful and appropriate renewal measures. This is also an essential aspect of a public space for sightseeing and leisure with a traditional cultural theme.

4.3.3 Commercial Space Structure

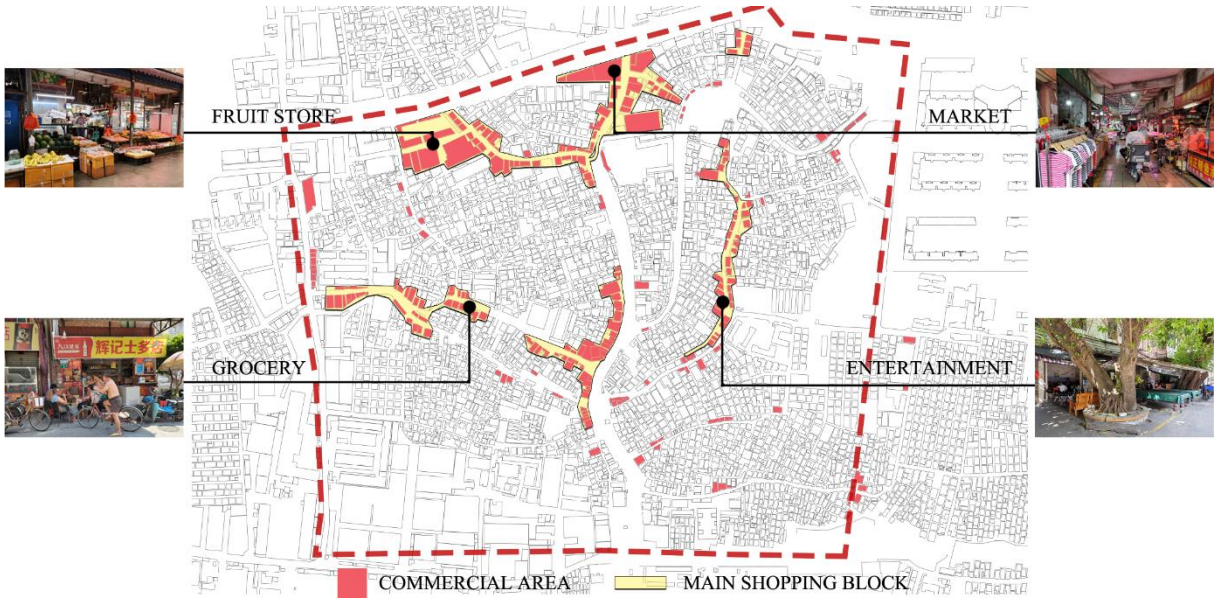

Fig. 4-74 Current Commercial Space Structure (Source: By author)

The commercial nodes are located on the village streets and are ostensibly part of the activities on the streets. The activities on the streets at the nodes are different from the activities on the streets and have a specific form, characterized by the fact that they occur continuously in a relatively fixed location and within a small area and that they are closely linked to the streets, and exchange with the pedestrian and material flows on the streets for the duration of the activities. (Fig. 4-74)

The public activities that take place at the nodes are influenced by the public space of the street, for example, by the shrinkage of the range of activities and the restriction of the types of activities at the nodes due to the movement of passengers and freight on the street, and by the public activities at the nodes, which can also influence the pedestrian activities on the street, for example, by residents stopping in front of shops to talk and shop, or by the entertainment activities and landscapes at the nodes. Therefore, the public space at nodes is discussed separately from the public space on the street. (Fig. 4-75, Fig. 4-76, Fig. 4-77)

Fig. 4-75 on the roads

(Source: By author)

Fig. 4-76 in vacant locations

(Source: By author)

Fig. 4-77 at shop entrances

(Source: By author)

4.3.3.1 Goals: Build a platform to carry all kinds of urban activities

The commercial space occupies an essential place within the village and is the most active activity regarding material exchange and information exchange within the village. Citizens do not only carry out commercial activities in the commercial space but also achieve human interaction through the commercial activity space. A complete and coherent commercial space not only meets the needs of the people in their daily lives in material terms but also creates local connections between people and the environment.

4.4 Summary of the Chapter

Through the understanding and study of the history of Lijiao Village, the analysis of the process of the formation of the public space form by the division of Lijiao River and its branch water system, the study of the architectural condition of the site and the use of space around the existing traditional ancestral shrines, supplemented by the capture and analysis of the urban culture, landscape and infrastructure urbanism and local relationships and various material, information and human flows of the site based on the field condition, it is possible to have a dynamic understanding of the spatial structure of Lijiao Village. This will enable a dynamic understanding of the site in which the complex urban village public space is located so that in the urban regeneration of the Lijiao Village area, the existing public activities of the site can be continued ,and the site can be given space to accommodate new activities through new buildings.

The analysis of the spatial pattern of the traditional water village of Lijiao, which was formed by a network of water, in this section can provide a historical basis for the subsequent

exploration of urban regeneration design so that the idea of restoring part of the historical water system and thus building a public spatial structure can have a traditional cultural basis.

Chapter 5 Design Practice

The design outcome is divided into three parts.

The first part is the design of Lijiao Village as a whole, focusing on the restoration of part of the historical water network and the adaptation of the higher-planned road network within Lijiao Village, as well as laying the foundation for the restoration of the spatial structure of the water village settlement in Lijiao Village.

The second part is the planning of the overall structure of public space and the selection of public space nodes within Lijiao Village, which will be based on the three main themes of public activities in Lijiao Village, and will be superimposed on the overall level to form a flexible and fluid public space system based on field condition. The third part is the detailed design of the nodes.

The third part is the detailed design of the nodes, in which the field condition is applied to analyze the material, information, and human flows of the site, as well as the relationship between public activities and localities, so that the nodes become fixed points in the public space structure of Lijiao Village, sorting out local relationships while becoming scaffolds for carrying public activities in the site, integrating the building functions into the urban environment, and thus realizing the process of scientific and practical urban regeneration in the urban village. The process of urban regeneration in an urban village can be achieved scientifically and effectively.

5.1 Master plan

The Lijiao area is located at the southern end of the city's central axis, the "eastern gate" of the Pearl River back channel and an important part of the city's riverine landscape.

The eastern part is connected from the city to the Pearl River by an ample central park space, which will be scientifically designed to meet city’s needs for flood prevention and waterlogging as well as to regulate the microclimate of the area in order to build an eco-friendly city. The open space on the island used for storage and logistics in the Pearl River back channel in the south will be dismantled and used as a public space for urban landscaping, an ecological education base, and a boat pier as a space for recreational activities for the public.

In the west and south, large industrial areas will be demolished and redeveloped into public and cultural buildings such as youth apartments, junior and senior secondary schools, sports centres, trade fairs, theatres, city exhibition hall, and Lijiao Cultural Centre to serve the new surrounding residential areas, visitors and office workers in the area. To the north, a new east-west road will be built along the village to disperse traffic within Lijiao. The new wet market, the nearby waterfront commercial street, and other shopping spaces constantly attract people from the surrounding area as the most active activities within site.

Fig. 5-1 Masterplan (Source: By author)

The transformation within Lijiao Village is based on a prudent urban regeneration strategy, starting with the restoration of the historic water network and the continuation of the traditional water village public space pattern in Lijiao Village, mainly through the restoration of the four branch chambers connecting Lijiao Main River and the Haizhu wetland water system to build a water ecological safety system. The existing road network in Lijiao Village has mainly been preserved, and the roads in the village have been widened following the removal of unauthorised structures added to the historic river to enhance the safety of pedestrian movement.

Temporary buildings and brick structures in poor condition have been demolished and turned into public spaces such as pocket parks and nostalgia squares in Lijiao Village, which, together with Lijiao Park, the West Street Wet Market, and the Lijiao Cultural Centre, form the

Lijiao Village public space system.

The Lijiao Park and Lijiao East Street form a north-south flow of sightseeing, recreation, and leisure and extend east-west along the secondary waterway to weave a public landscape and leisure space throughout Lijiao Village, providing visitors and residents with a good view of the village streets and a convenient space for rest relaxation.

The West Street Wet Market and the scattered shopping experience street and creative shopping street of cultural and creative goods in Lijiao East Street also form north-south water township-style street for visitors to sightsee, addressing the daily shopping needs of residents while providing visitors with cultural and creative goods full of Lijiao's traditional history, creating Lijiao's unique water township name card and becoming part of Guangzhou's cultural showcase.

The Lijiao Cultural Centre, together with the Wei Ancestral Hall, will form a cultural complex for Lijiao Village, comprising the Lijiao Library, a snack street, an activity plaza, the Lijiao Cultural Exhibition Hall and a cultural and creative industry office park, which will serve the youth appartments on the west side, the business offices on the south side and the residents and visitors of Lijiao Village. The cultural centre uses the existing traditional ancestral halls and traditional houses in Lijiao Village as nodes to create a historic and cultural site with the street texture of the water village in Lijiao Village.

5.2 Urban Renewal Strategy

5.2.1 Overall scheme

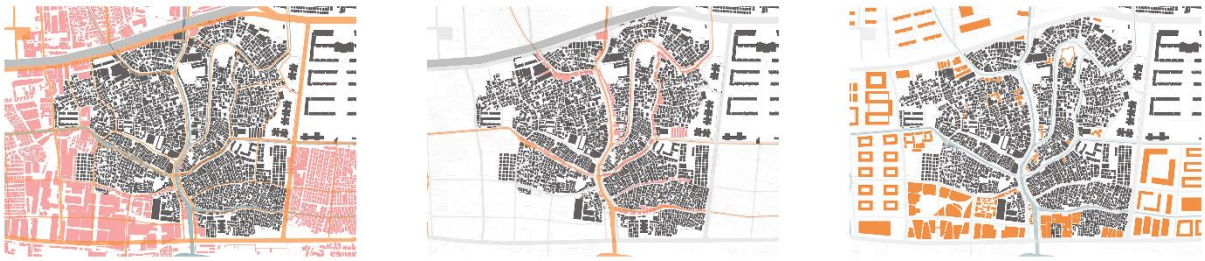

Fig. 5-2 Overall urban renewal scheme (Source: By author)

The regeneration strategy for the Lijiao area will be based on the ideas advocated by the field condition, to restore the traditional waterfront charm of the village, aiming to recreate the

historical and traditional streets and lanes while carefully developing the surrounding area through an analysis of the current function of the site.

The regeneration process begins with the adjustment of the road network and functional zoning inside and outside of Lijiao Village under the master plan of Zhuguang Group. Large industrial land, factory buildings, storage space and vacant land outside Lijiao Village will be redeveloped according to the master plan into functional zones such as business, offices, youth apartments, creative office parks and green communities to meet the planning and public facilities needs of the site.

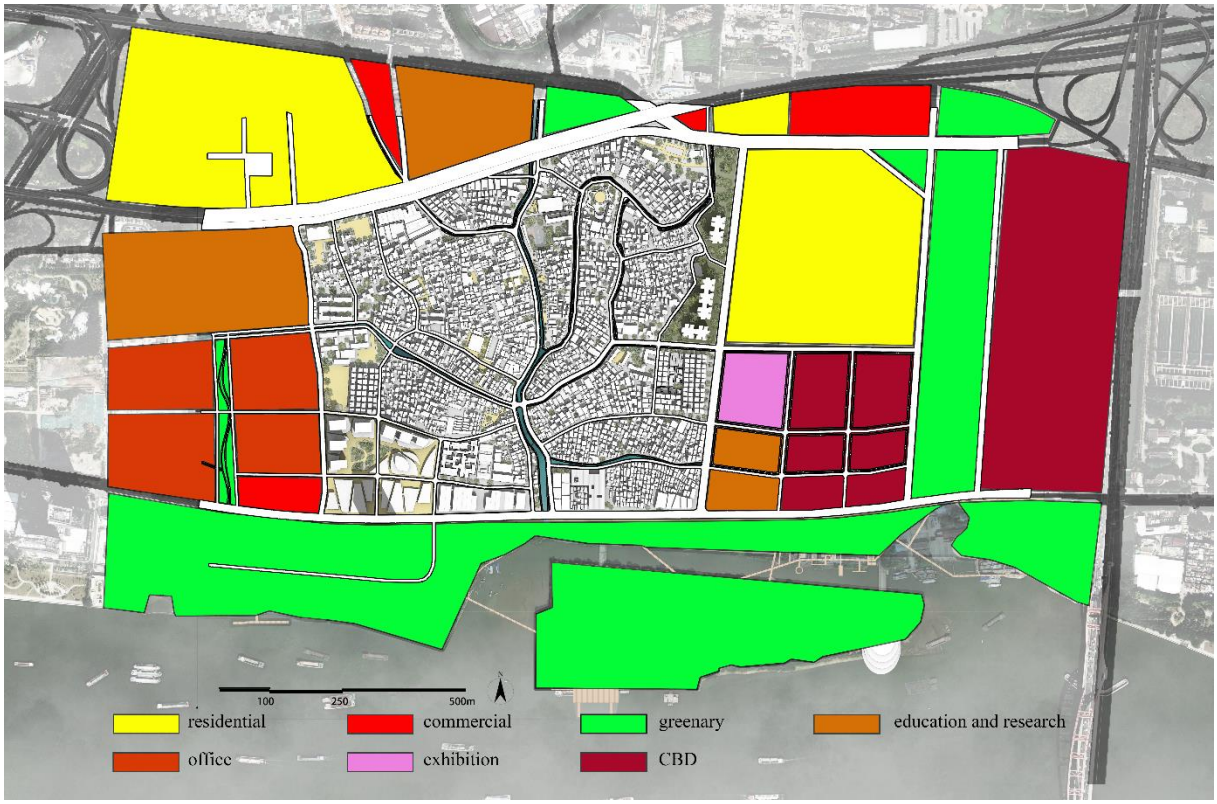

Fig. 5-3 Functional Zoning around Lijiao Village (Source: By author)

Fig. 5-4 Functional Zoning of Lijiao Village(Source: By author)

Secondly, according to the traditional water network structure to remove the additional buildings and restore part of Lijiao River and Lijiao Branch River, and along the water network to arrange the road network, where the main street along Lijiao River two-way carriageway divided into two sides of the river, to improve the accessibility of the river landscape. The main street outside Lijiao Village continues the waterway to the north to connect with the water system of Haizhu Wetland Park to enhance the water ecological resilience of the area. At the same time the branch river extends eastwards to become the main water body of the urban green axis to improve the micro-environment.

The road network within the village is based on the village layout and reshapes the three-level street structure of “street-main alley-alley”, with urban roads surrounding Lijiao Village

to ease traffic flow on the site. The curvilinear shape of the road effectively reduces the speed of traffic flow in the village and creates a safe street for pedestrians. Lijiao East Street, as the main road for north-south communication between Lijiao Village, will narrow the distance between Lijiao River and the street interface through a strategy of two-way lanes on both sides of Lijiao River to improve the accessibility of Lijiao River and the utilization of the landscape of the river. The parking function of the existing waterfront will be transformed into a landscape area for recreation, dragon boat culture, activities, and fitness, a memorial square for martyrs, and a partial waterfront creative commercial area to absorb visitors.

The area will also be enriched by the activities that the area can accommodate. Through the arrangement of flower boxes and plazas, a neutral space will be built on the main street in a scattered manner, which the local villagers will use as a place for recreational square dancing, villagers' gatherings, dragon boat cultural activities, clan celebrations and the "floating color parade".

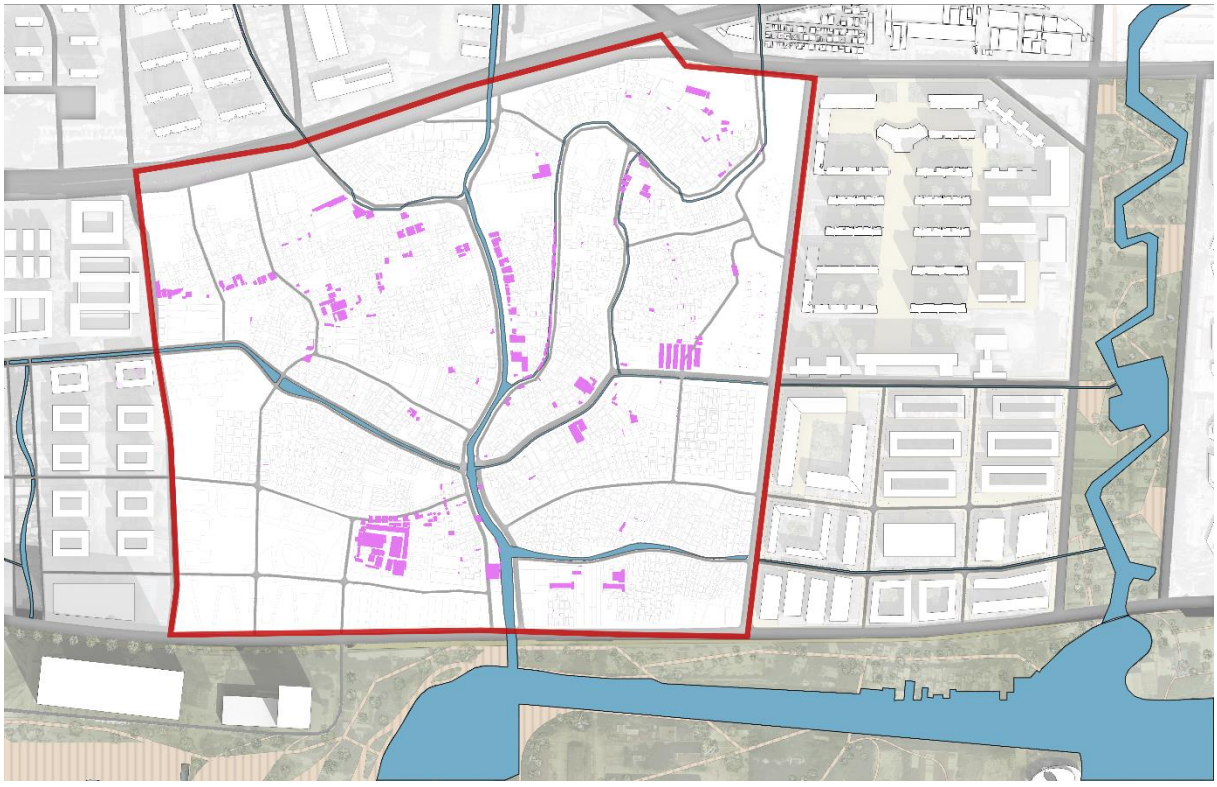

Fig. 5-5 Demolition of buildings used as public space (Source: By author)

The abandoned and temporary buildings in poor condition on the site will be demolished. The remaining space will be used as expanded nodes in the alley, which can be used as pocket parks, public service areas in the street, plazas for traditional cultural exhibitions, and galleries

for cultural and creative arts to attract the convergence of people, thus forming fixed points and connecting the local elements. (Fig. 5-6)

Fig. 5-6 Examples of Three Renewal Strategies (Source: By author)

5.2.1.1 Strategy 1 Recreational theme: Bring local connections to the whole structure

The linear linking spaces unite otherwise isolated recreational spaces, thus enhancing the integrity of the entire recreational public space structure and making the public space experience more coherent.

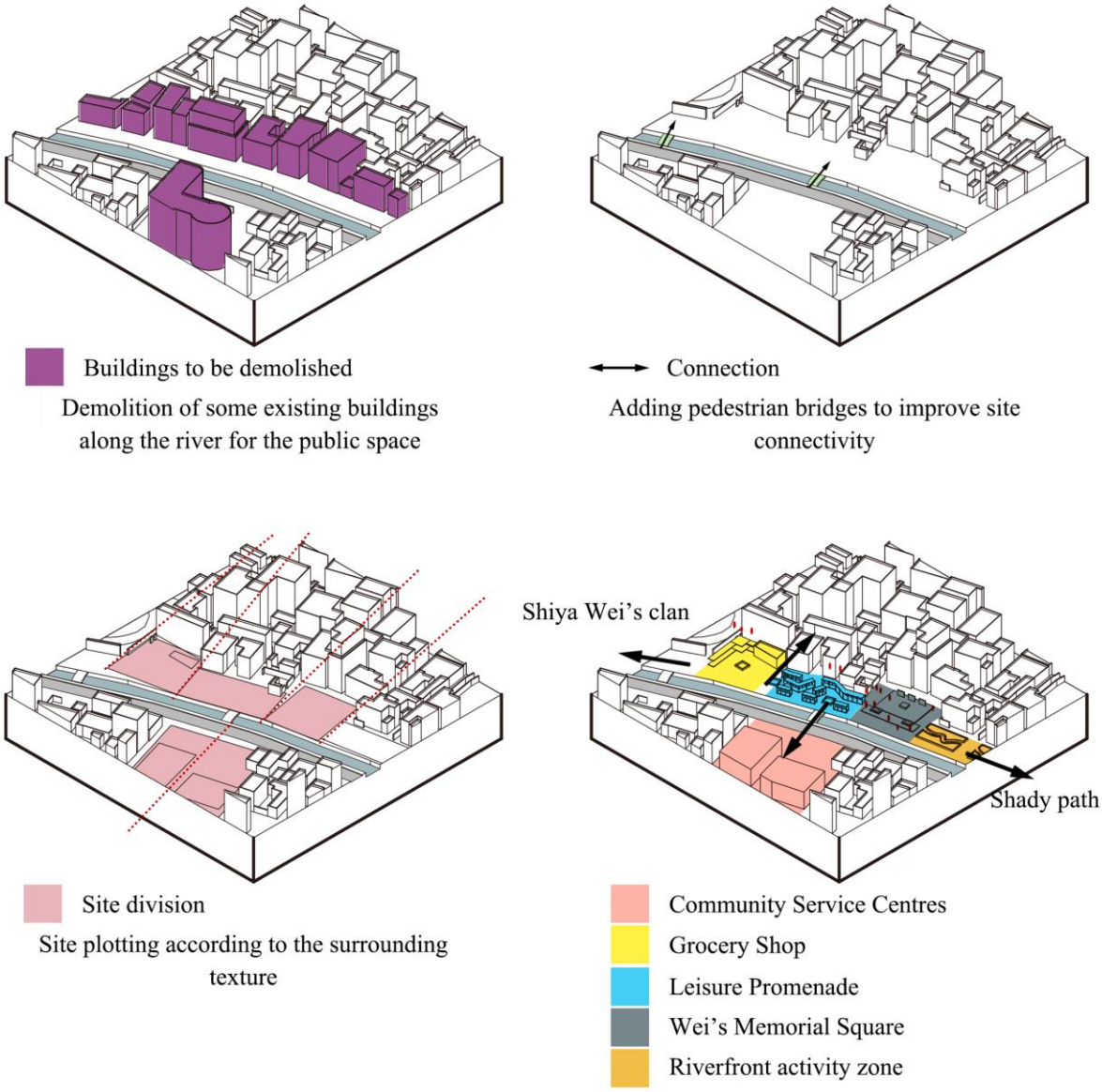

Fig. 5-7 The process of generating the Villager's Square (Source: By author)

Fig. 5-8 Site plan of the recreational node as a boulevard (Source: By author)

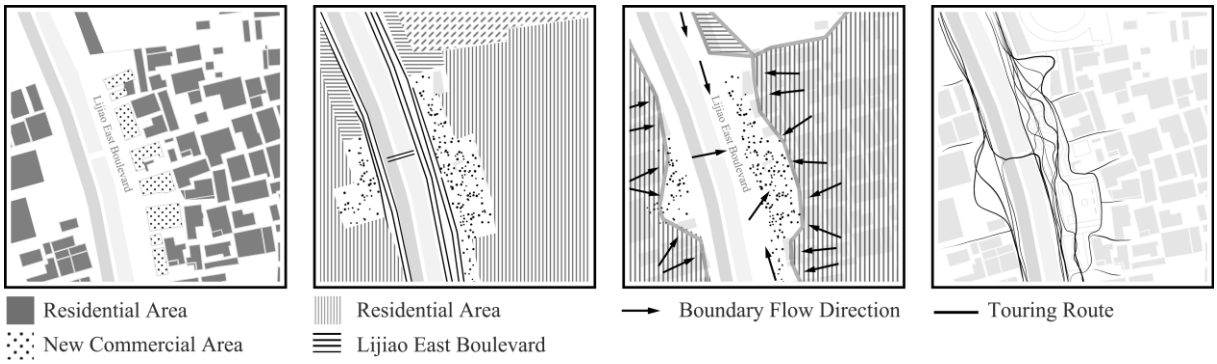

Fig. 5-9 Diagrams of the Lijiao East Boulevard (Source: By author)

The site next to Lijiao Wuyue Street, after the demolition of the buildings, has a linear space along the riverside and is connected by the Zhiyu Wei clan Ancestral Hall across the river and the adjacent Wei Guoyao Memorial Primary School to the north to create the Wei Guoyao Memorial Plaza, which can also meet the needs of community activities such as community promotion, display of cultural activities and events held at the Lijiao branch of the Haizhu Library. (Fig. 5-8, Fig. 5-9)

The site's fractured public spaces for recreation are thus connected. (Fig. 5-33)

5.2.1.2 Strategy 2 Historical theme: Integrate into the old context

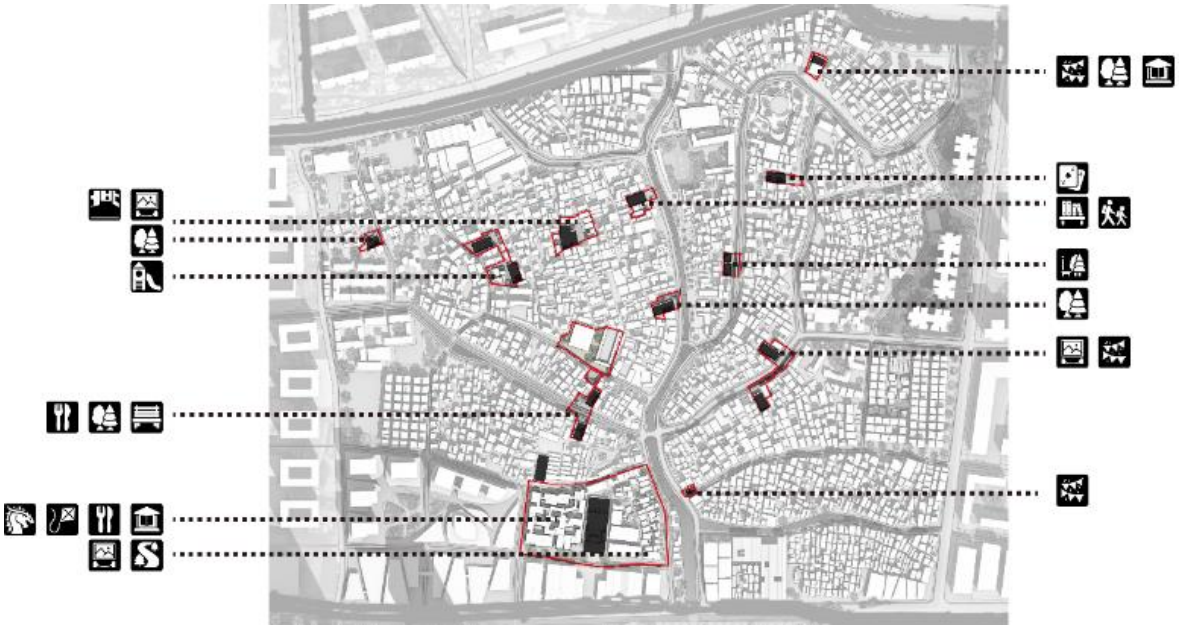

Fig. 5-10 Historical node activity intentions (Source: By author)

After discussing the demolition of buildings that are distributed around the clan and occupy a position conducive to the construction of public space, the demolition of low-quality buildings requires strict compliance with the conditions of the site's fabric and the construction of new buildings that blend into the city's cultural fabric and have a harmonious relationship with the surrounding localities.

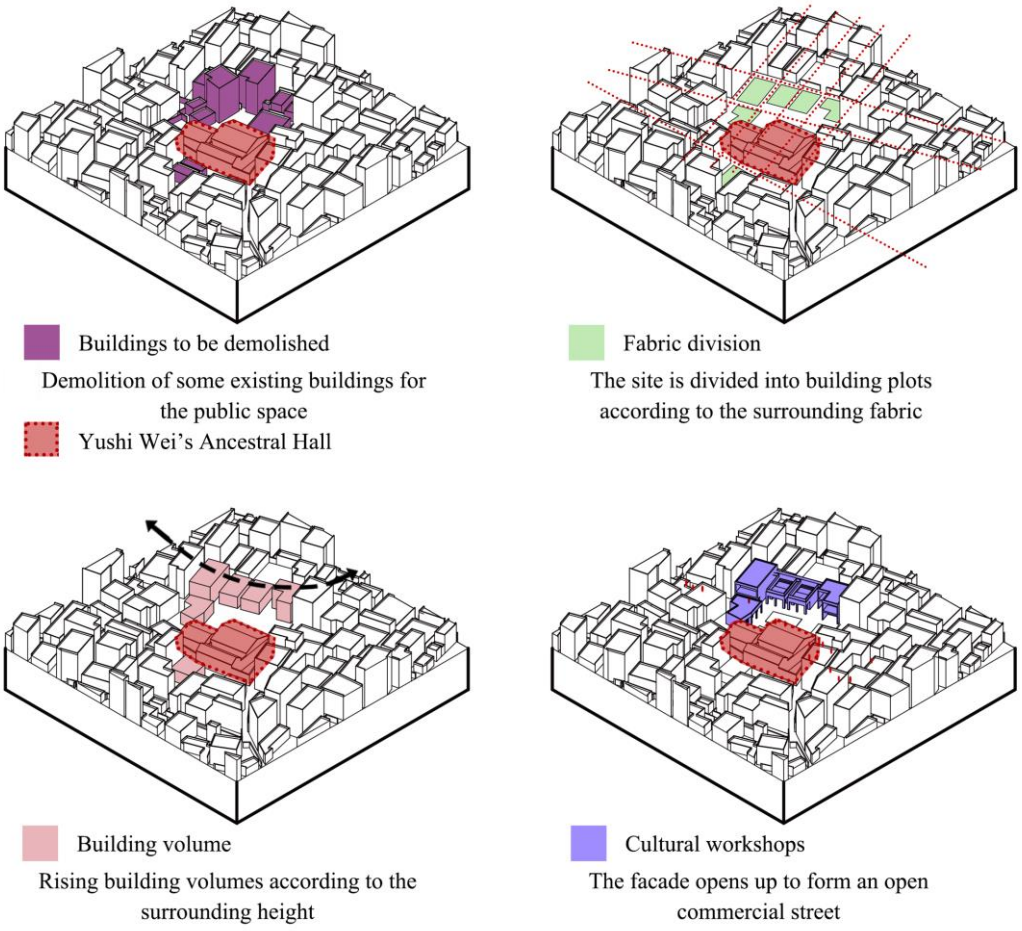

Fig. 5-11 The process of generating the Villager's Square (Source: By author)

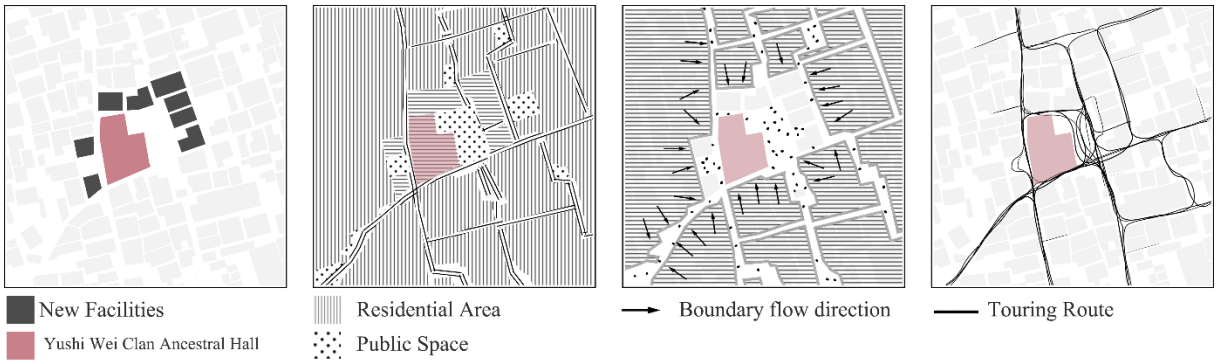

Fig. 5-12 Diagrams of the urban regeneration node as a commercial public space (Source: Author)

The remaining space parcels after demolition are used for the development and construction of public spaces to develop cultural and creative, commercial, tourism, and primary service spaces with local historical and traditional cultural characteristics, as well as providing a place for residents' activities. For example, the demolished vacant land next to the Yushi Wei's Ancestral Hall is used as a villagers' square, with two central activity areas, food and beverage shops along the street, as well as cultural and creative workshops and exhibition

halls, attracting people and activating the surrounding areas to live in harmony with the Yushi Wei's Ancestral Hall. (Fig. 5-12, Fig. 5-13)

The Village Square forms an exchange of views through the water feature tree pond near Yushi Wei's Ancestral Hall and the open terrace of the cultural and creative commercial shops to the east, providing an audience for the activity platform at the centre of the public space site thus becoming a suitable exhibition space to facilitate the occurrence of activities. (Fig. 5-14)

This enhances the influence of the historic public space node where the ancestral hall is located, radiating its influence to the surrounding area.

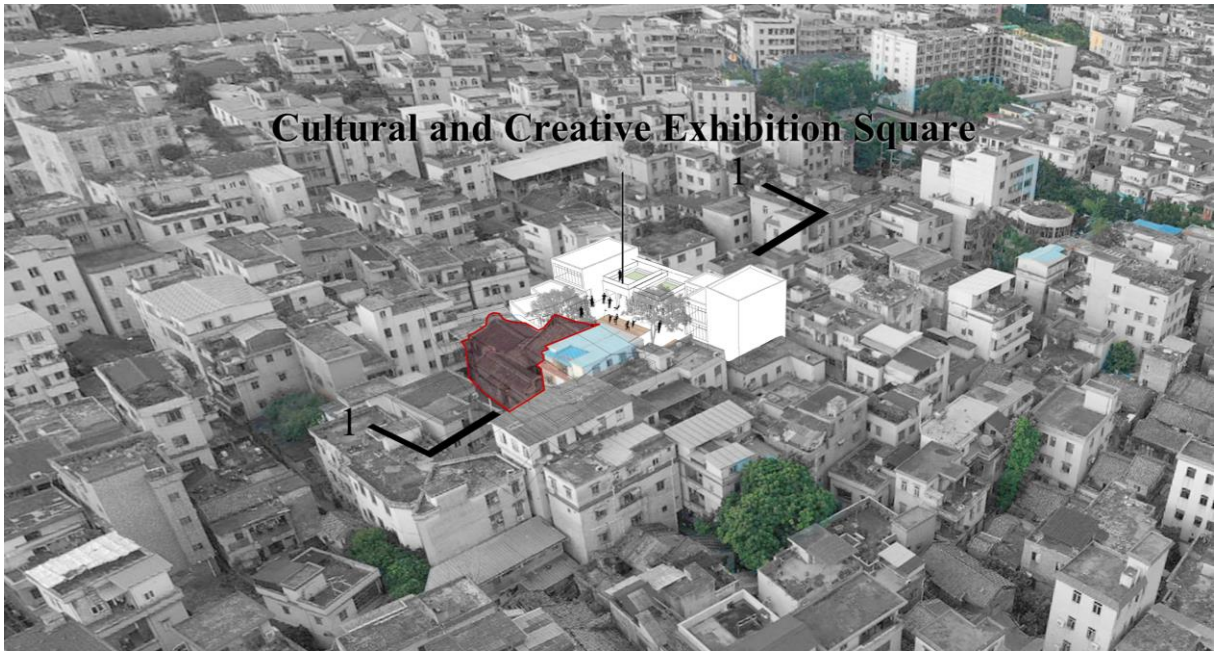

Fig. 5-13 Rendering of Yushi Clan Ancestral Hall (Source: By author)

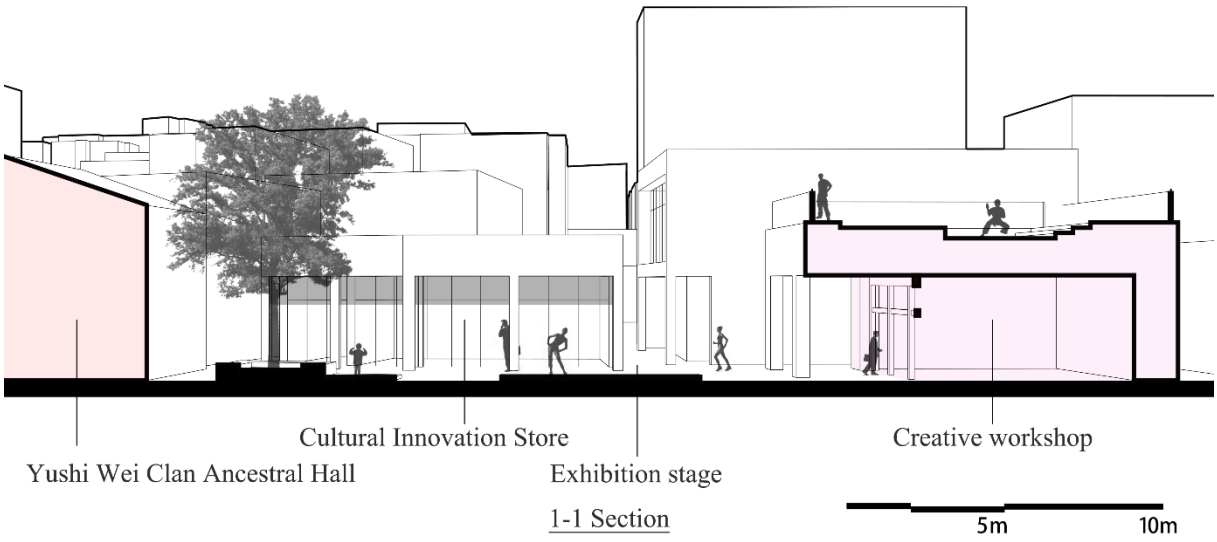

Fig. 5-14 Section of the public space(Source: By author)

5.2.1.3 Strategy 3 Commercial theme: Structure fluid pedestrian space

Lijiao River will be extended northwards to the Haizhu Wetland Park water system to enhance the water's ecological resilience. It will also use Lijiao River as the mainstay and restore part of the water network of Lijiao Village according to the distribution of the traditional branches of Lijiao River, thereby enhancing the quality of the villagers' living environment. (Fig. 5-15, Fig. 5-16)

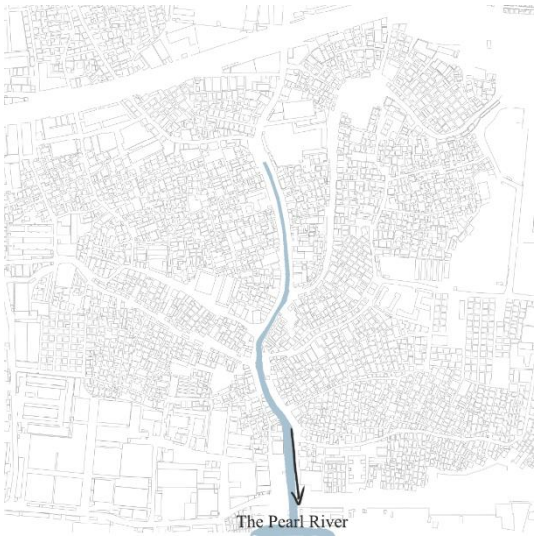

Fig. 5-15 Current Situation of the River (Source: By author)

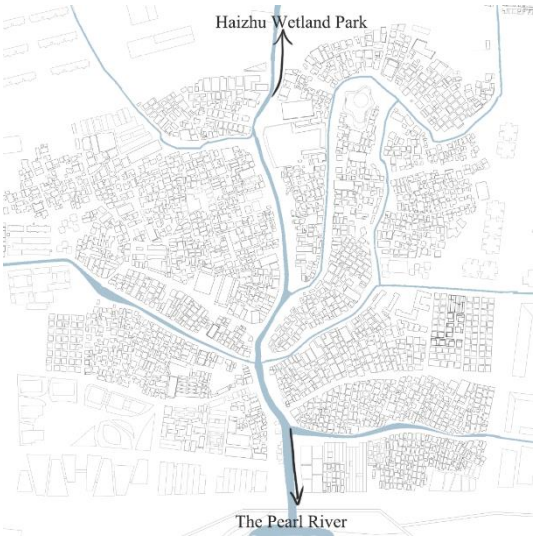

Fig. 5-16 Restored Structure of the River (Source: By author)

The branch chambers and street spaces will be extended from the main street to the east and west directions to build a relatively homogeneous Lijiao Village street’s landscape tour

experience at an approximate street scale, achieving a free-flowing and non-linear village street space. (Fig. 5-17)

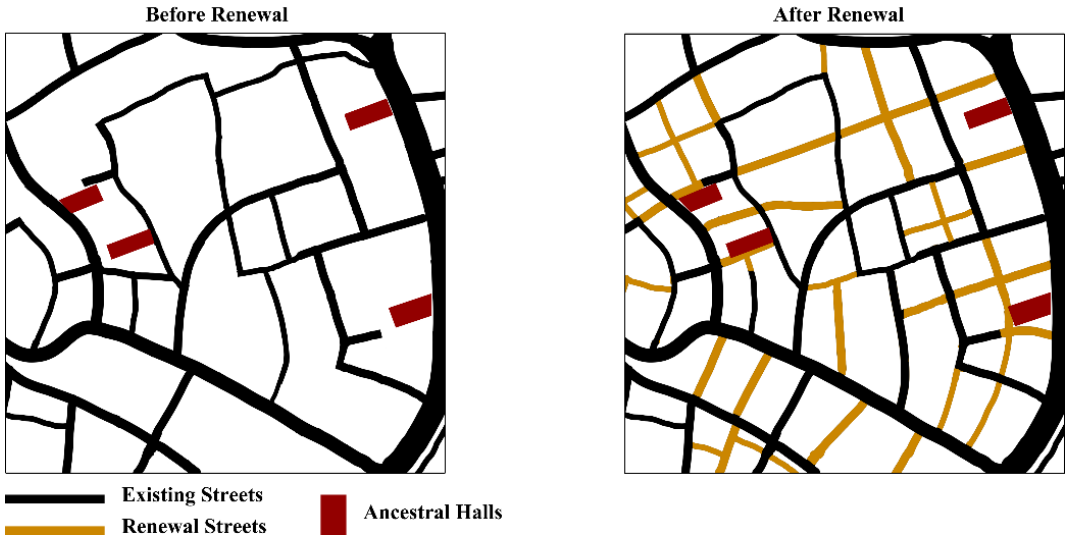

Fig. 5-17 The Structure of Streets in Lijiao Village Before and After Urban Renewal (Source: By author)

For example, in the following plot next to the West Street Wet market, the demolition of a building in poor condition results in a distribution plaza that regulates the flow of people from the commercial pedestrian street on the east side of waterfront space and the West Street Wet market on the west side, as well as meeting the needs of the adjacent residential plots to the north and south for views and recreation, while serving as a gathering place for people to interact with each other and stimulate the vitality of the site. (Fig. 5-19, Fig. 5-20)

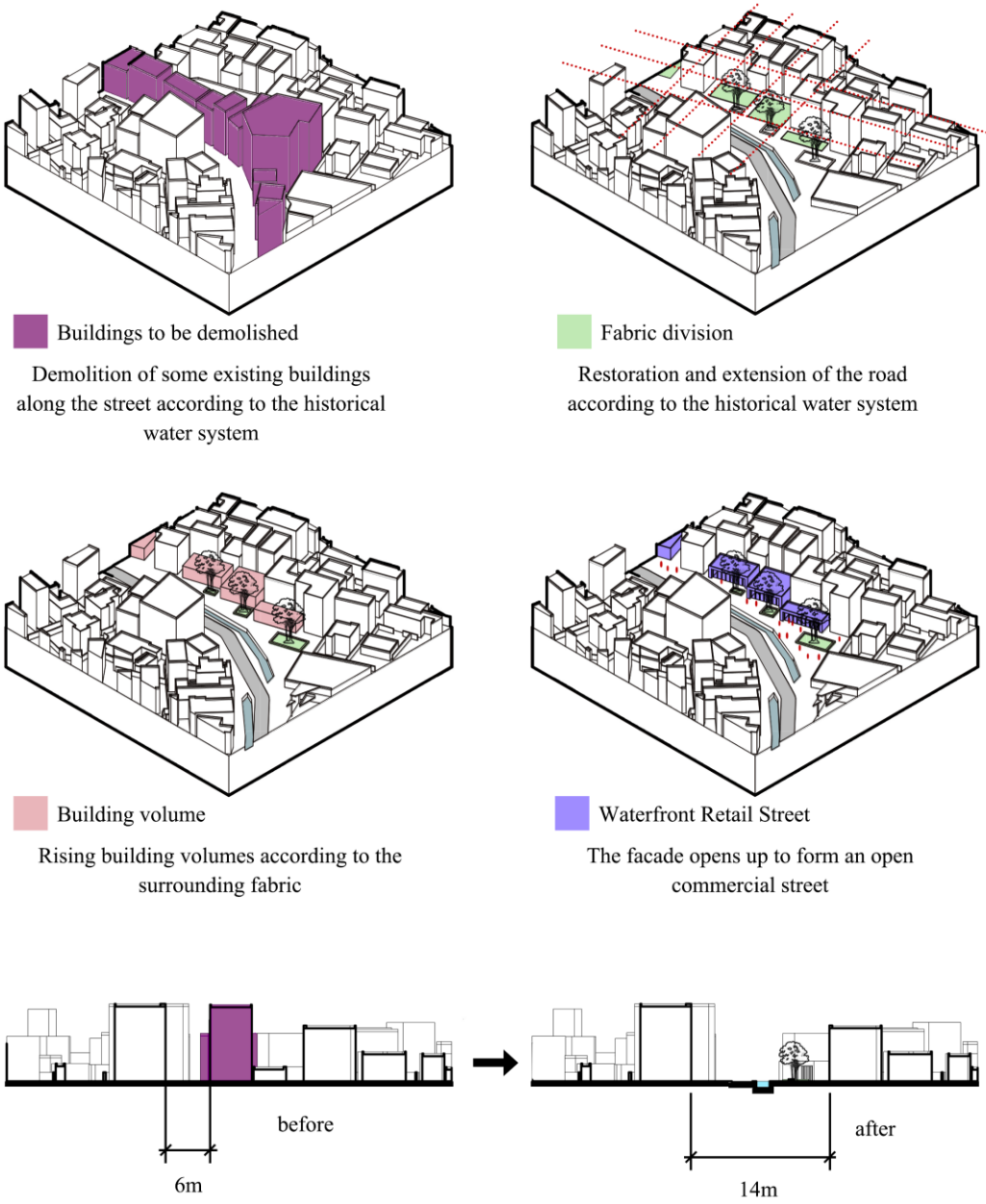

Fig. 5-18 The process of generating the riverfront retailing street (Source: By author)

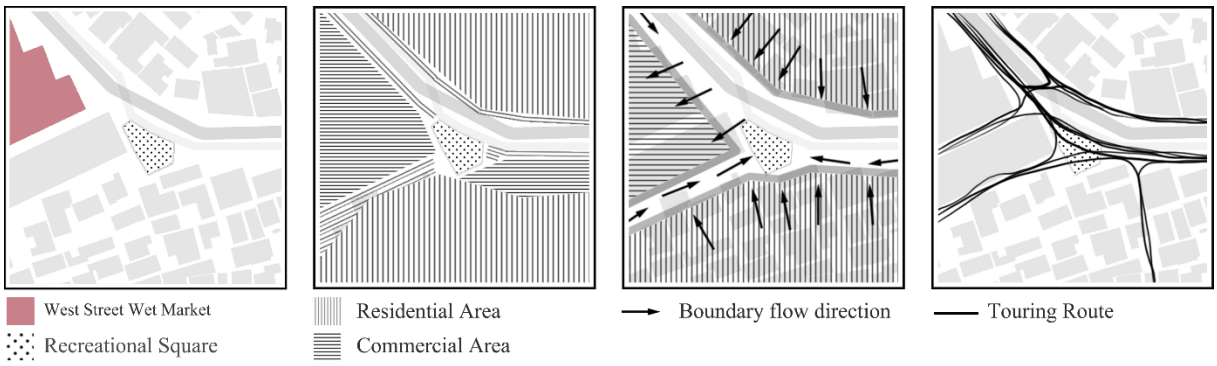

Fig. 5-19 Diagrams of the riverfront retailing street (Source: By author)

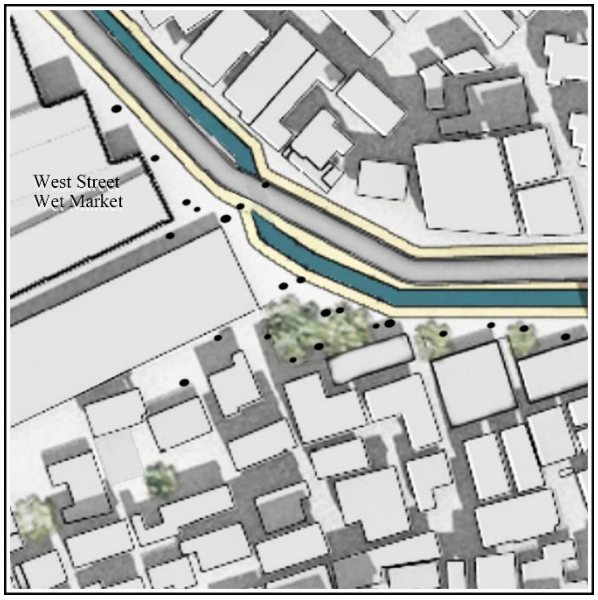

Fig. 5-20 Site plan of the riverfront retailing street (Source: By author)

Secondly, another important strategy is the renewal of the pedestrian pavement system. Given the pavement of Grand Wei Clan Ancestral Hall, only some parts of the pavements in the village are well-preserved. (Fig. 5-21, Fig. 5-22)

Fig. 5-21 the pavement in front of the Wei Clan Grand Ancestral Hall (Source: By author)

Fig. 5-22 the pavement in front of the Pak Tai Temple

So a renewal of the pavement program is operated along the streets surrounding traditional buildings, so that the scattered historical fields, centred with those ancestral clan halls and traditional buildings, can be re-integrated as a whole, completed the historical field.

Through the process of restoring the original branched water network of Lijiao River and the renewal of the pavements of the specific streets in the village, a free-flowing non-linear public space of streets and alleys will be constructed within Lijiao Village using the cultural lineage as a thread. The pedestrian route is undirected, and as people wander through the village, they will encounter nodes of public space and interact with other people moving around, expanding the spatial experience.

Fig. 5-23 the Location of Pavements Renewal (Source: By author)

5.2.2 Spatial structure

Through the analysis of the historic spatial structure of Lijiao Village and site research, Lijiao East Street was identified as the main street of Lijiao Village, and through the main alleys and alleys, it was connected to the recreational public space system lead on Lijiao Park, the historical and traditional cultural network system lead on Lijiao Cultural Centre and the commercial network system lead on West Street Wet Market, respectively, to integrate and superimpose the “field”. The "fields" formed by the three systems are integrated and superimposed to create a structure of places that can carry the activities of the residents within the village so that they can continue to carry functions, act as platforms and infrastructure for activities, and regulate and direct the material, information, and human flows within site. (Fig. 5-24)

Fig. 5-24 Masterplan of the Renewal Public Space of Lijiao Village (Source: By author)

In the spatial structure of Lijiao Village, the main street running north-south is the most important connection. The southern part of the main street serves as the main entrance to the village, forming the village entrance square and the riverfront commercial pedestrian street in conjunction with Lijiao Chung, with viewing platforms and leisure trails along the Chung to meet the viewing needs of activities such as "dragon boat rafting" and to carry commercial and recreational activities. The Dragon Boat Square across the Chung and the Pak Tai Temple form a historical and traditional cultural space of monumental significance. Further north to the San York area is another commercial and leisure plaza. (Fig. 5-25)

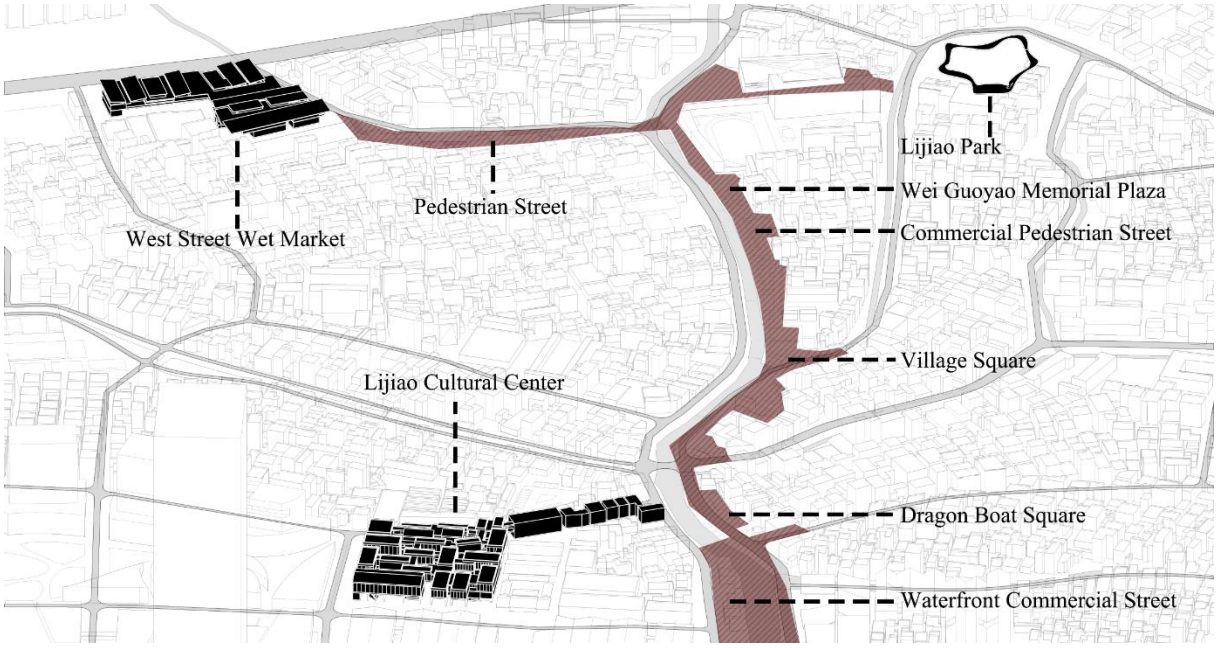

Fig. 5-25 Nodes and Main Street (Source: By author)

5.2.2.1 The Main Street: main axis

The spatial sequence on the main street is thus connected to the neighboring ancestral shrines and temples, the leisure plaza, and the commercial pedestrian street, where different functional activities are superimposed to create a diverse and flexible use of space. (Fig. 5-26)

The main street of Lijiao Village serves as the primary place where multiple functional activities overlap, with a cultural and commercial waterfront pedestrian street corresponding to the Lijiao Cultural Centre section, a Dragon Boat Square next to the Pak Tai Temple, and a Wei Guoyao Memorial Square at the Zhiyu Wei's Ancestral Hall and Wei Guoyao Memorial Primary School, all sections of the main street are partially connected to the adjacent public space activities of Lijiao Village, and combine at least two of the commercial, recreational and historical traditional activities two of these, creating a flexible and fluid public space. The main street acts as a linear public space, extending the range of activities in the neighborhood through the sub-level streets and becoming an infrastructure platform for street activities. (Fig. 5-44)

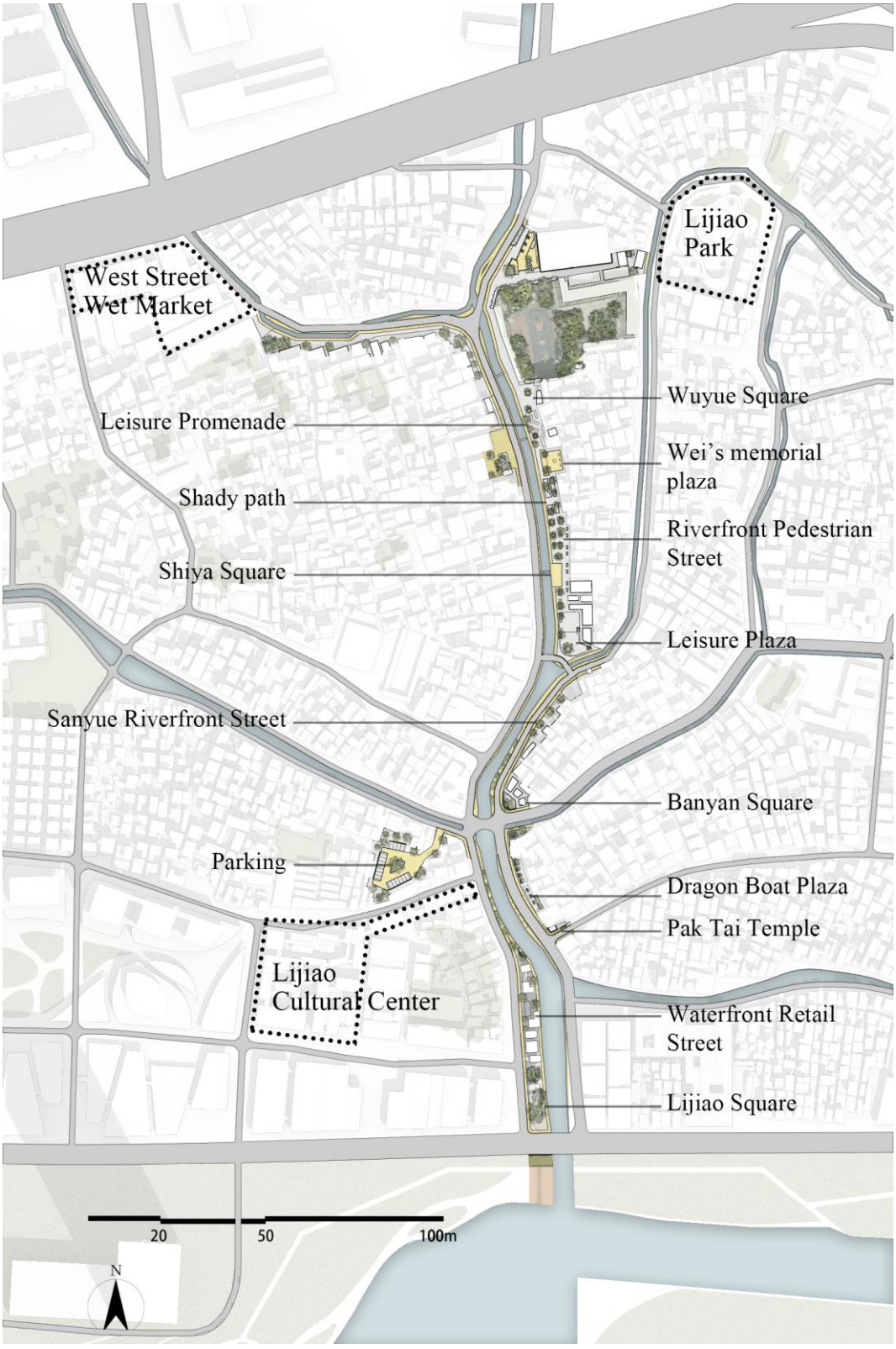

Fig. 5-26 Masterplan of Main street (Source: By author)

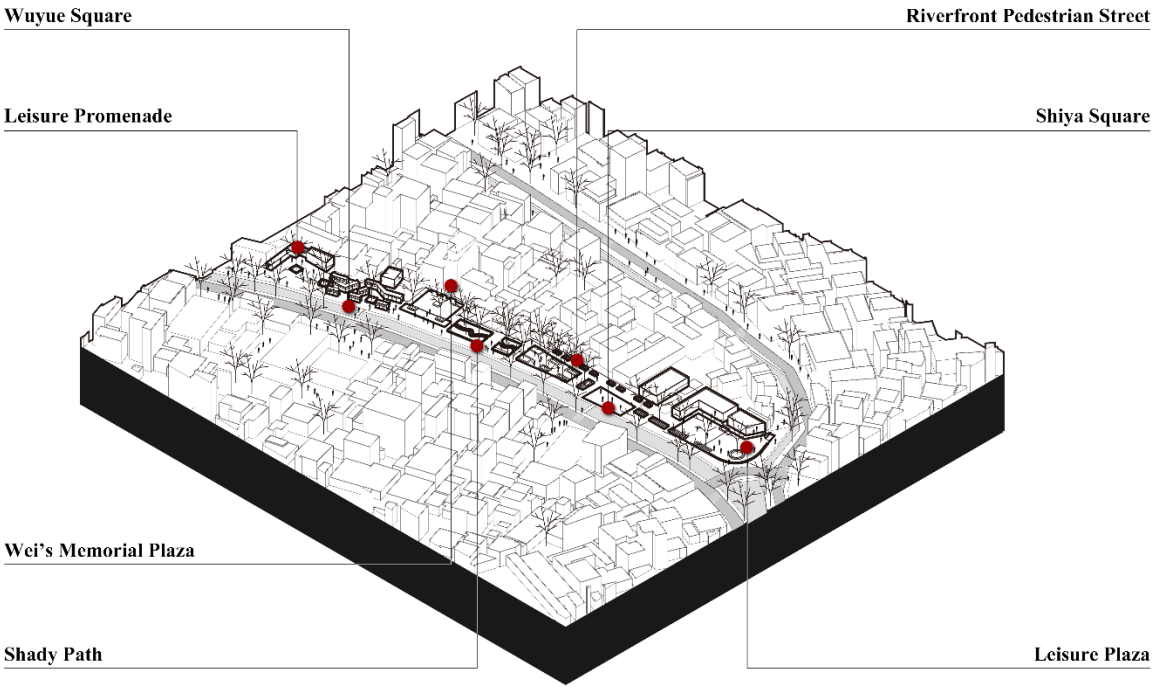

Fig. 5-27 Axonometry of Wuyue Square (Source: By author)

Fig. 5-28 Axonometry of Banyan Square (Source: By author)

5.2.2.2 Recreational Structure: Continuous and homogeneous

Through the design of the landscape space, a spatial pattern is created that facilitates the bottom-up transformation of villagers to meet their daily lives and festive activities, creating a continuous, flexible, and mobile recreational field condition within Lijiao Village, forming a landscape infrastructure field, and as well a platform for various events to take place. (Fig. 5-29)

Fig. 5-29 The Scheme of Recreational Re-Structure (Source: By author)

With applying the renewal strategy based on field condition theory, the recreational field of Lijiao Village can be more flexible and continuous for the future developments, as the drawing below shows how the recreational field is reaching a higher degree of completion. (Fig. 5-30, Fig. 5-31, Fig. 5-33)

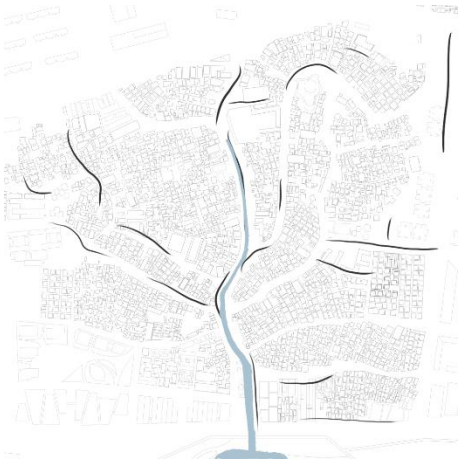

Fig. 5-30 before (Source: By author)

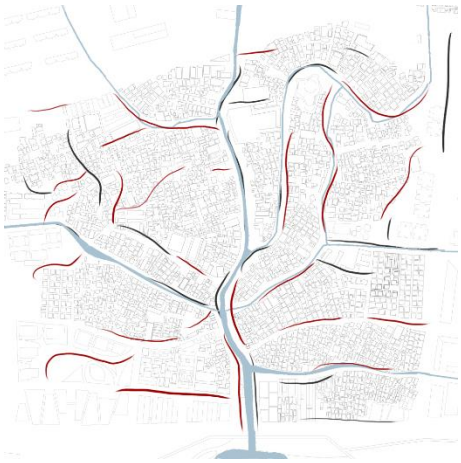

Fig. 5-31 after (Source: By author)

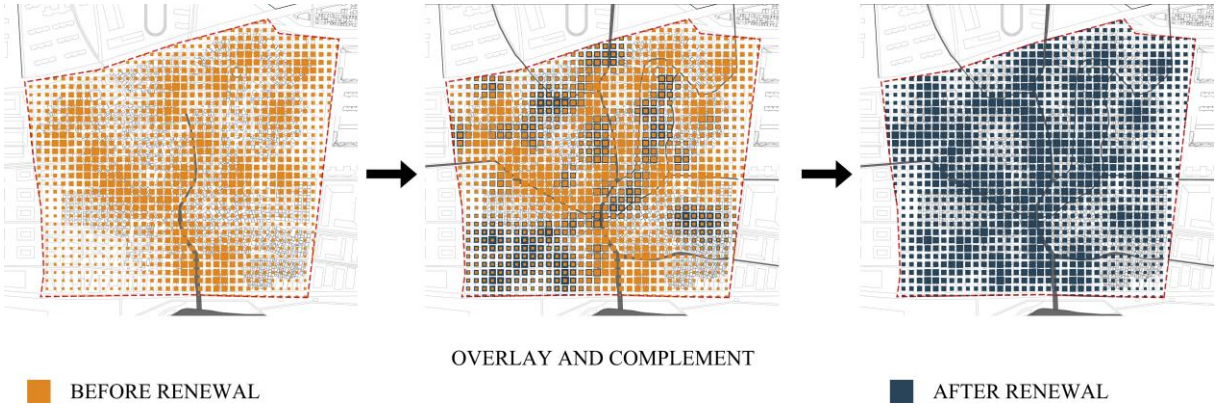

Fig. 5-32 Field Condition Diagrams of the Renewal of recreational public space (Source: By author)

Fig. 5-33 New public space structure of recreational space (Source: By author)

Different functions can be arranged in this area, along with the new recreational brunches, to meet the need of daily use, and all the recreational space in Lijiao Village can be used variously. (Fig. 5-34)

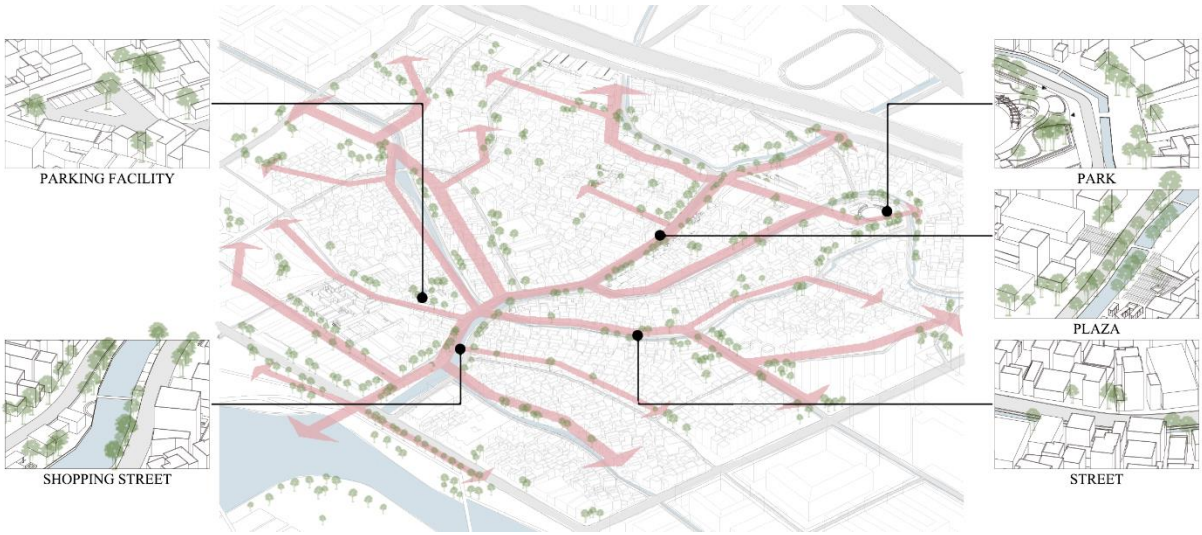

Fig. 5-34 Various recreational public space (Source: By author)

The recreational spaces in Lijiao Village are mainly distributed along the center axis, the main street, mainly as activity plazas and shopping and commercial areas, providing residents and visitors with a nice landscape as well as available and flexible activity spaces, giving full play to the residents' initiative in transforming public space to form a space closer to their living activities. (Fig. 5-35) The main street is also playing as the artery of Lijiao Village, connecting both sides with the capacity of transportation, offering the opportunities for people and information to flow freely, and integrating all the recreational space and their surrounding function area as a whole. (Fig. 5-36)

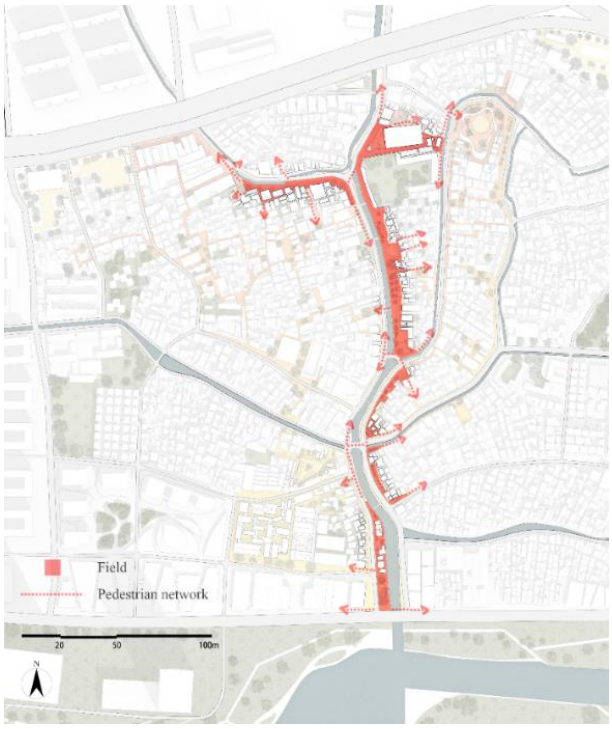

Fig. 5-35 Connection of the Recreational Structure

(Source: By author)

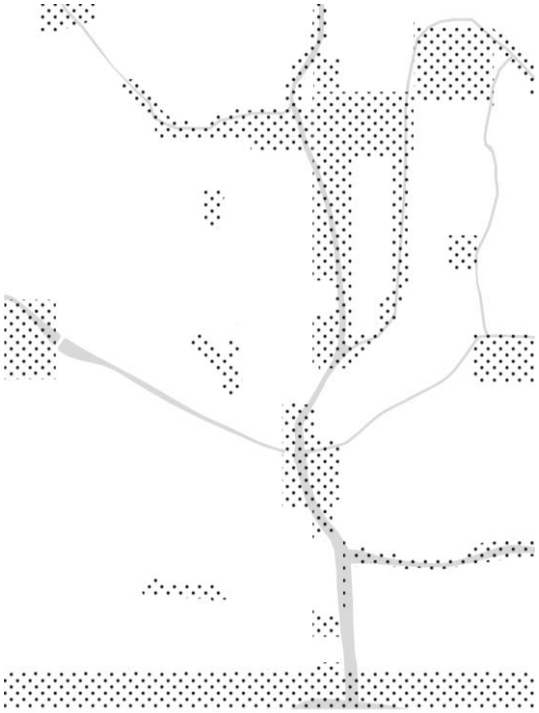

Fig. 5-36 Diagram of the Recreational Space

(Source: By author)

Thanks to the power of integration of the main street, residents can freely expand their activities through the streets and alleys. Thus, all kinds of various events can take place in this newly created in-between space. (Fig. 5-37)

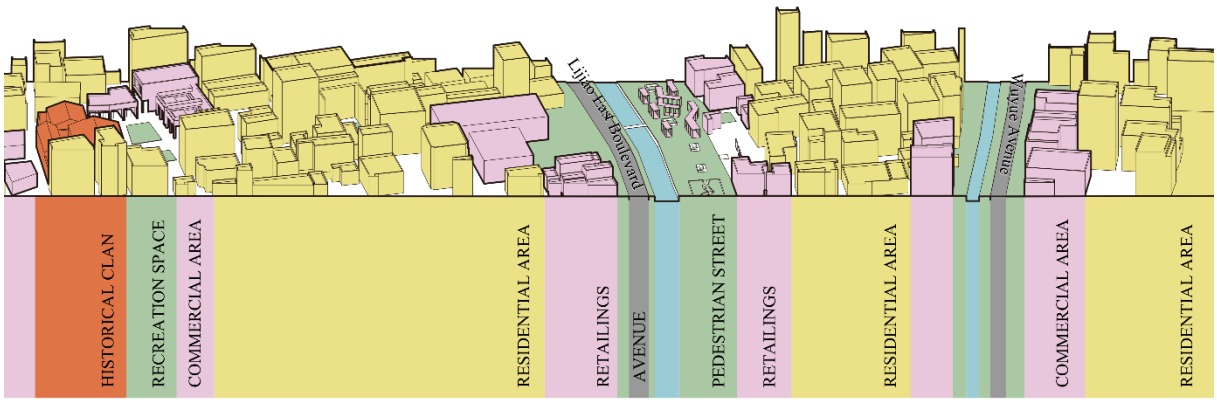

Fig. 5-37 Renewal Spatial Structure System (Source: By author)

5.2.2.3 Historical Structure: Integral structure

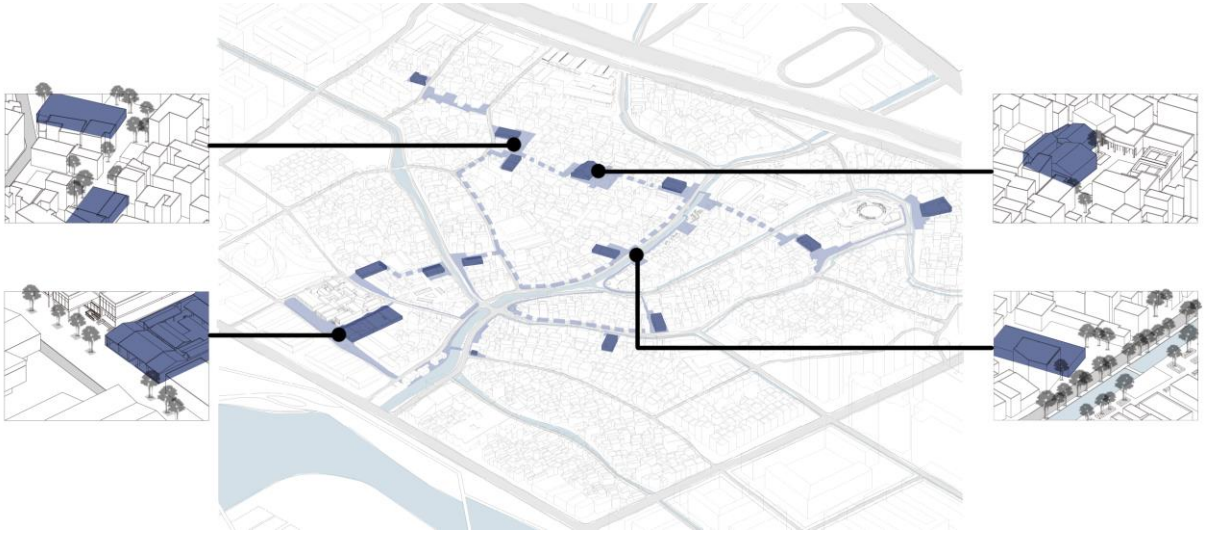

Fig. 5-38 Various Historic Public Space (Source: By author)

The space around the existing ancestral halls and traditional buildings on the site will be carefully managed to form villagers' squares, cultural and creative shops, creative office spaces, and large stages that provide activity spaces for villagers and tourists in conjunction with the square space of the ancestral shrines, and in this way become nodes that activate the public space of Lijiao Village and integrate into the urban space through the activities of the nodes. (Fig. 5-39)

These nodes exist as fixed points in the field condition and can play a role in regulating the relationship between localities in the site and in the space connected by nodes, i.e.,, the space of “things in relation to things”, through the interweaving of human flow and different activity boundaries, they can create in the space between the nodes, which is the space of “things and things”, the interplay of people and different activity boundaries allows for the creation of “unexpected” activity spaces, allowing for more variation in the activities between the nodes and the flexibility and fluidity of the space.

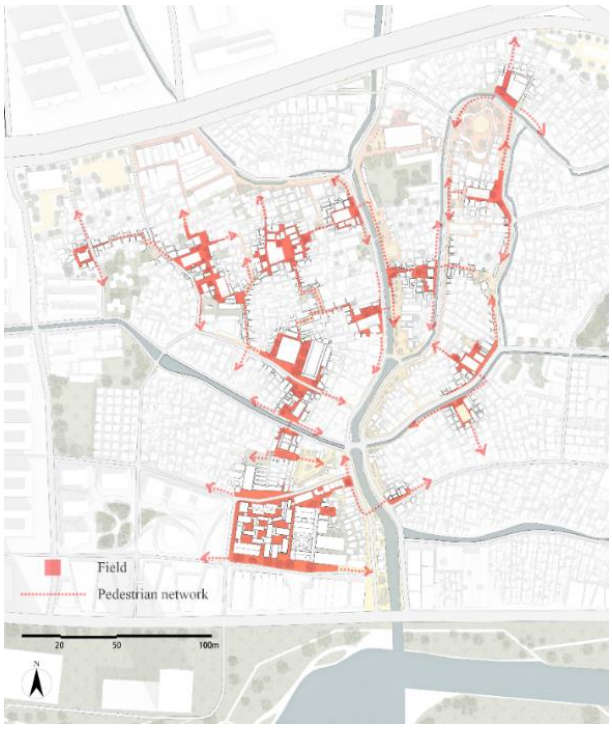

Fig. 5-39 Connection of the historic structure (Source: By author)

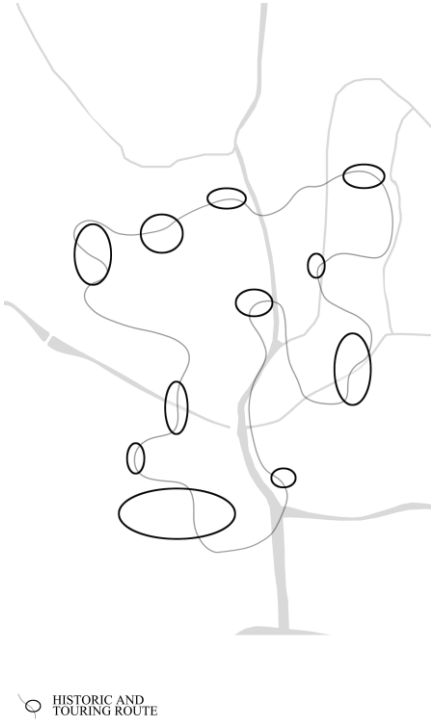

Fig. 5-40 Diagram of the historical space (Source: By author)

By restoring, rehabilitating, and utilizing the space of the existing historical and traditional houses and ancestral halls within Lijiao Village, each of the nodes of the historical and traditional theme will stimulate activities within a particular area. These areas overlap locally so that the local spatial activities are stimulated to a similar extent as at the nodes. Ultimately the spatial impact is not as scattered as the distribution of the nodes but forms a nearly final spatial impact is not as scattered as the distribution of nodes, but forms a nearly homogeneous 'field'. (Fig. 5-40)It shows that the emphasis in field condition on the form of things and the relationship between localities does not mean that things are meaningless, but rather that the form of things should be valued as much as the things and that the relationship between localities and the role of localities in space can play an approximate role.

There are 13 relatively well-preserved ancestral halls as well as the traditional residence Zhaochang Hall in Lijiao Village. With the filling in of the river's tributaries and the encroachment of villagers' houses on the village site, the square in front of the ancestral halls and the original public activity space along the river have disappeared, destroying the traditional continuous and unified waterfront appearance of the village. Therefore, under the condition of

restoring part of the river, the original ancestral hall plaza, the public space along the river and the streets along the ancestral hall can be linked together to form a whole, giving the public a coherent and smooth walking tour experience as well as a fully enriched historical and cultural experience. (Fig. 5-41)

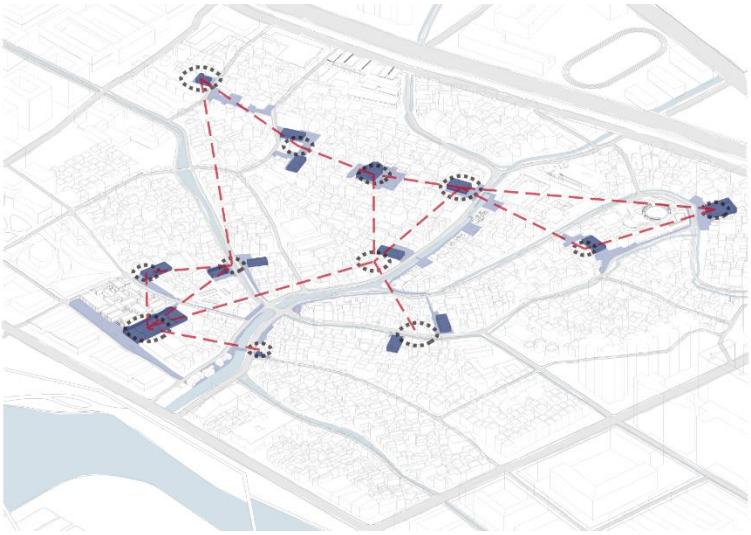

Fig. 5-41 The distribution and connection of historical buildings (Source: By author)

This almost evenly distributed spatial activity relationship is related to the spatial pattern of the streets and alleys of the traditional water village, thus integrating the spatial experience into the urban culture. Here the 'undertones' are the original historical and traditional cultural themes of the event space, under the influence of which the activities that occur and take place in the site have a fixed point and can be better unified into a coherent and integrated space.

5.2.2.4 Commercial Structure: Connected and activating

The commercial and shopping functions within the site will be mainly located on the first floor of the buildings along the main street, attracting pedestrian flow from the main street through the leisure and entertainment transition space on the main street to the commercial premises through a continuous open commercial interface. The commercial shopping is based on the river and the street as the direction of expansion, extending towards the periphery of Lijiao Village, becoming a woven network in spatial form. (Fig. 5-42)

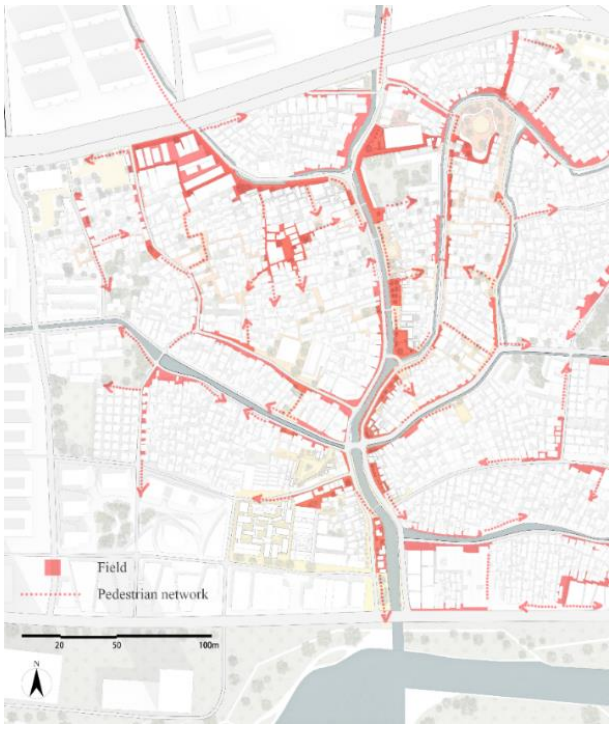

Fig. 5-42 Connection of the commercial structure

(Source: By author)

Fig. 5-43 Diagram of the commercial space

(Source: By author)

The connections within the net-like structure are homogeneous, with each street space for commercial shopping freely crossing to the interior of the settlement or another commercial street. (Fig. 5-43)

5.2.2.5 Moiré effect: Overlay and blur

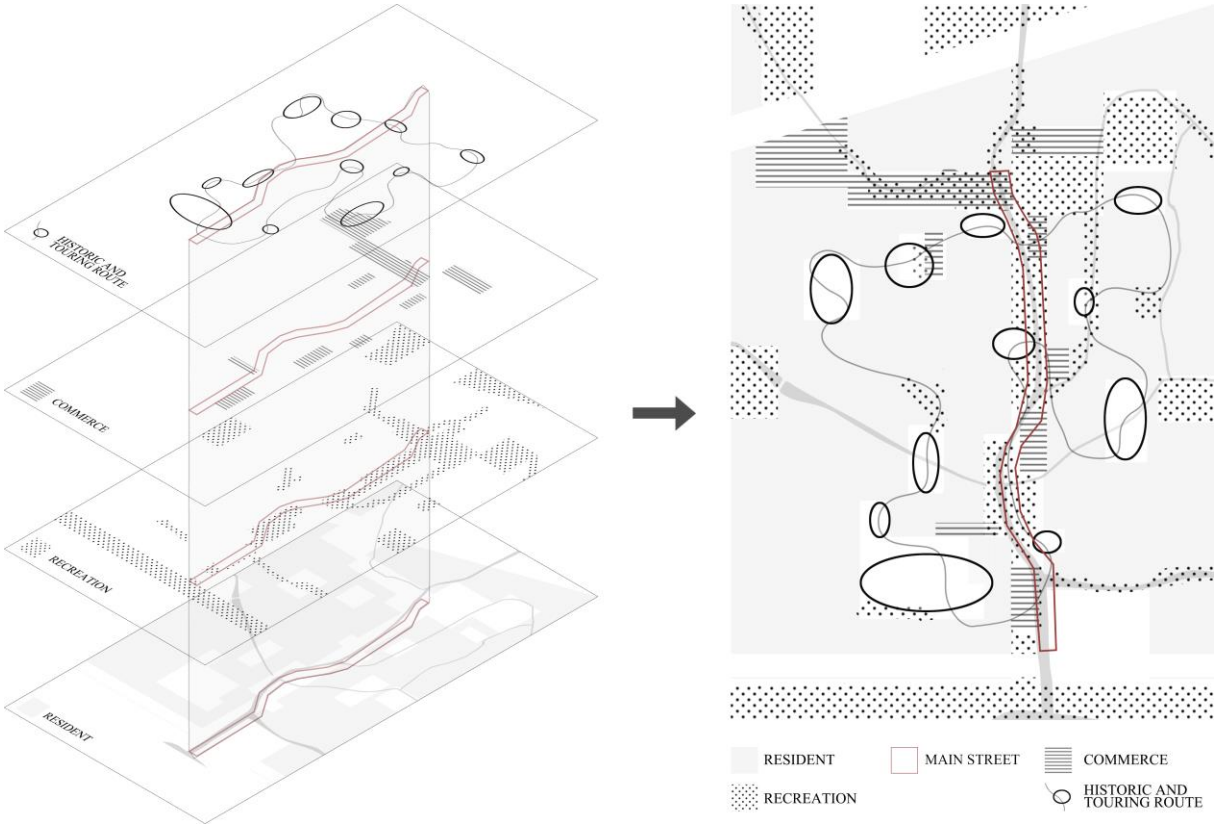

Fig. 5-44 Diagram of the generation of the whole site (Source: By author)

Ultimately three different thematic public space structures overlap within Lijiao Village, forming a complex and flexible public space system within Lijiao Village. (Fig. 5-44)

Fig. 5-45 The diagram of the overlay of historic, recreational, and commercial fields (Source: By author)

5.3 Nodes

5.3.1 Nodes Location

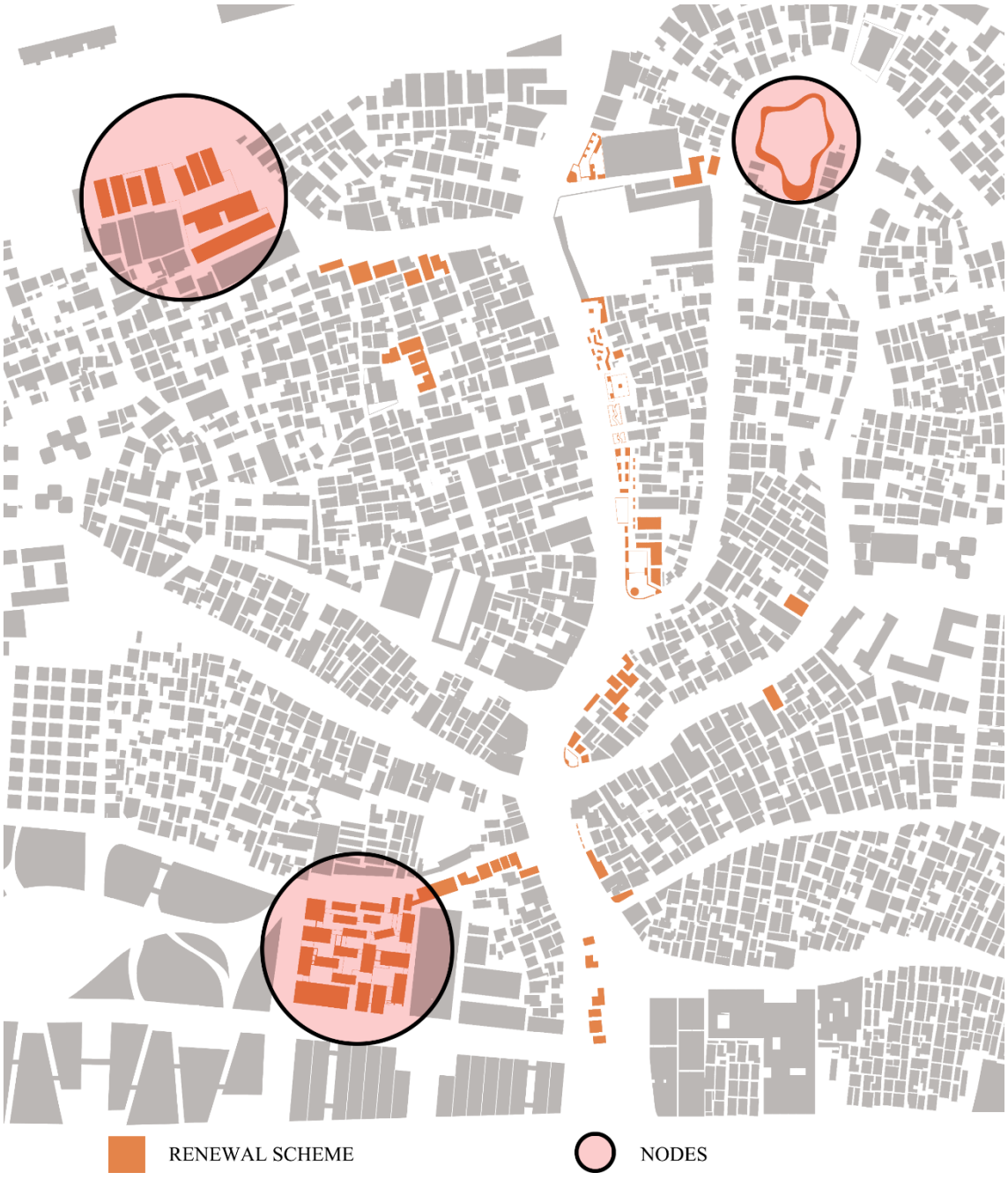

Fig. 5-46 the Locations of Urban Renewal Nodes

There are three primary nodes within the site, Lijiao Park, representing the theme of recreation; the Lijiao Cultural Centre, representing the theme of historical culture; and the West Street Farmers' Market, representing the theme of commercial, which are linked together as a whole through the main street. (Fig. 5-46)

These three nodes function as fixed points of Lijiao Village according to the field condition theory, integrating into the urban fabric while creating local connections and site concepts with other elements within their respective themes and acting as infrastructure platforms for the activities that occur within the respective themes. (Fig. 5-47)

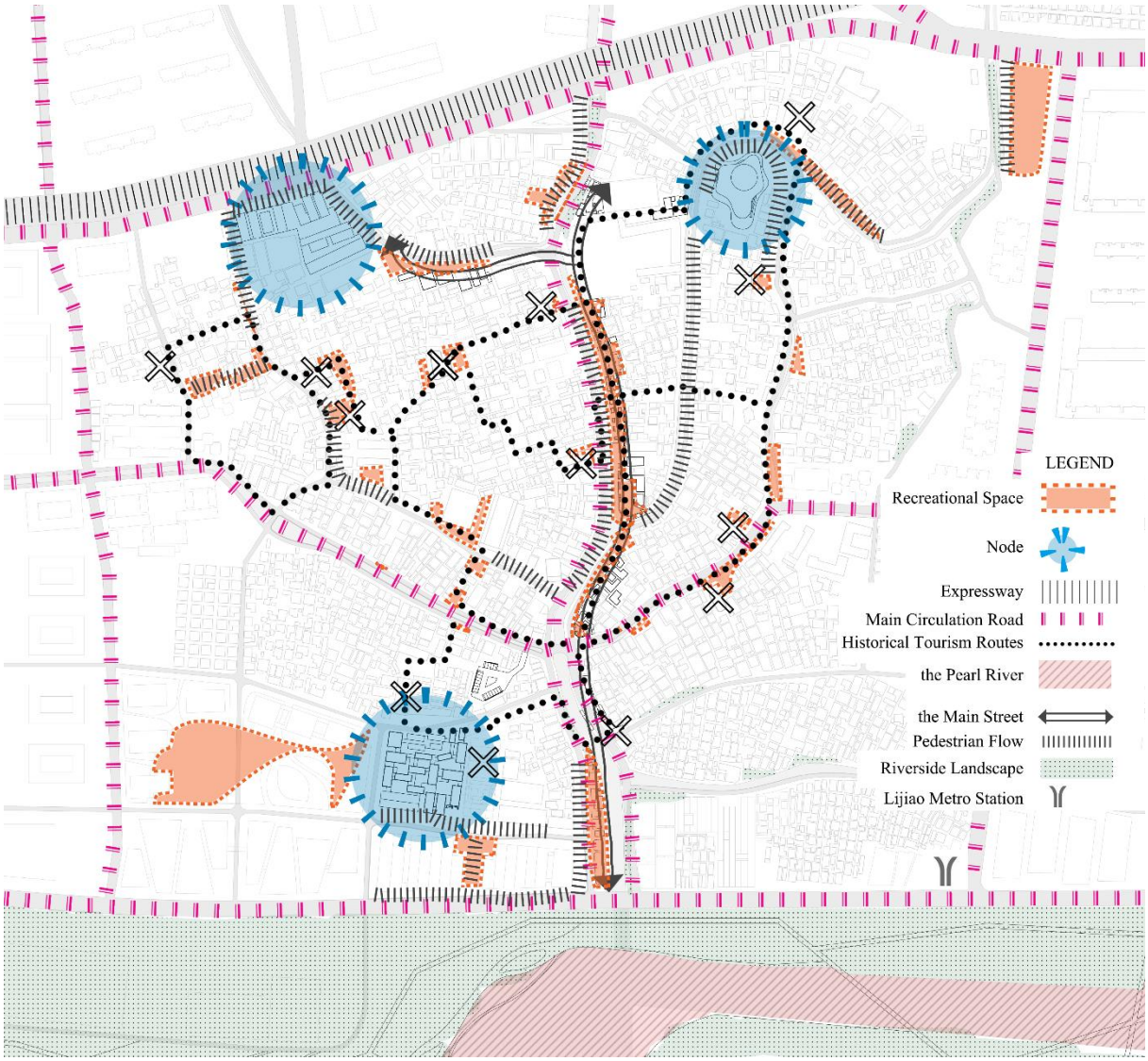

Fig. 5-47 Diagram of the site (Source: By author)

5.3.2 Lijiao Park

5.3.2.1 Site Analysis

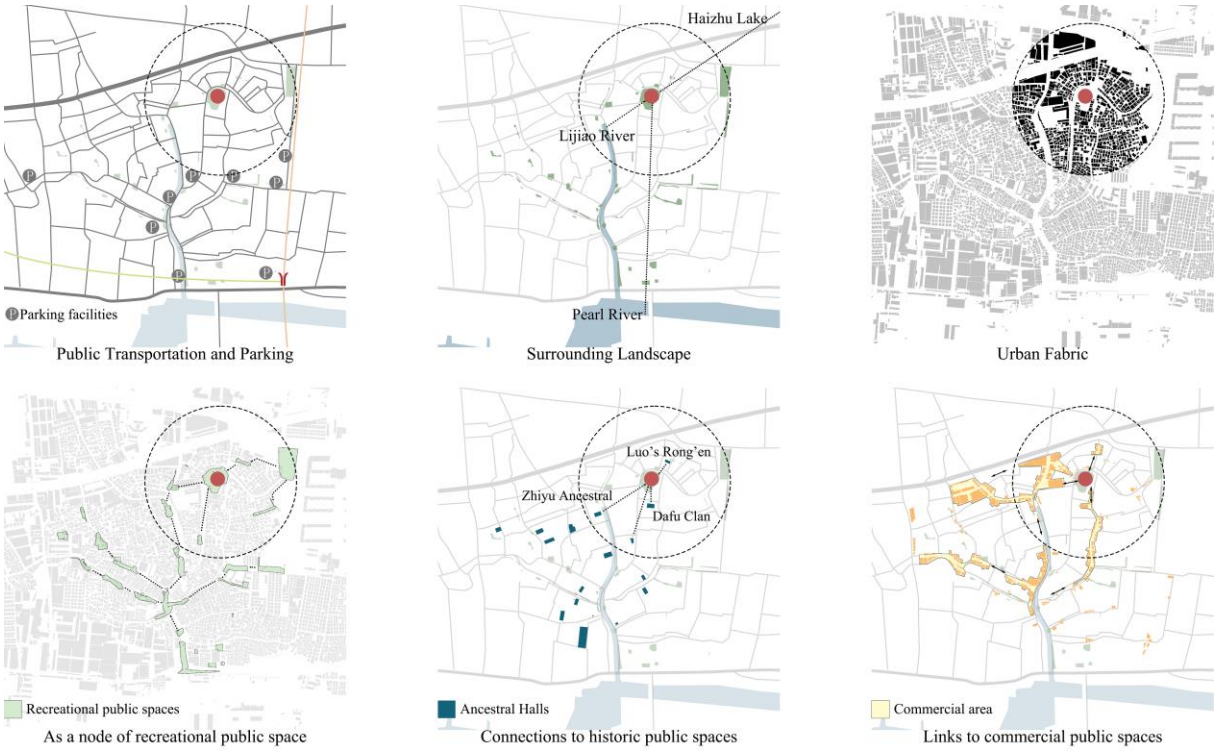

Fig. 5-48 Site Analysis (Source: By author)

Located in the northeastern part of Lijiao Village, Lijiao Park is the core of the whole recreational structure, surrounded on three sides by the restored river after urban renewal, with a predominantly residential function and commercial shopping outlets along the road. (Fig. 5-51)

Despite its proximity to Luo's Rong'en ancestral hall, the open space between the park and the clan has become a negative place and lacks events and activities due to the park fence and the rubbish storage site. (Fig. 5-49) A similar situation is evident in other parts of Lijiao Park, where connectivity with the surrounding environment is blocked by fences, walls, functional rooms, etc., making Lijiao Park more of a relatively independent situation during the activities and events of Lijiao Village, which does not serve well as a connection point to other surrounding public spaces, and this will be addressed as a major issue in the subsequent scheme.

Fig. 5-49 The obstructed accessibility (Source: By author)

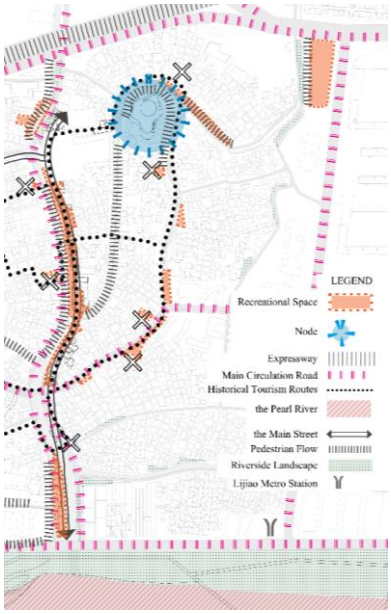

Fig. 5-50 Site Analysis (Source: By author)

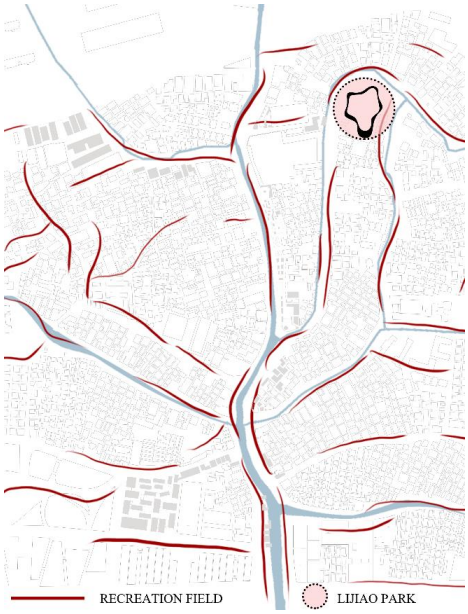

Fig. 5-51 Recreational Space Structure (Source: By author)

As a public space, Lijiao Park is separated from the road pavement by a partial tree pond landscape wall, creating a centripetal circular space within the site. The building fabric in this area follows a regular “comb-pattern” along the road, with the main road encircling the site and the secondary road perpendicular to the main road pointing towards Lijiao Park, which can lead the flow of people. (Fig. 5-50, Fig. 5-52)

5.3.2.2 Design Process

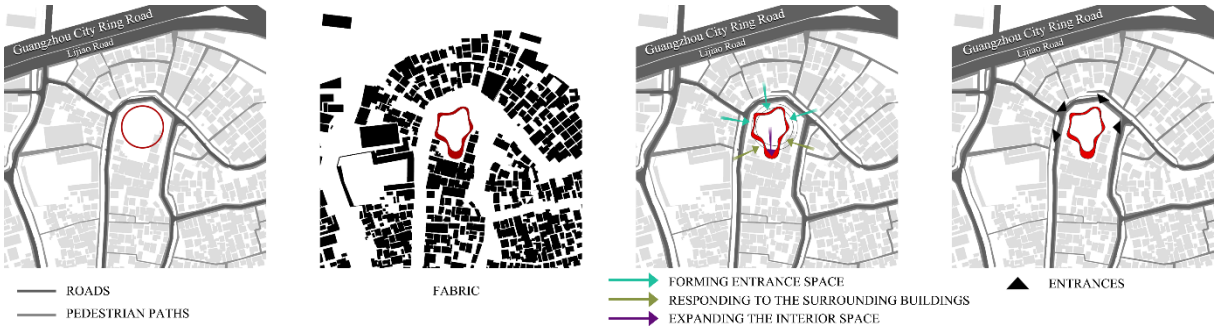

Fig. 5-52 Design process diagram of Lijiao Park (Source: By author)

The original trellis, the central circular activity space and the fitness equipment within site are retained to continue the activity of the site, and the surviving elements are used as nodes in Lijiao Park, forming a circular drifting belt by linking the park entrance to the nodes. (Fig. 5-57)

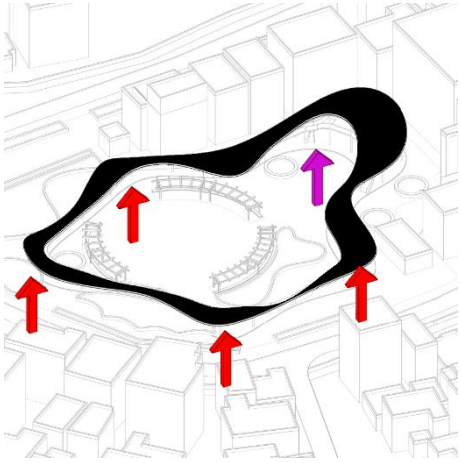

Fig. 5-53 Lift up the roof for entrances and housing functions (Source: By author)

The roof structure of Lijiao Park is covered by public toilets and a chess and card room for the elderly, as well as a first-floor viewing platform, which is not pre-designed for any function, but only provides tables and chairs, allowing residents to freely observe the view, gather for entertainment.

5.3.2.3 Masterplan

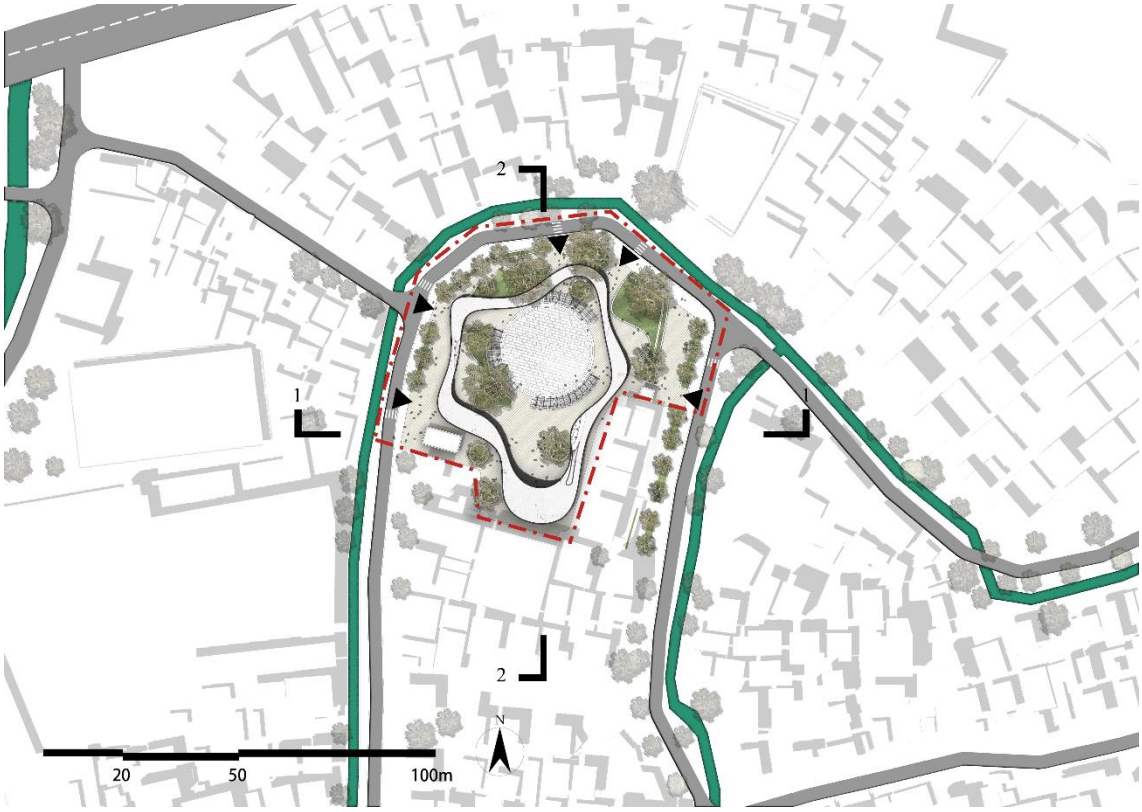

Fig. 5-54 Masterplan of Lijiao Park

The roof of Lijiao Park receives foot traffic from outside the site in an open position and provides shade at activity nodes. The trees within site are retained and influence the generation of the roof form, allowing the roof to be integrated into the spatial structure of the site's landscape. The width of the roof cover is varied, and the multiple scales can accommodate a variety of activities such as sitting alone with a view, gathering for a chat, small painting exhibitions, chess and card entertainment, and all are used by the residents from the bottom-up. Without pre-determination, the park itself exists as a landscape infrastructure, in a gesture of integration into the original landscape space, building an infrastructure platform that can accommodate a wider variety of activities. Through the occurrence of activities, Lijiao Park can become a hub connecting the surrounding residential areas and an important node of recreational space within Lijiao Village.

5.3.2.4 Drawings

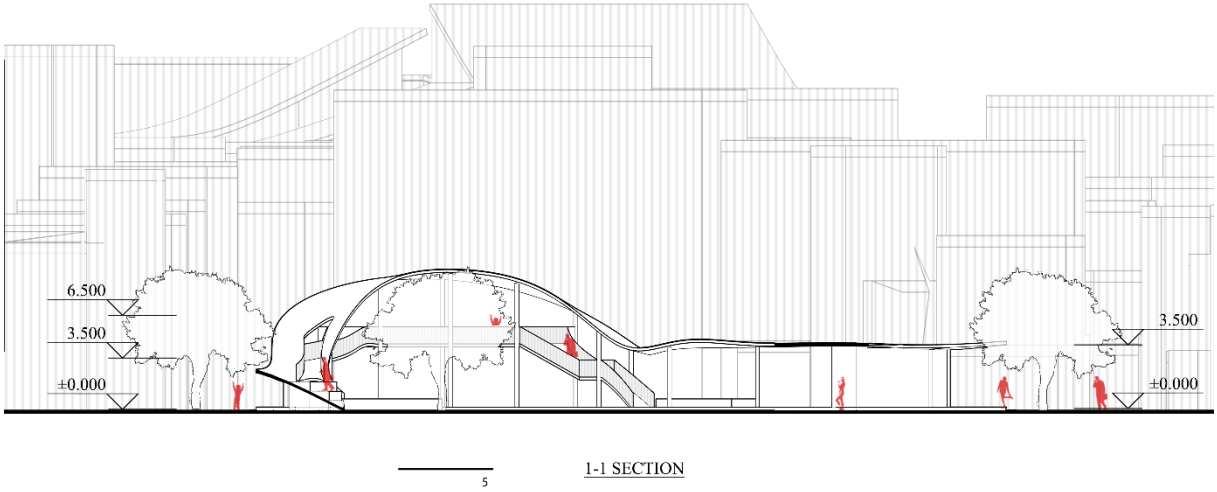

fig. 5-55 1-1 section (Source: By author)

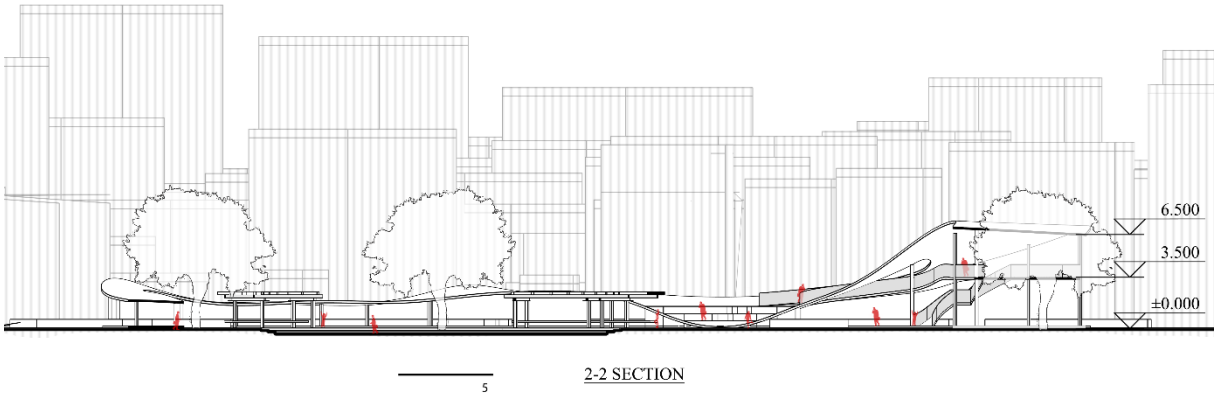

fig. 5-56 2-2 section (Source: By author)

5.3.2.5 Analysis

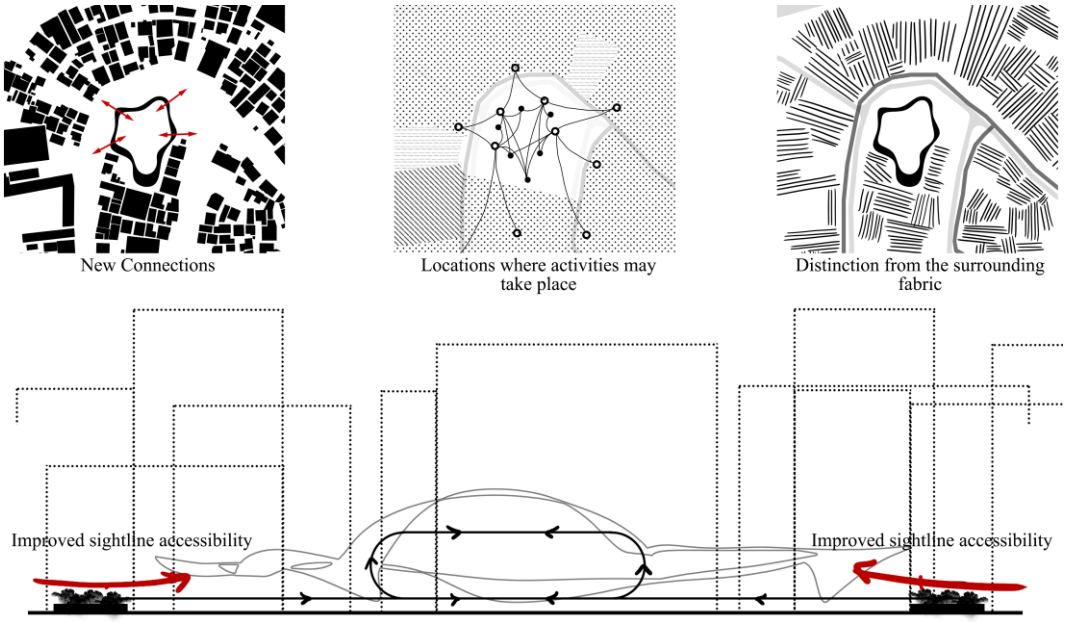

Fig. 5-57 Diagrams of Lijiao Park (Source: By author)

The roof is a flowing curved surface, and the natural slope of the roof partially forms a spectator platform towards the centre of the site, which on the one hand, further enhances the centripetal nature of the site and promotes central activity, and on the other hand, the space under the roof cover is an important place to stimulate people's interaction. (Fig. 5-57)

Through the regeneration, the connection between Lijiao Park and the ancestral hall has been strengthened, with the ability to stimulate activities and events at the intersection of the park entrance streams. (Fig. 5-58)

Fig. 5-58 Park entrance collage (Source: By author)

5.3.2.6 Rendering

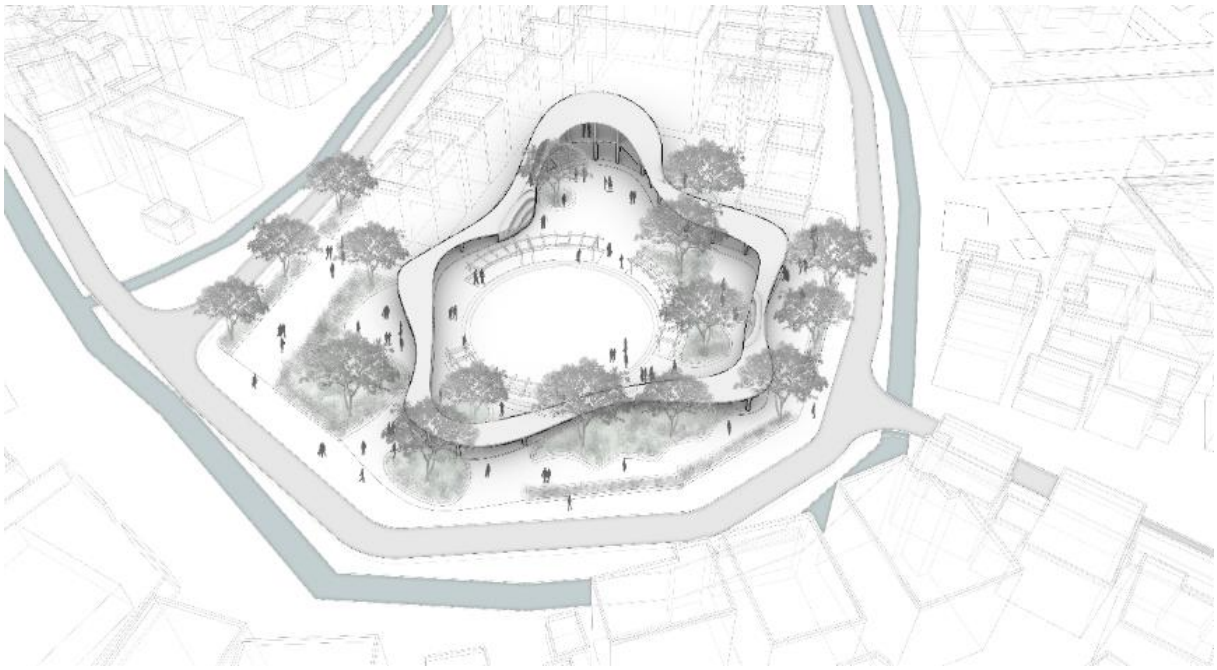

Fig. 5-59 Rendering of Lijiao Park (Source: By author)

Fig. 5-60 Aerial perspective view of Lijiao Park (Source: By author)

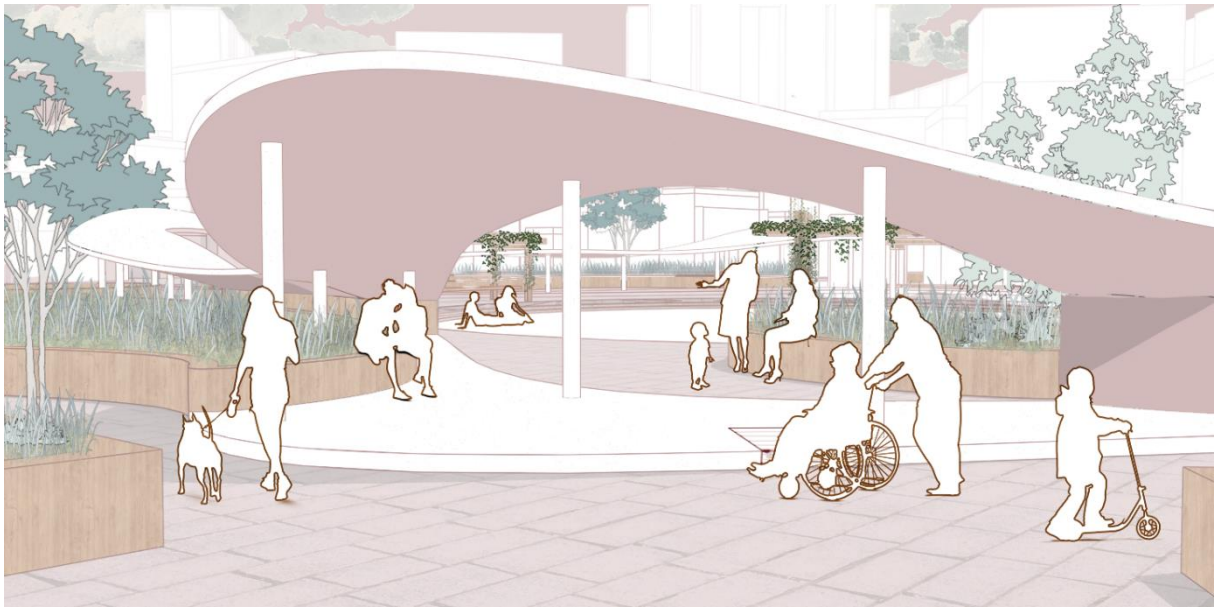

Fig. 5-61 Illustration of the Entrance (Source: By author)

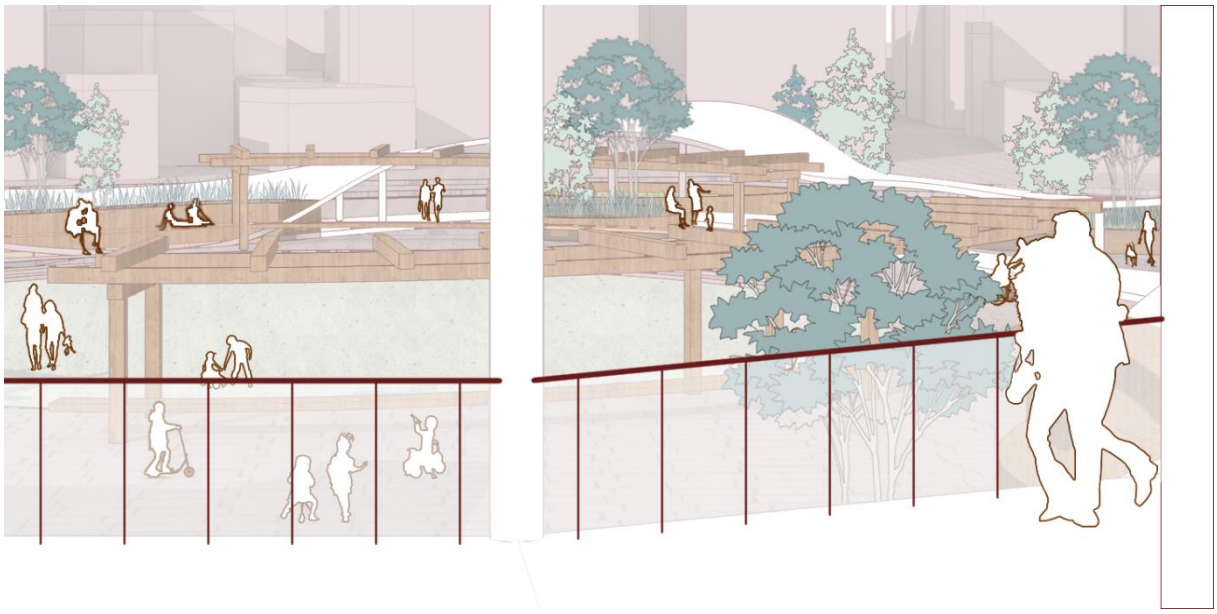

Fig. 5-62 Illustration of the Entertainment Room on the Second Floor (Source: By author)

5.3.3 Lijiao Cultural Centre

5.3.3.1 Site Analysis

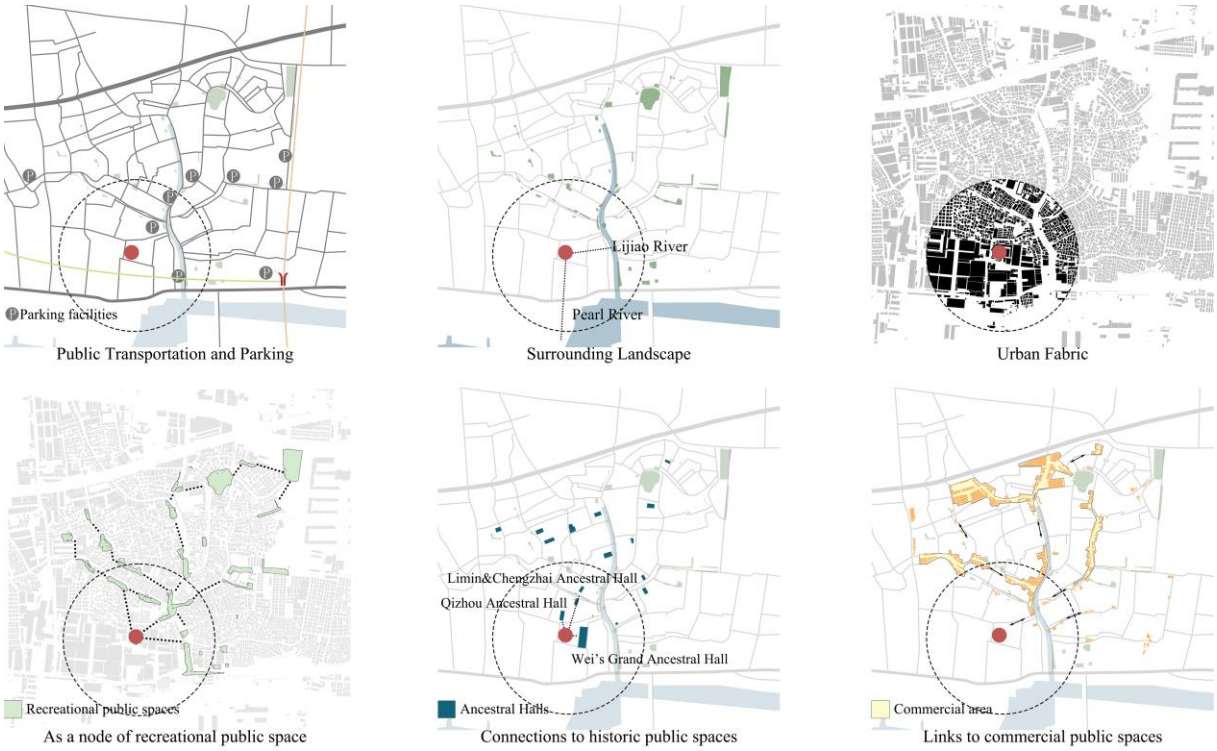

Fig. 5-63 Site Analysis (Source: By author)

The Lijiao Cultural Centre is located next to the largest surviving ancestral hall of the Wei clan in Lijiao Village, facing the Pearl River and close to Lijiao metro station, which is the more important gateway to Lijiao Village.

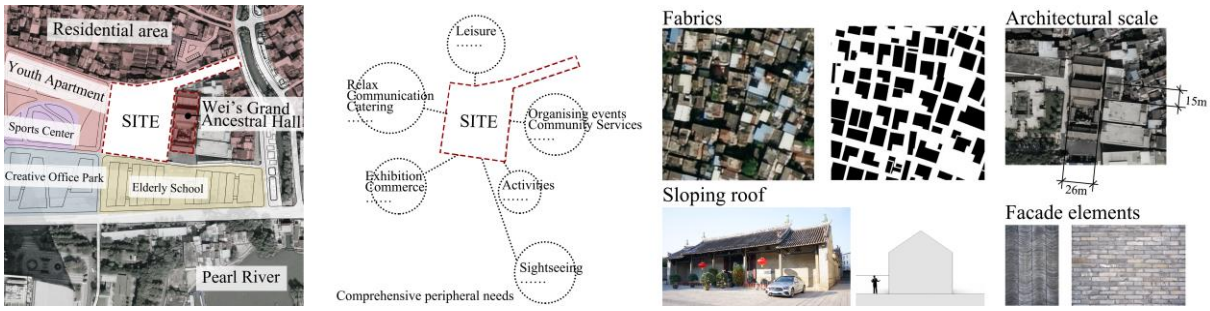

Fig. 5-64 Integration of site elements (Source: By author)

The site is bordered by the youth community area of the urban design scheme to the west, the preserved village of Lijiao to the north, a creative office park and elderly school buildings to the south, and Lijiao River a short distance away to the east, providing a rich landscape resource. (Fig. 5-64)

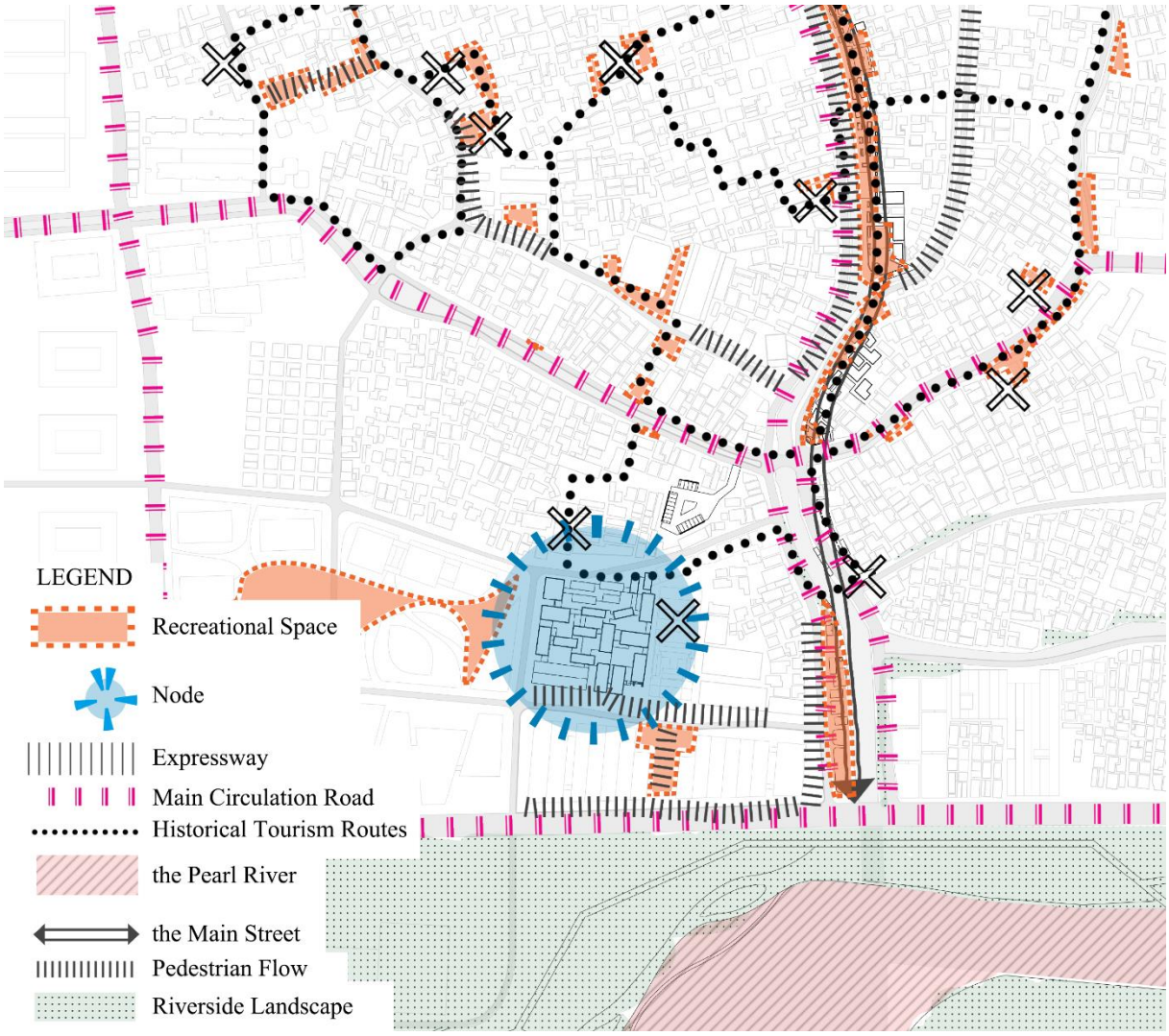

Fig. 5-65 Site Analysis (Source: By author)

5.3.3.2 Design Process

All these different functional areas around the site give the Lijiao Cultural Centre the need for a rich and varied event space. Thus, the cultural centre is intended for a diverse range of people and will host a complex range of activities: flea markets and creative fairs for young people; temporary exhibitions and creative merchandise sales for tourists and artists; extensions of traditional activities such as the "Lantern Festival" and "Dragon Boat Festival" for the Wei's of Lijiao Village, as well as casual dining, reading books and learning history of Lijiao Village for the mass, all require a public space with a high level of quantity, quality and flexibility.

The massing and scale of the entire Lijiao Cultural Centre will respond to the site's surroundings and the fabric of Lijiao Village. By scattering the building entities on a near-rectangular site in accordance with the street pattern of Lijiao Village, a touring experience with

a sense of the spatial scale of a traditional water village street is created. The first floor of Lijiao Cultural Centre will therefore be a public space that allows for maximum openness, where spaces of different scales can be freely combined and separated and where the spatial boundaries within site are sufficiently blurred and fluidly connected to the urban site to attract people and accommodate a wide range of urban activities.

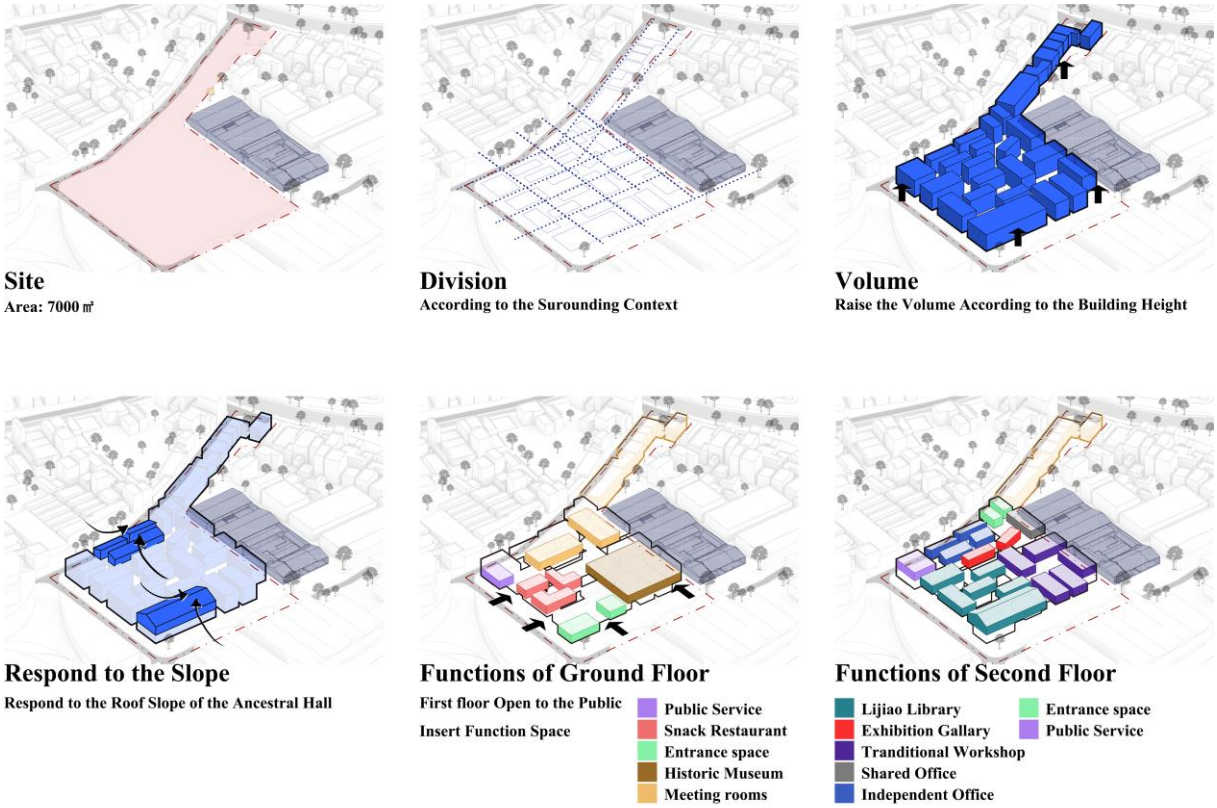

Fig. 5-66 the Process of Scheme Generation (Source: By author)

5.3.3.3 Masterplan

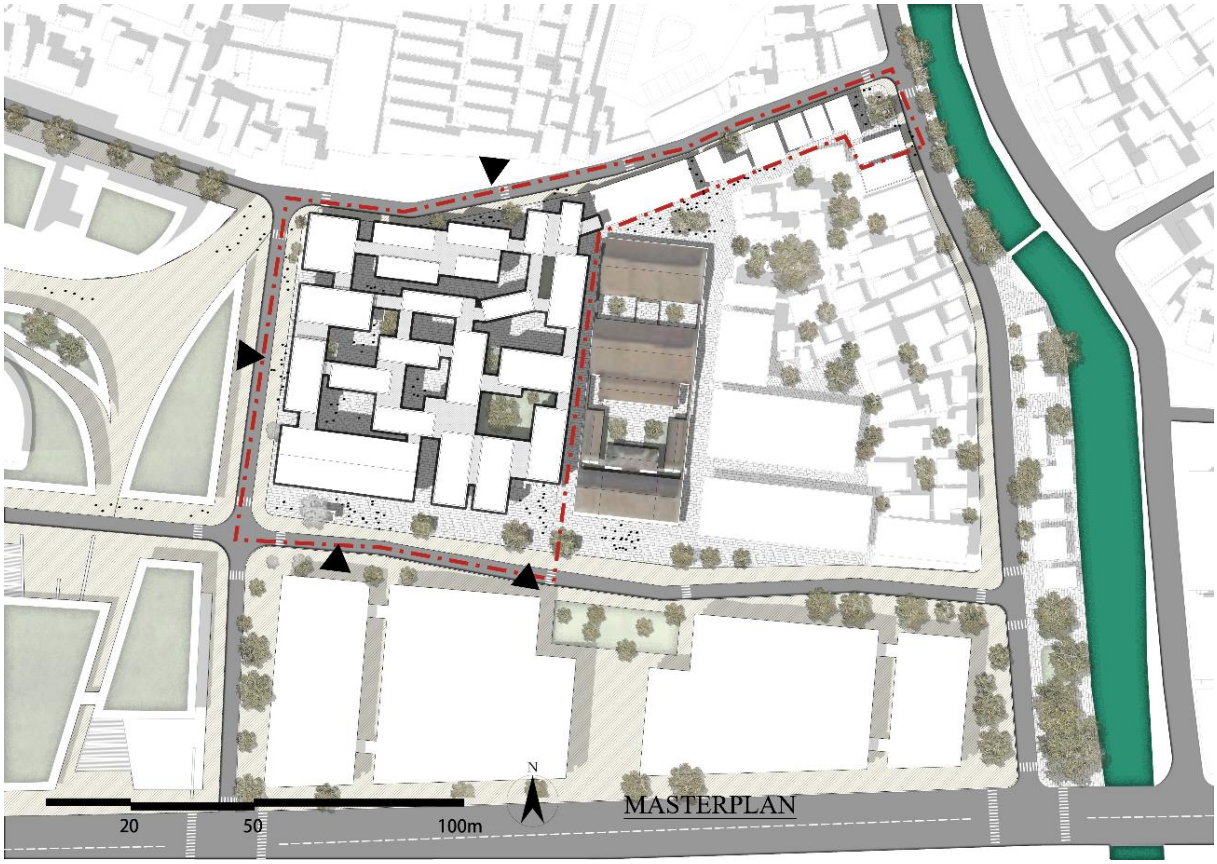

Fig. 5-67 Masterplan of Lijiao Cultural Centre (Source: By author)

The Lijiao Cultural Centre is adjacent to the youth flats to the west, the business offices to the south, the Wei Ancestral Hall to the east and Lijiao Village to the back, serving a diverse range of people and carrying a wealth of activities. The first floor is, therefore, a large area of elevated space that can be used flexibly, with only service facilities such as office entrances and toilets, as well as functional spaces such as multi-functional halls, cultural pavilions, simple food and drink, etc. The outdoor dining area, youth square activity space and temporary exhibition galleries are naturally isolated at ground level, allowing for a variety of activities to be carried out according to the different groups of people.

The overall layout of the Lijiao Cultural Centre is integrated into the urban environment through the scale and texture of the site's surroundings, and the blocks are linked by corridors to form a free-flowing coherent space within a certain area.

The entrance to the cultural pavilion on the first floor is combined with the plaza in front of the Wei's Grand Clan Ancestral Hall to form the cultural centre plaza, which is used as a

space for public events such as the Lantern Festival and Dragon Boat Festival. The entrance staircase of the library on the west side is also a large staircase for the public to rest, opposite the exhibition space, and the people flow through the intersection of spaces to reach the courtyard and the café and restaurant. The courtyard is covered by four consecutive exhibition halls on the first floor to form a temporary space under the corridor, which can be used as a snack street for festivals, a temporary exhibition and sales space for creative workshops, a flea market for youth flats and a photography exhibition for villagers.

The library on the first floor has space for historical research offices, book reading, study room and discussion to meet the spiritual and cultural needs of Lijiao Village and the surrounding community; office space is distributed above the multi-functional hall and meeting rooms on the north side of the site and is easily accessible to all functional areas on the first floor for easy management. The shared office space on the second floor is connected to the eastern creative and cultural experience block through the corridor and provides easy access to the exhibition gallery for product exhibitions and events.

5.3.3.4 Drawings

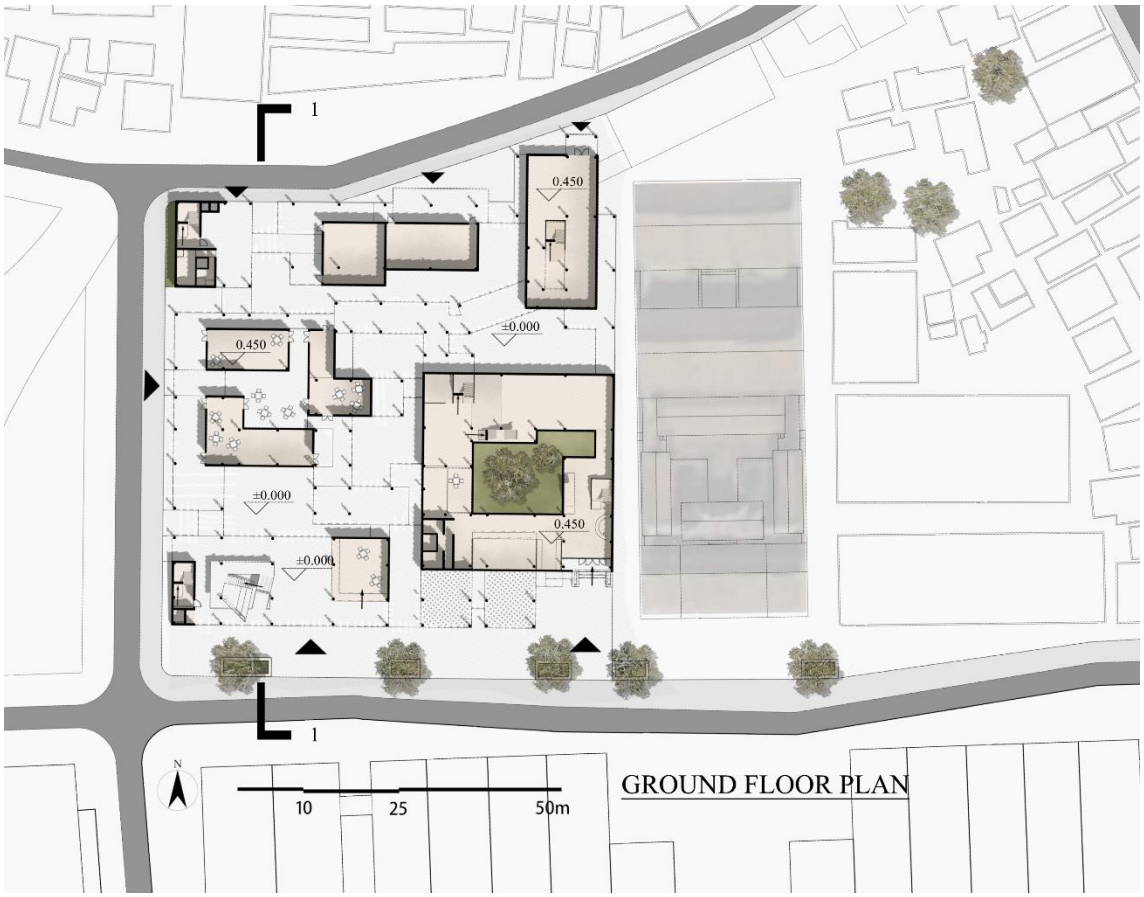

Fig. 5-68 Ground plan of Lijiao Cultural Centre (Source: By author)

fig. 5-69 Second Floor (Source: By author)

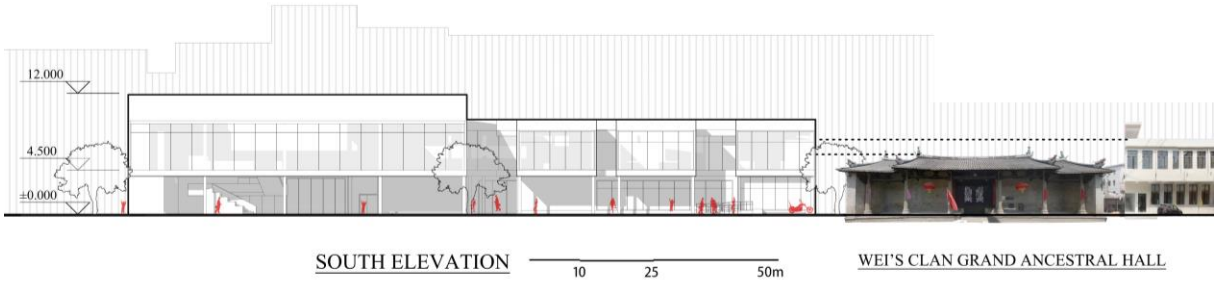

fig. 5-70 South Elevation (Source: By author)

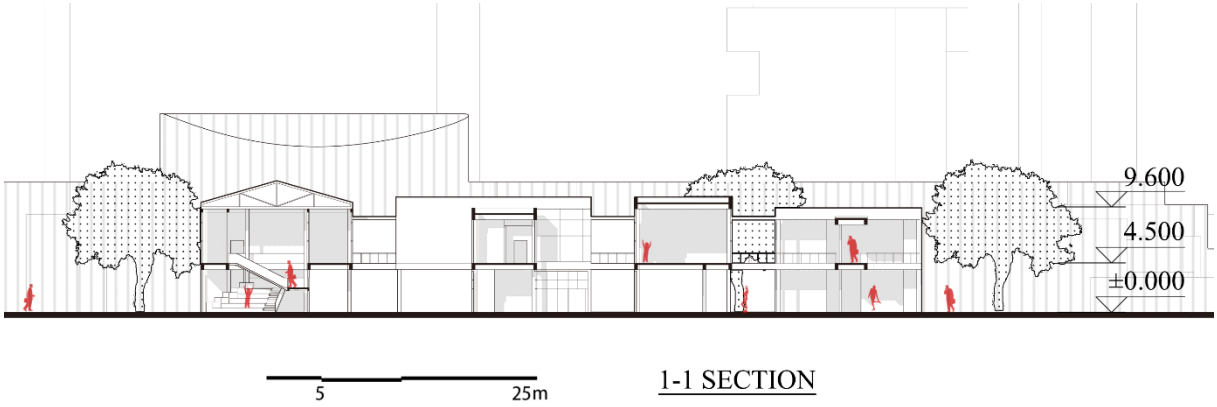

fig. 5-71 1-1 Section (Source: By author)

5.3.3.5 Analysis

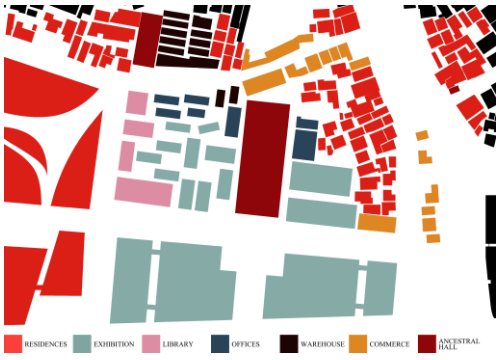

Fig. 5-72 Diagram of the functional distribution

(Source: By author)

Fig. 5-73 The flow of the Lijiao Cultural Centre

(Source: By author)

The complex functions surrounding the Lijiao Cultural Centre, with residential, commercial, exhibition and sales, creative office parks for the cultural and creative industries,

warehousing and service management, make the first floor of the site as open as possible, both as a temporary event space for a variety of urban public activities and as a passage space to attract people through and stimulate interaction between different classes of people, promoting the generation of urban activities.

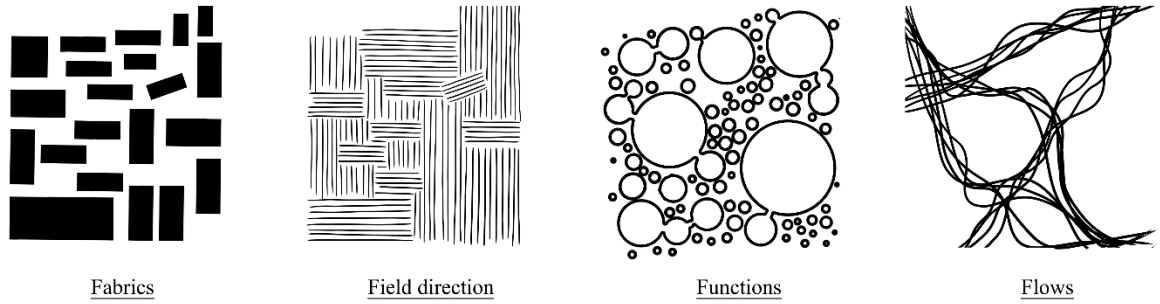

Fig. 5-74 Diagrams of Lijiao Cultural Centre (Source: By author)

Fig. 5-75 Volumns distribution (Source: By author)

5.3.3.6 Rendering

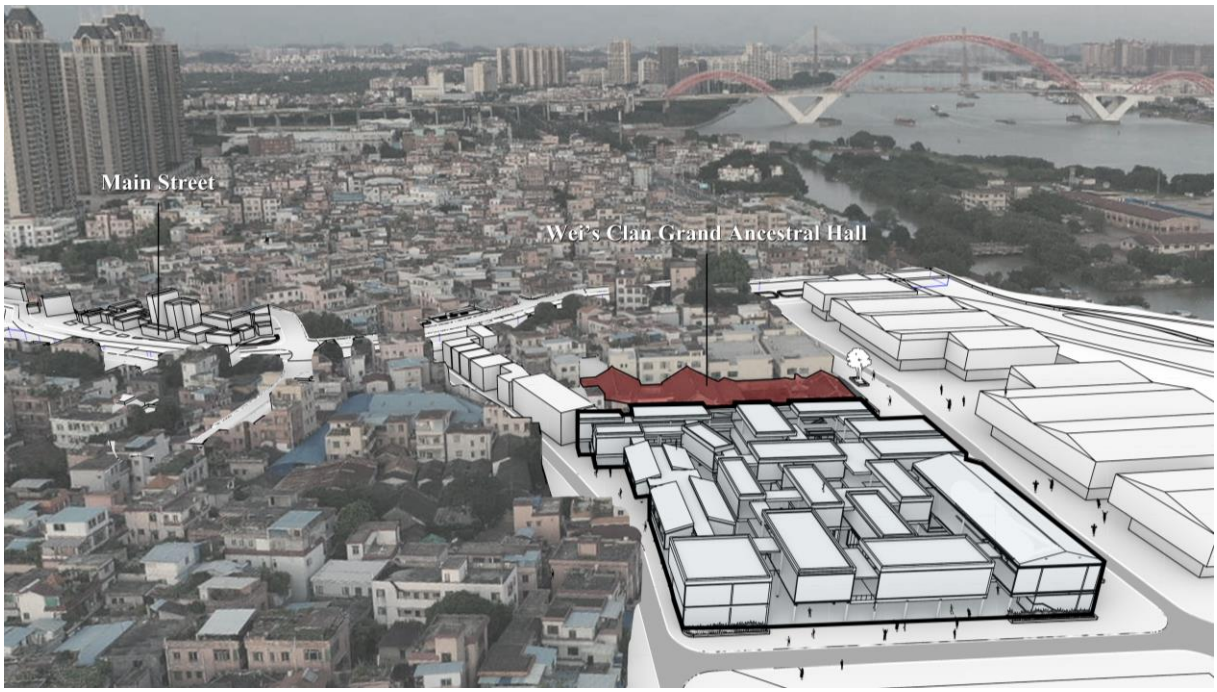

Fig. 5-76 Volume comparison diagram of Lijiao Cultural Centre (Source: By author)

Fig. 5-77 Illustration of the Main Entrance (Source: By author)

Fig. 5-78 Illustration of the Entrance (Source: By author)

Fig. 5-79 Illustration of the Entrance (Source: By author)

5.3.4 West Street Wet Market

5.3.4.1 Site Analysis

Fig. 5-80 Site Analysis (Source: By author)

The West Street Market is in the northern part of Lijiao Village, connected to Houjiao Village outside the site, and serves as a market for villagers in the vicinity to sell their produce and purchase vegetables, fruit and meat. The factory-like sloping roof forms a large spatial form that differs from the traditional village fabric of Lijiao Village, underneath which covers stalls that are closely arranged in similar units internally, stitched together and extended within the trapezoidal site. (Fig. 5-82)

Fig. 5-81 Internal and external split streamlines of West street wet market (Source: By author)

From the current use of the West Street Wet Market, it is clear that vendors and shopkeepers tend to occupy the street space to sell their goods, resulting in mixed pedestrian

and vehicular traffic and narrow passage space, creating both a safety hazard and a chaotic environmental situation. From the perspective of field theory, the internal flow of the farmers' market building and the flow along the street are relatively independent, and the narrow entrance to the building exacerbates the fragmentation of the internal and external flow, which will be addressed and optimised as a significant issue in the subsequent scheme.(Fig. 5-81)

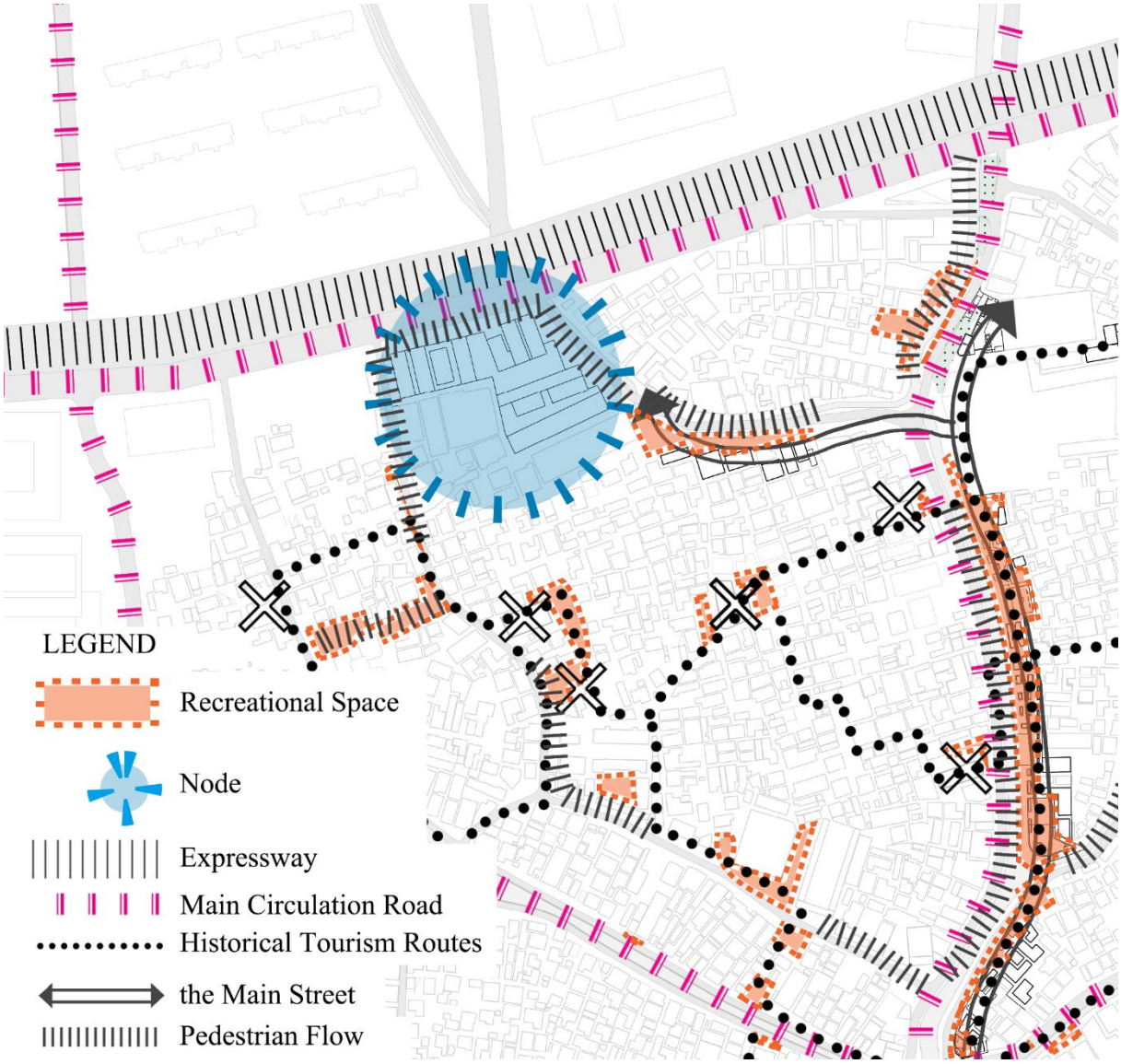

Fig. 5-82 Site Analysis (Source: By author)

5.3.4.2 Design process

The commercial hall to the south of the former vegetable market on the site has been transformed together with the market to form a two-storey structure of shopping shops on the ground floor and recreational activities and offices on the upper floor, with the first floor divided between fruit and vegetable and fresh meat sales to ensure a clean and hygienic space, and a

service volume with vertical traffic in the centre to coordinate the different zones.

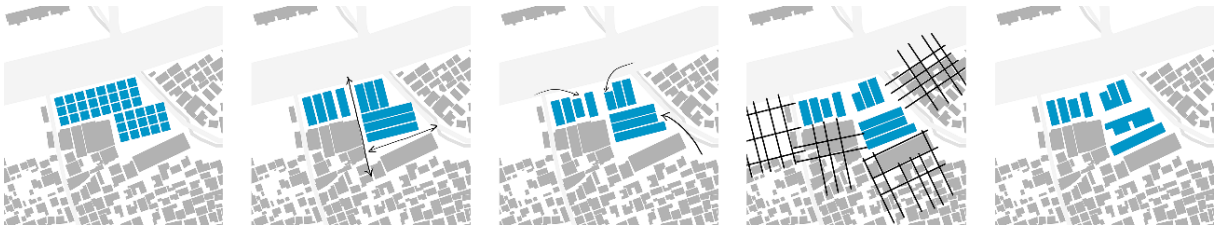

Fig. 5-83 The generation process of West Street Wet Market (Source: By author)

5.3.4.3 Masterplan

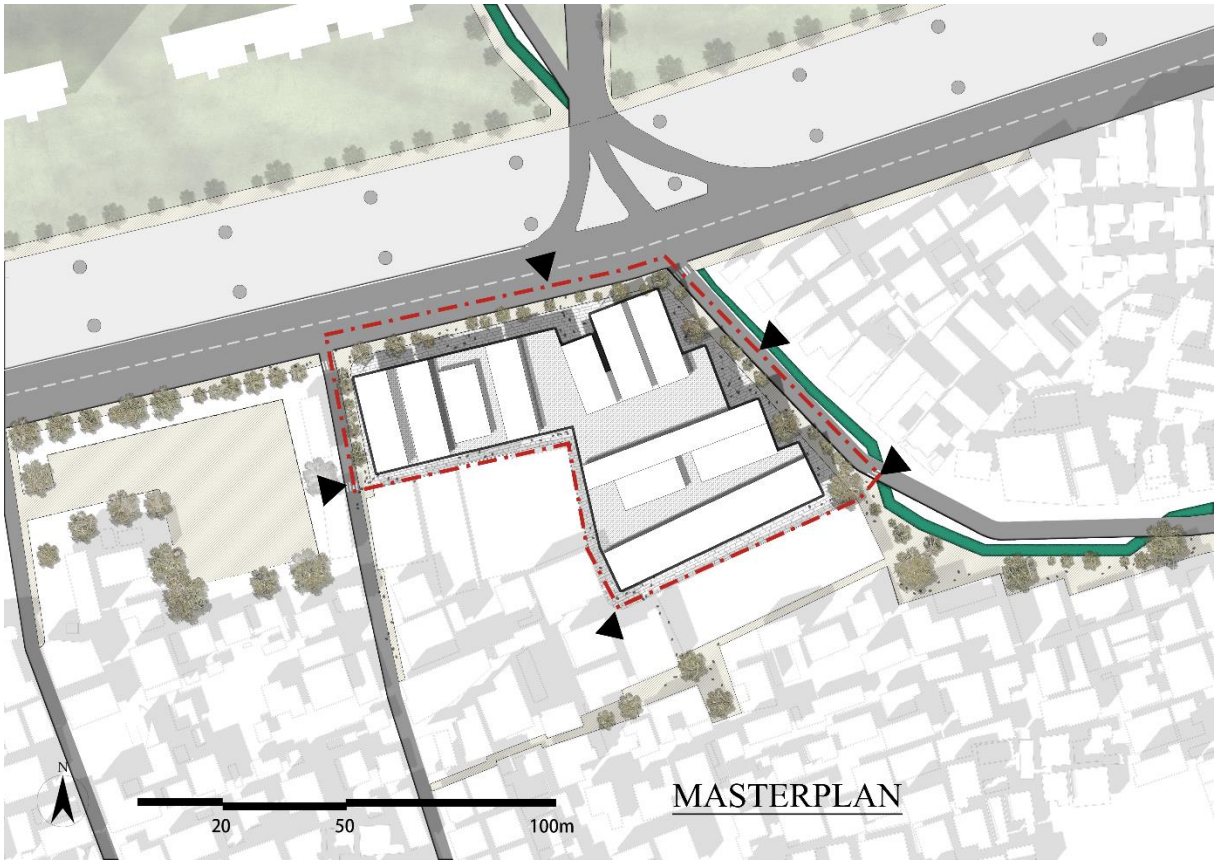

Fig. 5-84 Masterplan of West Street Wet Market (Source: By author)

5.3.4.4 Drawings

Fig. 5-85 Ground Plan (Source: By author)

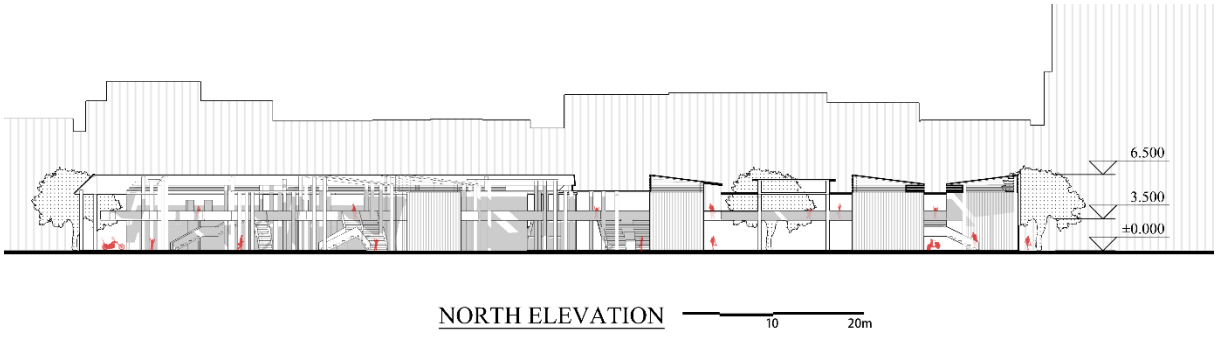

Fig. 5-86 North Elevation (Source: By author)

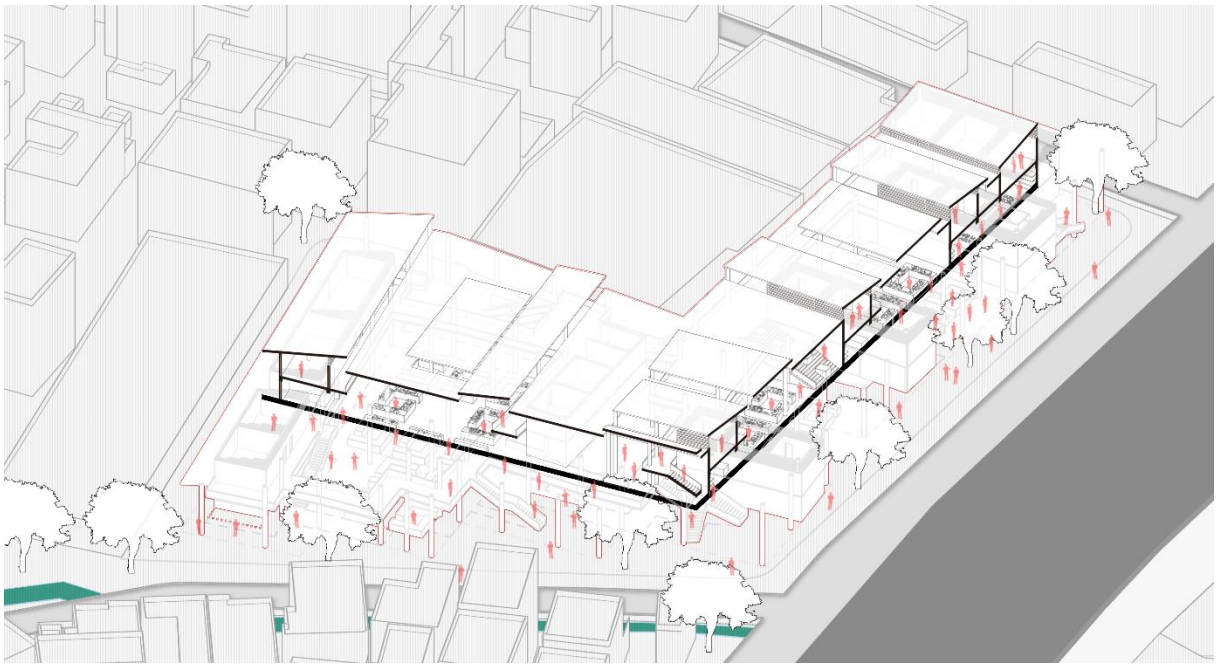

Fig. 5-87 axonometry section (Source: By author)

5.3.4.5 Analysis

The first floor of the West Street Wet Market is open and continuous, allowing residents to move freely between the shops and stalls, creating a pedestrian experience of the streets in the city, while the first floor is connected to the functional blocks by a corridor, creating a functional area superimposed on the ground floor market, with lines of sight crossing through the high spaces, creating an interesting spatial experience.

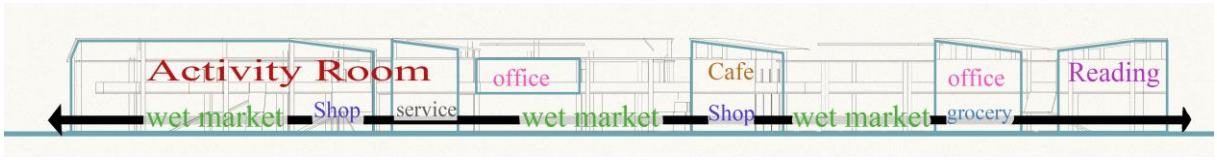

Fig. 5-88 Diagrams of West Street Wet Market (Source: By author)

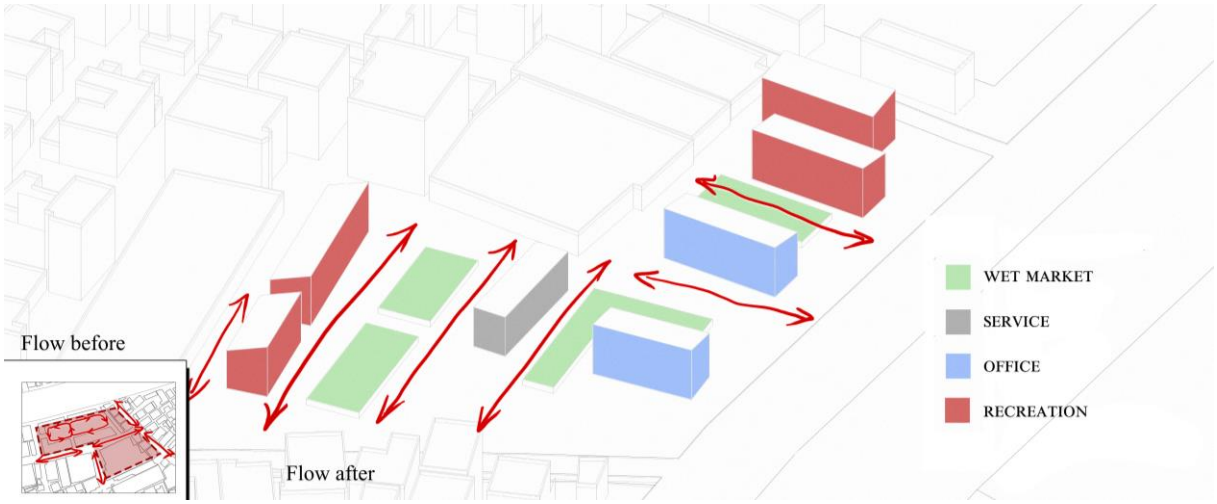

Fig. 5-89 Diagram of the functional distribution of the West Street Wet Market (Source: By author)

The recreation volumes are located at the edges of the site to facilitate connections to the urban public space and reduce disruption to the vegetable market space, and the office space is conveniently located along the new road to the north of Lijiao Village. The service and management blocks at the central node of the site separated the fresh produce and dried fruit areas to the north and south, maintaining the sanitary conditions of the site. The internal space of the building is integrated into the external street through the functional division of the market. (Fig. 5-89)

5.3.4.6 Rendering

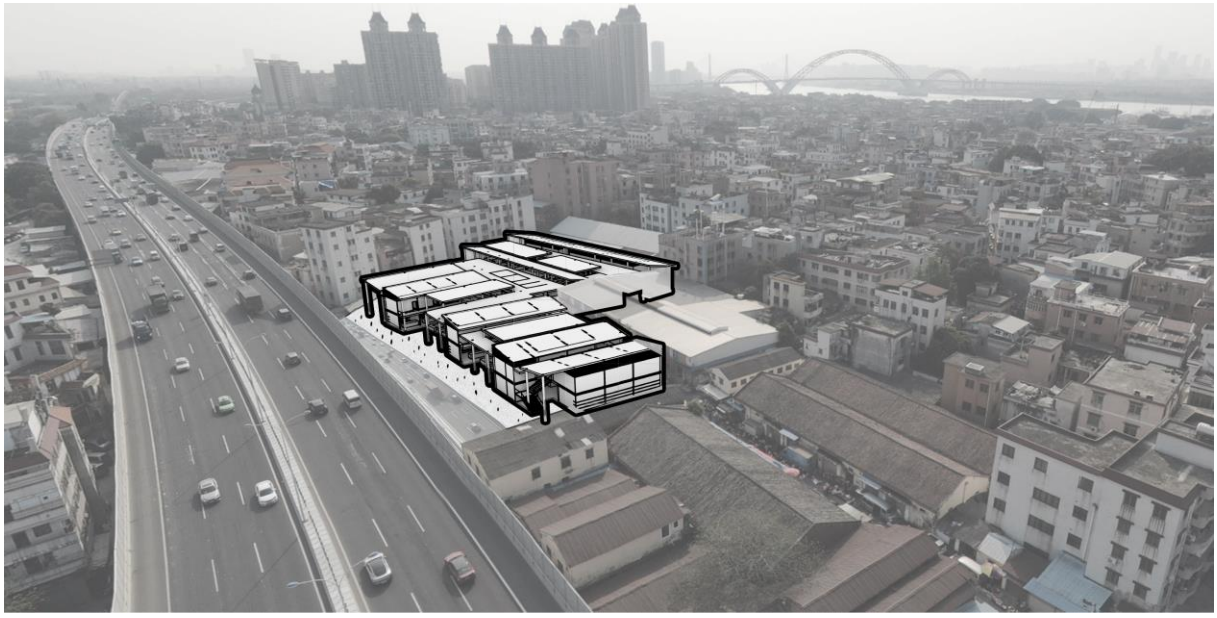

Fig. 5-90 Aerial perspective view of West Street Wet Market (Source: By author)

Fig. 5-91 Rendering of West Street Wet Market (Source: By author)

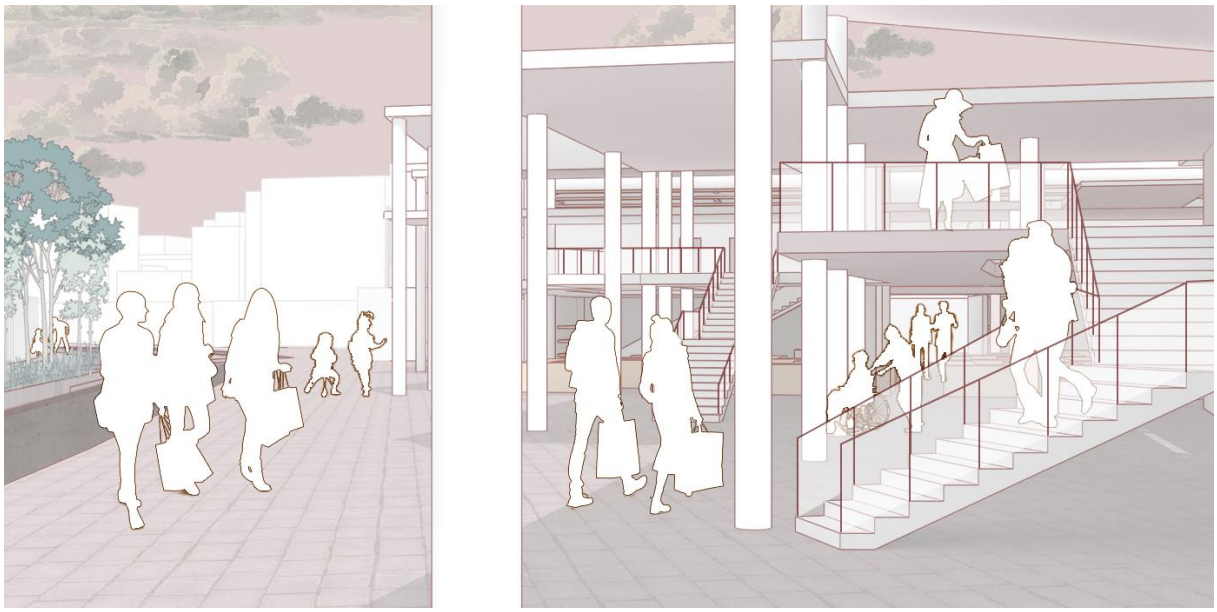

Fig. 5-92 Illustration of the Main Entrance (Source: By author)

Fig. 5-93 Illustration of the boundary with the street (Source: By author)

Conclusion

Through the study and research of Stan Allen's field condition and case studies, the important value and development potential of field condition can be found. Field condition blurs the boundaries between urban, landscape and architectural design, and seeks to integrate the structural systems of these three in a unified perspective, thus enabling the goal of 'general design' to be realized and urban space to become a coherent organic whole.

The introduction of landform buildings is also intended to better regulate the relationship between architecture and the natural environment and to better integrate into the city and the natural environment. This thesis attempts to develop the scope of the application of field condition and to reverse the many ideas and requirements of field condition for architectural design to build an urban public space that can be integrated into the existing urban site and architectural space through the renewal of public space in urban design, completing the direct operation and construction of the "field" according to field condition. This is in line with the direction advocated by field condition in relation to urban space, as in the case of Stan Allen's view of the city as a superposition and coupling of different 'fields' to form unexpected forms.

The construction of urban spaces that are coherent and support the occurrence of various activities. In the architecture schemes of Stan Allen, and of others, it is about capturing and directing the various flows of people, materials, and information in the city by condensing the urban effect, and making the building a platform for regulating the flows, so that the building becomes a medium of horizontal communication, just like the urban space, free from the constraints of vertical 'walls', and able to break away from the constraints of inside and outside. By doing so, it also allows the building to form a continuous flowing site with urban space and topography through the continuous expansion of the large open roof, accommodating public activities.

At the same time, there is evidence of the application of field condition to urban design in the context of an understanding of the city of Guangzhou. Guangzhou used the occasion of the Sixth Nation Games in 1987 to expand eastwards, building the core area of the new city of Tianhe and creating the modern urban area of Zhujiang New Town based on the development and construction of the Tianhe Sports Centre and the surrounding area. 2001 saw the

construction of the new Olympic Sports Centre at the time of the Ninth Nation Games and the further evening multi-center clustered urban structure at the time of the Asian Games in 2010. Today Guangzhou consists of several local areas with different event themes, with no geometrical relationship between the localities, but rather the intertwining and overlapping of local boundaries and their integration through new urban spaces as time progresses. In this process of development, a 'part-to-whole' relationship between local monoliths and the general expansion of Corbusier's Venice Hospital scheme forms the overall layout of the city of Guangzhou. The local relationships, through the connection of public facilities between adjacent clusters, creates a stable connection between the localities, while the space outside the localities is expanded and renewed under the influence of certain local clusters, forming a diverse and inclusive urban spatial structure of Guangzhou.

Through its grasp of the various flows of people, materials and information in the city, its theoretical perspectives have a natural tendency to unify architectural design, landscape design and urban planning. Although it cannot practically guide and produce architectural forms nor directly generate architectural strategies and practices, field condition is more valuable in the construction and renewal of complex and changing post-urban cities, and the study and exploration of field condition are more conducive to the enrichment of urban life and the expression of regional cultural activities.

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