



The influence of micro renovation on human well-being

— Case studies of Guangzhou, China

Master Thesis

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CONTENT

Chapter 1 Introduction	6
Chapter 2 Theoretical background	8
2.1 Urban renewal	8
2.2 Urban acupuncture and micro renovation	8
2.3 Well-being	11
2.4 Maslow's hierarchy of needs and micro renovation	12
Chapter 3 Contextual chapter	15
3.1 Chapter introduction	15
3.2 China's context	15
Phase I : 1949-1977	15
Phase II: 1978-1989	16
Phase III: 1990-2011	16
Phase IV: 2012 - now	17
3.3 Guangzhou's context	18
Phase I: Modernisation and Transformation of the city (1918-1949)	18
Phase II: Productive Urban Transformation (1949-1978)	19
Phase III: Modernization Transition Overlay (1978-2008)	19
Phase IV: Three Old Transformation (2008-2015)	20
Phase V: Micro renovation (2016-now)	21
Chapter 4 Case studies	23
4.1 Chapter introduction	23
4.2 Yongqingfang	23
4.2.1 Cultural values	24
4.2.2 Social values	25
4.2.3 Micro renovation of Yongqingfang	26
4.3 Shawan Ancient Town	30
4.3.1 Cultural values	30
4.3.2 Social values	32
4.3.3 Micro renovation in Shawan Ancient Town	32
Chapter 5 Research Methodology	36

5.1 Chapter introduction				
5.2 Research methodology	36			
5.2.1 Semi-structured in-depth interview	36			
5.2.2 Multiple case studies	36			
5.3 Data collection strategy	37			
5.4 Data analysis strategy	37			
Chapter 6 Results and Analysis	39			
6.1 Chapter introduction	39			
6.2 Results and analysis	39			
6.2.1 Physical infrastructure	39			
6.2.2 Buildings	42			
6.2.3 Clean and green	44			
6.2.4 Public open spaces	45			
6.2.5 The downsides of micro renovation	48			
Chapter 7 Conclusion and Discussion	51			
7.1 Chapter introduction	51			
7.2 Conclusion and discussion	51			
7.3 Limitation and Recommendation	54			
Reference	56			
Appendix	72			
Appendix A. Interview guide (based on Hay, 2016)	72			
Appendix B. Pseudonyms of respondents				

Key words: urban renewal, urban acupuncture, micro renovation, well-being, Maslow's hierarchy of needs

Abstract: This research aims to explore the impact of micro renovation (the latest urban renewal approach in China) on residents' well-being. Through the case studies of Yongqingfang and Shawan Ancient Town in Guangzhou, China, this study found that micro renovation can affect residents' well-being from four aspects, respectively physical infrastructure, buildings, public open spaces, and clean and green (spaces). Using Maslow's hierarchy of needs, this thesis concludes that micro renovation of physical infrastructure can improve residents' well-being through meeting their basic needs, while the public open spaces are closely related to residents' higher-level pursuits.

Chapter 1 Introduction

Due to the development of urbanization and limited land resources, urban renewal has become a hot topic. From the second half of the twentieth century, in order to adapt to the rapid development of cities, demolition became the efficient way of urban renewal, which makes space for high-rise buildings that can accommodate the increasing urban population. But this approach led to many urban issues and was criticized by scholars. Jane Jacobs, for example, visited various neighborhoods in the United States of America and criticized that the wholesale, monolithic demolition and redevelopment eradicated the vitality of the city. Long and boring streets, neighborhoods without primary functions, loss of diversity, and repetitive, monotonous housing types have robbed areas of their characters (Jacobs, 1961). In addition, the demolition of streets and buildings is nowadays considered to destroy the social and interpersonal structure, especially for cities with long histories. And this blind demolition would affect the historical heritage and culture of the whole area.

But the renewal of old city regions is necessary since areas' designs no longer function adequately in contemporary society. It is not only to accommodate the rapid increase in urban population and urbanization, but also to deal with the safety problems, to improve the quality of places and citizens' living standards as well. However, how to renovate and re-energize old cities and city regions, how to preserve the buildings with cultural value, and how to improve the living conditions of the inhabitants are the problems facing the transformation of old city regions.

In recent years, people-oriented approaches to urban renewal have been advocated. The focus of urban renewal has gradually shifted from large-scale demolition to small-scale renovation, with residents' rights and interests receiving more attention. For example, the revitalization of neighborhoods from the late twentieth century in European countries. This is consistent with the people-oriented requirement for urban renewal. Influenced by the experience in western countries, the urban renewal approach in China has gradually developed and become more people-oriented. The latest micro renovation approach proposed by Guangzhou Urban Renewal Bureau in 2016 reflects the focus on people-oriented to urban renewal, which addresses the needs of people's daily lives through the renovation of houses, the maintenance of infrastructure, and the revitalization of

neighborhoods. The concept of micro renovation is based on the urban acupuncture theory (He et al., 2017; Yin & Zhang, 2018; Deng & Wu, 2020; Chen, 2018); it is an acupuncture intervention aiming at improving the living standard and revitalizing neighborhoods through minor renovations. Micro renovation was initially started from the historical districts and aimed at preserving historical architectures, while nowadays it has developed to an urban renewal approach that can also be applied to old neighborhoods. Due to the lack of land resources, limited funding and residents' unwillingness to move out, micro renovation became the desired approach that can maintain the social structure and reduce relocation costs. After the promotion of this approach in Guangzhou, media and newspapers reported that this approach can make a real difference to residents' lives, such as improving their living environment and increasing their well-being (Jia, 2020; Xu, 2020; Zheng, 2021; PPCPC, 2021). However, whether micro renovation impacts residents' daily lives, in what ways it works for residents, and which aspects of micro renovation influence them most is still subject to further research.

This study focuses on the impact of micro renovation on citizens and aims to explore whether and in what ways this approach can influence residents' well-being. The research question is therefore

How does micro-renovation affect residents' well-being?

Using Maslow's hierarchy of needs, this thesis is going to explore the influence of micro renovation on residents' well-being, with the sub-questions as following:

- Has micro renovation increased the standard of living, quality of life and well-being for local residents, and what effects do they have on peripheral communities?
- Which aspect of micro renovation is considered as the most important from resident's perspective
- What is the downside of micro renovation?

The thesis is divided into six chapters. In chapter 2, this thesis introduces the relevant concepts and theories; chapter 3 is the contextual chapter, which provides a review of the development of urban renewal, mainly focus on the theoretical and practical development of urban renewal in China's context; chapter 4 is the research methodology; chapter 5 is about the case studies; and chapter 6 is data results and analysis, following by chapter 7, conclusion and discussion.

Chapter 2 Theoretical background

2.1 Urban renewal

Urban renewal in Western countries originated from large-scale urban renewal projects, which were characterized by replacing current neighborhoods with new commercial districts, residential areas, and highways (Chen, 2019). With the core goal of making decaying areas attractive again, urban renewal can also be understood as a process by which governments or communities seek to attract investment, employment, consumption, and improved quality of life in urban areas (Liu et al., 2015). However, this kind of technical rationality of urban renewal has been heavily criticized (Jacobs, 1961; Mumford, 1961). For example, Lewis Mumford pointed out the drawbacks of large-scale urban renewal in his book *The City in History*, arguing that blind demolition destroys the organic function of the city and that urban planning should be based on a people-oriented approach to urban renewal (Mumford, 1961).

With the influence of the *cultural turn* in the 1980s and the humanistic rethinking of space, cultural geographers and spatial planners began to focus more on human beings themselves and their culture in interaction with their surroundings, which contribute to the sustainable development of the place (Chen, 2019).

City is not a vacuum, but includes material environment and its socio-spatial context (Wu,2017; Horlings, 2019, pp.36-40). Because of this, cities are adaptive to external factors such as natural, social, political, and economic environments (Wu, 2017). Therefore, perceiving urban renewal from a multifaceted perspective rather than only focusing on a single spatial design perspective is necessary and important. (Tan et al., 2018).

2.2 Urban acupuncture and micro renovation

"Yet no matter how good it may be, a plan by itself cannot bring about immediate transformation. Almost always, it is a spark that sets off a current that begins to spread." (Lerner, 2014: p. 2-3).

This statement well explained the core of urban acupuncture. With the acupuncture point as the spark and spread the influence of this starting point to the surrounding areas.

Urban acupuncture can be seen as a strategy, which refers to the interventions at crucial points provoking comprehensive reactions that improve the whole organism (Shieh, 2006). It applies the concept of acupuncture in traditional Chinese medical science (Lerner, 2014; Xiao, 2016; Chen, 2018). In Chinese medicine, acupuncture is related to the *acupuncture points*, which are usually considered as important points of the human body. Human diseases can be reflected to the acupuncture points through meridians (paths through which the life-energy known as "qi" flows), and acupuncture can regulate the body function by stimulating the acupuncture points (Xiao, 2016) (figure 1a). The theory of urban acupuncture reflects the main point of acupuncture - to use the smallest action in key areas to trigger the city's conditioning and obtain more benefits (Lerner, 2014; He et al, 2017; Deng, 2020).



Figure 1a, 1b and 1c. Body meridians (left) (Ruediger Anatomie, 2020) and Urban acupuncture (right) (after Ou, 2018)

When acupuncture is reflected at the spatial level, the traffic/transport network can be considered as the meridians of a city, while the acupuncture points are usually public spaces. They can be an abandoned factory, a bus station, or a decaying plaza. This kind of point-based transformation extends the impact of renovation from a point to the surrounding meridians and ultimately stimulates the place's vitality.

Xiao (2016) explains urban acupuncture further. He categorized urban acupuncture into three aspects, namely public open spaces, traffic systems, and buildings.

A typical example of urban acupuncture in public open spaces is the Jardins del Príncep de Girona in Barcelona. This garden is located in a high-density, low-income residential area, which was originally a military base and became a temporary parking space for years. In 1995, architect Jordi Farrando proposed to change this abandoned area into a public park, in this way to revitalize the area (Xiao, 2016).

The urban acupuncture of the traffic system unblocks the meridians of the city and creates a cross-regional renewal, which is an approach that can influence the surrounding areas by public transport network (Xiao, 2016). The case of the construction of Bus Rapid Transit (BRT) in Curitiba, Brazil illustrated it well (Green, 2014) (figure 2b). Jaime Lerner, the mayor of Curitiba at that time, started to build an efficient public transportation system in the 1970s, giving bus priority and encouraging citizens to use public transport. The cores of BRT are straight lines, strong connectivity and high-speed. This measure unblocked the "meridian" (i.e., road and traffic system) and thus increasing efficiency.

The urban acupuncture of buildings can be shown by the Centre Pompidou in Paris (Tontisirin & Anantsuksomsri, 2016), which was originally a ghetto and was abandoned until the Pompidou project was launched. The new architecture in the old town was once criticized, but this new high-tech and anti-traditional style has certainly brought fresh ideas to the area (Xiao, 2016). The Pompidou Square in front of the Pompidou Centre has become a cultural gathering place.







Figure 2a, 2b and 2c. Jardins del Príncep de Girona (left), BRT (middle), Centre Pompidou (right) (Farrando et al., 2012;

Mariordo, 2006; Hunter, 2021)

The latest urban planning approach in China, micro renovation, was inspired by the urban acupuncture strategy (Yin & Zhang, 2018; Deng & Wu, 2020; Chen, 2018). Micro renovation is an urban renewal approach focusing on specific points of a region and starting from small-scale changes, which can be a source of inspiration for the wider area, a trigger for more developments. Compared to urban acupuncture, which can not only be physical interventions but can also be sensory, like music (Green, 2014), the measures of micro renovation under China's context are usually spatial changes and has a shorter cycle, especially when it is applied to old city regions and old neighborhoods.

The starting point of micro renovation in old city regions is very similar to heritage planning. Heritage planning, as defined by Shirvani and De Luca (2018), is a combination of heritage conservation and urban planning. It starts from the presumption that communities care about valuable historical places; their importance provides reasons to

preserve them. At the same time, there are reasonable economic and social pressures to remove these historic places along with their context (Shirvani and De Luca, 2018). The micro renovation was proposed under the pressure of economic and social development of the city, with the aim of developing old city regions while preserving the cultural and social values held within them (Deng et al., 2017; Zhang et al., 2017).

To better understand what micro renovation is and how it is applied to practice, this thesis ran through several micro renovation cases in different cities. Wei (2017) conducted a study focusing on micro renovation of residential Hutongs in Beijing and analyzed the spatial changes of public facilities (e.g., stairs, public toilets, etc.), public traffic system (driveway roads, pedestrian paths, etc.), public open spaces and living environment; Chen (2019)'s study of micro renovation in an old neighborhood in Changsha found that micro renovation is mainly focusing on buildings, greenery, public open spaces, traffic system and public facilities; while other scholars' analysis of micro renovation in other cities and communities have come up with diverse influencing factors based on their own contexts (Liu, 2019; Xue et al., 2018; Zhao et al., 2017). Therefore, every case has its own problems and needs different micro measures to cope with them.

2.3 Well-being

Well-being is an understandable but complex concept. According to the United States Centers for Disease Control and Prevention (CDC), well-being can be described as judging life positively and feeling good (CDC, 2021), which can be measured by objective and subjective variables (Cummins, 2018).

Well-being includes people's physical, spiritual, social, economic, and overall state of well-being in life (CDC, 2021). Perceive it from a global perspective, climate, geology and other factors have great impacts on people's well-being; from the national scale, economic development, institutional structure, policies, etc. can influence well-being; and from the city level, the living environment, the maintenance of infrastructure, the usage of public space and so on are directly related to people's daily life, hence impacting their well-being (Dang & Zhou, 2016). Environmental psychology suggests that residents' well-being in urban areas depends partly on their perceptions and assessments of the spatial elements of the city in which they live (Dang & Zhou, 2016).

In the World Happiness Report 2020, the Ranking of Happiness 2017-2019 of China ranked only 94 out of 153 countries measured worldwide (Helliwell et al., 2020). It is worth

noting that although recently China's economic growth has made remarkable achievement and residents' income has steadily increased, residents' happiness has not improved in parallel.

Chen et al. (2009) examined the objective and subjective factors affecting well-being, they argue that China is facing two dilemmas in its policy choices. First, in the urban and rural areas of the central and western regions, where per capita income is relatively low, the increase in income would positively influence citizens' happiness. So for the government, considering how to develop the economy to increase the residents' disposable income in these areas is important in improving citizens' well-being. As for the economically developed southeast coastal cities, the effect of increasing happiness through higher income is less significant, so the focus on safety issues, living environment, and transport facilities would be more reasonable (Chen et al., 2009).

Happiness is only a small component of overall well-being and is considered as the most subjective aspect of human well-being. However, the low level of happiness to some extent represents a low level of citizens' well-being. Understanding what constitutes well-being and how to increase people's well-being through influencing factors is thus important in urban planning.

2.4 Maslow's hierarchy of needs and micro renovation

To better understand how micro renovation affects people's well-being, this study is going to use Maslow's hierarchy of needs to represent well-being. Nygren asserted that well-being is predicated on having basic needs met (McGregor, 2010); while Gorman (2010) argued that the level of social and emotional well-being of an individual corresponds to the level of needs achieved on Maslow's hierarchy. Hence, we think that it is plausible to use Maslow's hierarchy of needs to represent well-being in this study, which can help to categorize spatial changes and exploring further how they influence residents' well-being. The following is a further explanation of Maslow's hierarchy of needs and how it is applied in cases' evaluation.

Maslow (1943) categorized people's needs into five levels, namely physiological needs, safety needs, love and belongingness needs, esteem needs and self-actualization needs (figure 3).

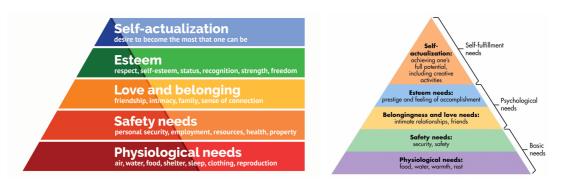


Figure 3. Maslow's hierarchy of needs (McLeod, 2018)

Physiological needs refer to biological requirements for human survival, including air, food, shelter, etc. (Maslow, 1943). The first stage is considered as the most important since these needs are the preconditions for the human body to function optimally, all the other needs become secondary until physiological needs are met (McLeod, 2018). Considered from the planner's point of view, it is related to proper spatial design, such as enough space between dwellings in order to provide adequate sunlight and good ventilation for residents (Qu et al., 2018). In addition, the renovation of basic infrastructure and municipal public facilities (e.g., refurbishment of buildings and roads, sewage system, traffic facilities, etc.) in an old neighborhood in Guangzhou is proved to affect people's well-being most from residents' perspective (Liu, 2019).

Safety needs include protection from elements, security, freedom from fear and so on (McLeod, 2018). When it is reflected in spatial planning, it can be a private space that can safeguard the privacy and avoid losses of personal property (Qu et al., 2018); Or barrier-free facilities that can guarantee the safety of people with disabilities (Niu & Xu, 2017).

The third stage is love and belongingness needs. When the physiological and the safety needs are fairly met, the love and affection and belongingness needs will emerge (Maslow, 1943). Friendship, intimacy, trust, and acceptance, receiving and giving affection and love can be examples of this stage (McLeod, 2018). When it is applied to the spatial aspect, public open spaces that cater to people's social needs can be a good example (Niu & Xu, 2017; Wu & Hu, 2017; Qu et al., 2018).

The esteem needs are classified into two subsidiary sets by Maslow (1943), respectively the desire esteem for oneself (e.g., dignity, achievement, mastery, independence) and the desire for reputation or respect from others (e.g., status, prestige) (McLeod, 2018). In order to meet these needs, respects for different needs from different groups of people (e.g., age, gender, income, etc.) are necessary.

Self-actualization need is described as "the desire to become more and more what one is, to become everything that one is capable of becoming" (Maslow, 1943: p.382). This can be realized through public participation, for example, opportunities to engage in diverse activities, etc. (Niu & Xu, 2017; Li, 2019)

In the results and analysis chapter, this thesis will explore further how spatial changes of micro renovation affect residents' well-being from the perspective of Maslow's hierarchy needs.

This chapter introduces the relevant concepts and lays the theoretical foundation for this study. The next chapter will introduce urban renewal approaches in China to further explore urban renewal under China's context and how they have evolved.

Chapter 3 Contextual chapter

3.1 Chapter introduction

Before starting to explore how micro renovation affects residents' well-being, this chapter will run through the evolutionary path of urban renewal in China first. Understanding the evolution of China's urban renewal helps to understand how micro renovation as an urban renewal approach was proposed, how its focus differs from other urban renewal approaches, and under what context micro renovation is appropriate. The main goal of this chapter is to have a better understanding of how micro renovation emerged, how it developed during these years and what are the differences between micro renovation and other urban renewal approaches.

3.2 China's context

Phase I: 1949-1977

This phase of urban renewal was dominated by basic urban construction work such as improving environmental sanitation, renovating municipal facilities, and building workers' housing in key cities (Du & Tian, 2015; Yang & Chen, 2019).

China faced several challenges at the very beginning. On the one hand, the domestic situation had not yet been fully stabilized and the relevant disciplines had not yet been well established. Therefore, the concepts of urban planning and urban renewal were in their infancy and there was a lack of relevant experience in urban construction (Yang & Chen, 2019); on the other hand, the country's financial resources were limited and municipal utilities were scarce, so urban planning and urban renewal were stuck. The following *Great Leap Forward* and the *Cultural Revolution* forced urban planning and renewal processes to slow down and even stagnate during this period (Xu, 1999; Huang et al., 2009; Yang & Chen, 2019).

Therefore, urban planning and renewal were only focused on the most basic issues of health, safety, and a rational division of the city; and the planning mode was incremental planning - planning based on spatial expansion with new construction sites and economic benefits as the main target (Zou, 2012; Chen et al., 2015).

Phase II: 1978-1989

During this period, the introduction of various policy documents, such as the *Opinions on Strengthening Urban Construction* and the *Regulations on Urban Planning*, was of great significance to the planning and renewal of old cities in China (Yang & Chen, 2019). And it also signified the initial establishment of the legal system of urban planning, which was of great guiding significance to the development of urban planning and its renewal work at that time. Besides, the policy promotion of *reform and opening up* and the *assignment of land* enabled urban renewal entered a new stage (Huang, 2009; Xu, 1999).

This phase of urban renewal developed rapidly and was carried out at an unprecedented scale and speed across the country (Huang, 2009; Yang & Chen, 2019). In this stage, the focus of urban renewal has gradually shifted from large-scale demolition to a healthier way, such as the *organic renewal* put forward by Liangyong Wu, which highlighted the importance of preserving the organic structure and social network during the urban renewal process (Wu, 1994).

Phase III: 1990-2011

With the establishment of the market economy, land-use policies, and diverse financial resources, urban renewal in this phase has made some progress (Yang & Chen, 2019).

The compensable use of the state-owned land and housing commercialization have brought economic impetus to urban renewal, with the real estate and financial industries as the driving force. Many cities have made various attempts based on their own contexts, such as the 798 Art District regeneration in Beijing (Dai, 2020) and the Tianzifang Creative District regeneration in Shanghai (Li, 2013), both of which are urban renewal cases that use cultural and creative industries to re-energize the old city regions in abandoned old industrial areas. However, many urban renewal projects have led to serious problems, such as over-density of development, deterioration of residents' living environment, overload of infrastructure due to excess capacity, environmental pollution and so on (Yang & Chen, 2019). What is more, the one-sided pursuit of economic benefits caused excessive demolition, thus harming the interests of local inhabitants, leading to conflicts among different interest groups (Yang & Chen, 2019; Li, 2016).

Phase IV: 2012 - now

In 2011, China's urbanization rate exceeded 50% (Yang & Chen, 2019). Although the rapid urban development in the past decades contributed a lot to the improvement of urban landscape and living environment, the rapid urban expansion and large-scale transformation of old cities have laid potential crises in environmental, social, and economic aspects (Yang & Chen, 2019). The shortage of land has forced urban planning to shift from *incremental planning* to *stock planning* (a planning approach that promotes functional optimization and adjustment of built-up areas through urban renewal and other means (Zou, 2012); or even *reduction planning* (a planning method solving problems by reducing the scale of towns and cities, improving the utilization of infrastructure and increasing the development efficiency) (Chen et al., 2015; Shi, 2014).

Under the general framework of ecological civilization, urban renewal at this stage emphasizes people-oriented, the improvement of living environment and the enhancement of urban vitality (Yang & Chen, 2019). As a result, urban renewal has gradually shifted the focus on the preservation of the historic environment and people's well-being (Du & Tian, 2015).

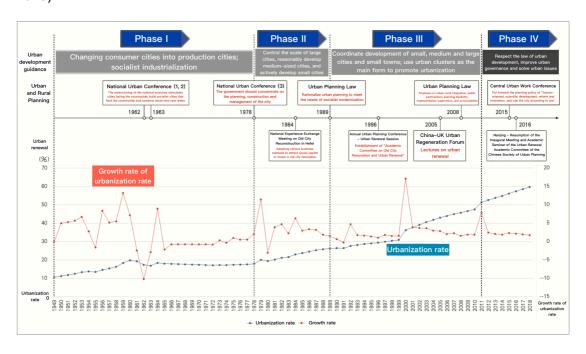


Figure 4. The stage division of urban regeneration in China (Yang & Chen, 2019)

	Phase I	Phase II	Phase III	Phase IV
Time	1949-1977	1978-1989	1990-2011	2012-now
Renewal objects	Shacks and old dwellings	Staff housing and infrastructures	Major infrastructure, old industrial bases, historic districts, urban villages	Historic district, old neighborhoods, old industrial area, creative industry
Renewal target	Focus on improving basic environmental sanitation and living conditions in cities	Focus on solving housing tensions and paying off infrastructure debts	Market and property development oriented old city renewal	A new situation of urban renewal based on human- oriented and high-quality development
Actors	Central government and local government	Central government and local government	Cooperation between government and private sectors, communities were not included	Government, private sectors and communities, though the community participation is still weak
Institutional structure	Top-down	Top-down	Top-down / bottom-up	Integrated approach (top- down and bottom-up)
Renewal mechanism	Funding was mainly from the government	Funding was mainly from the government, market mechanism was initially established	Fully introduce market mechanism and the urban renewal projects were promoted by the government and the market together	Engage communities, private companies and public sectors. Public and private investment

Table 1. The urban renewal evolution in China (after Yang & Chen, 2019)

3.3 Guangzhou's context

The last section is the overall development of urban renewal in China. However, as the first city to overthrow traditional feudalism and introduce Western urban planning ideas, Guangzhou was always at the forefront of urban planning and urban renewal among Chinese cities (Lan, 2018). The latest urban renewal approach this thesis focuses on, the micro renovation, is put forward by Guangzhou Urban Renewal Bureau. Therefore, the specific context of Guangzhou is also necessary. There followed an introduction of Guangzhou's urban renewal development process, which highlights the proposal of micro renovation and explores how it differs from other urban renewal approaches.

Phase I: Modernisation and Transformation of the city (1918-1949)

Before 1918, China was a traditional empire with a highly centralized and strictly hierarchical feudal system, which was separated from the rest of the world by an Isolationism policy that gave the country the illusion of prosperity (Liu, 2005).

The 1911 Revolution was a turning point for Guangzhou, which declared its independence after the Revolution, taking the lead in ending 2,000 years of feudalism (Lan, 2018). At this stage, Guangzhou was influenced by the planning experience of post-industrial urban transformation in Western countries. The ideas of Western planning, such as the classical transformation of Paris and the Garden City, began to play a role in the modernization of Guangzhou (Lan, 2018).

In 1918, when the Guangzhou Municipal was established, Guangzhou underwent its first modernization of the city following Western urban planning approaches, starting with

the transformation of the city's traffic system. Relevant policies such as the Strategy for the Establishment of the State - The Great Southern Port, the Construction Plan of Guangzhou and the Draft Outline of the Urban Design of Guangzhou worked as the guidance (Zou, 2017).

In the context of bureaucratic capitalism, the land system was private and allowed for buying and selling, so Guangzhou was mainly transformed by the government and residents themselves (Lan, 2018).

Phase II: Productive Urban Transformation (1949-1978)

The period 1949-1957 was a period of national economic recovery. According to its existing industrial base, Guangzhou was positioned as a production city with the light industry as the main industry (Wang et al., 2002).

From 1958 to 1964 was a period of large-scale economic restructuring. Affected by the Great Leap Forward and the People's Commune movement, Guangzhou's industrial structure was transformed from light industry to heavy industry. Later, under the general requirement proposed by the Central Government, Guangzhou was repositioned as a "production city with a certain foundation in heavy industry and mainly light industry" (Lan, 2018).

During the period of the Third Front Movement and the Cultural Revolution from 1965 to 1978, Guangzhou utilized foreign trade as one of its functions (Lan, 2018). However, during the period of the Cultural Revolution, the construction of cities lacked government guidance and was characterized by disorderly development (Wang et al., 2002; Lan, 2018).

Under the context of the planned economy, land use was allocated by the state, and construction materials and supplies were financed by the central and local governments. Hence, at this stage, Guangzhou's urban renewal was mainly government-led and supplemented by private investment (Lan, 2018).

Phase III: Modernization Transition Overlay (1978-2008)

The 3rd Plenary Session of the 11th Central Committee of the Chinese Communist Party in 1978 proposed China's reform and opening up (Huang, 2009; Xu, 1999). In 1982, Guangzhou was positioned as one of the political, economic and cultural centers of Guangdong Province, as well as one of the most important centers for foreign economic and cultural exchanges in China (Wang et al., 2002). In 1984, Guangzhou was used as a

pilot city for the reform of China's economy. In 1989, the policy of *Trial Measures for the Grant and Transfer of Urban State-owned Land Use Rights in Guangzhou* marked the establishment of a land market system, which diverse the subjects and funding sources for urban development and construction (Lan, 2018).

In 2000, the *Strategic Plan for the Overall Development of Guangzhou* formally proposed the urban development strategy of *moving east, linking west, expanding south and optimising north* (Wang et al., 2002; Lan, 2018). This strategy emphasized the development of surrounding areas, and the spatial layout of the city was changed from a single center to multi-centers.

In 2003, the Asian Games offered Guangzhou an opportunity to accelerate the renovation of dilapidated housing (Zhang, 2019; Yao & Tian, 2017). In 2006, Guangzhou decided to adopt a strategy of *central region adjustment*, which focuses on improving the quality of development in the old city regions that are located in the middle of Guangzhou (Zhang, 2019; Yao & Tian, 2017). In 2007, the construction of new communities was launched, focusing on the rehousing of households that had been demolished and rehabilitated from dilapidated housing in the vicinity. Up to the Asian Games, the government funded the renovation of a total of 1,090,700 square meters of listed dilapidated houses (Lan, 2018).

This period witnessed the rise of the economic system, the establishment of land-use systems and the prosperity of the real estate market (Yao & Tian, 2017; Lan, 2018). However, as urban renewal became too one-sided focusing on economic benefits, large-scale knockdown and demolition resulted in a bunch of urban issues, such as destroying the traditional urban landscape, building low-quality dwellings and defaulting demolition fees (Lan, 2018).

Phase IV: Three Old Transformation (2008-2015)

Three Old Transformation refers to the transformation of old towns, old factories and old villages (Yao & Tian, 2017; Wu, 2020), which is an important cooperation between the Ministry of Land and Resources and Guangdong Province (Lan, 2018).

The policy *Retreat of Two to Three Industries* issued in 2008 aimed at moving enterprises that damaged the environment (e.g., hazardous chemicals enterprises) from urban areas to the outer suburbs (Yao & Tian, 2017; Lan, 2018). The government also encouraged the functional transformation of vacant factory buildings, for example, through

developing the creative industry. This approach has stimulated market players and owners to invest in renovation on their own, and has also guided the upgrading of industries within the old city regions (Yao & Tian, 2017).

During the Three Old Transformation period, residents, villages and industrial enterprises saw the social and economic benefits and spontaneously took the initiative to start the transformation (Yao & Tian, 2017; Lan, 2018). However, there was a conflict between the economic pursuit and the provision of facilities. For example, real estate companies preferred to build a bunch of high-rise buildings with inadequate green spaces, in order to maximize their benefits. This was contrary to the original attempt, therefore, from 2012 on, the Three Old Transformation policies entered a phase of optimization and adjustment (Yao & Tian, 2017).

Phase V: Micro renovation (2016-now)

The goal of urban renewal at this stage shifted to promoting differentiated, networked and systematic urban repair and organic renewal. It focuses on the improvement of the living environment, historical and cultural heritage, and socio-economic development (Yao & Tian, 2017).

Guangzhou established the Urban Renewal Bureau in 2015 and put forward the idea of micro renovation in 2016. Based on the urban acupuncture theory, the concept of micro renovation provides a new approach for the transformation of old city regions in Guangzhou (Chen, 2018; Wu, 2017; Zhang et al., 2017; Cai et al., 2017; Deng et al., 2017).

Micro renovation emphasizes the progressive improvement of the living environment and public facilities. Similar to acupuncture therapy in Chinese medicine, micro renovation is an urban renewal approach that promotes overall metabolism through tiny improvement. It changed from a large-scale demolition and reconstruction to a small-scale, step-by-step, diversified and innovative improvement method (Cai et al, 2017).

Renewal approach	Small-scale redevelopment	Large-scale demolition	Micro renovation
Target	Improve residents' living standard	Economic benefits	Solving urban issues base on social, economic, environmental and cultural context
Actors	Government	Government and real estate developers	Government, property developers, communities
Institutional structure	Top-down / Bottom-up	Top-down	Integrated approach
Heritage protection	Medium	Low	High
Land use and economic returns	Low	High	High
Funding	Public investment / private investment	Mainly from the property developers	Government, property developers, private investment
Sustainability	Low	Low	High
Difficulties and challenges	Small-scale of old city redevelopment, some cases were initiated by the residents themselves, but with limited funds	Demolition of old buildings, a radical approach to urban construction that destroys urban fabric and historical culture, but with high economic benefits	Community participation is still relatively weak, and public participation is more at the "informing" stage

Table 2. The comparison among different urban renewal approaches in China (after Xiao, 2016)

From this chapter we can find that different approaches to urban renewal have been derived with different demands for urban development in different periods. At the beginning of the reform and opening up in the last century, China focused on the pursuit of economic development, so it vigorously developed real estate. Many old houses were demolished, including some historical buildings with cultural values. As times developed, many urban issues caused by blind demolition made people realize that the way of urban renewal needed to be more sustainable.

Compared with the previous urban renewal approaches, micro renovation is more in line with modern society's requirements for sustainable development and can better protect the rights and interests of relevant stakeholders. Micro renovation is particularly suitable for old city regions, since it aims at preserving historic districts and the measures are always implemented through micro changes. Therefore, the local characteristics and cultural values can be well-preserved, and residents' social networks can be maintained. In the following chapters we will further analyze the studied cases, explore what micro renovation measures and spatial changes were made, and how these changes affect residents' well-being.

Chapter 4 Case studies

4.1 Chapter introduction

This chapter will discuss two micro renovation cases, in which the spatial changes are shown and analyzed. As a pilot project in Guangzhou, Yongqingfang is also the beginning of micro renovation in China (started from 2016 till now). Therefore, its development trajectory and problem analysis are very important references for similar cases in the future. Similar to Yongqingfang, Shawan Ancient Town is also a case using tourism as the economic driving force (also started in 2016) (PDURB, 2016). These two cases have their commonalities, for example, they are both using tourism as a development strategy, hence, the experience of Yongqingfang can be referred to by Shawan Ancient Town. However, they are also different based on different contexts. Compared to Yongqingfang, the cultural and social values in Shawan Ancient Town are more protected intact, while that in Yongqingfang to some extent has been destroyed due to the demolition in the 2000s. Through the study of the two cases, this thesis tries to find out the impact of micro renovation on residents' well-being under the same urban renewal approach.

4.2 Yongqingfang

Yongqingfang is located in Enning Road, the core of historical Guangzhou, which connects to Shangxiajiu Commercial Street (figure 5). With the rapid development of the city, Yongqingfang has once fallen into disrepair and become a dilapidated and severely damaged old city region. This reflects the current situation of most historical and cultural old city regions in China (Zhu & Chen, 2019).



Figure 5. Yongqingfang and the surrounding targets of micro renovation (after Google Maps, 2021)

Yongqingfang (also known as Yongqing Area) was the first case that experienced a completely different urban renewal approach compared to other cases in China. Its first phase covered an area of about 8,000 square meters, and renewed buildings of about 7,000 square meters (Chen, 2018). The second phase of Yongqingfang is still an ongoing project, which will cover a total area of 137,000 square meters (Guangzhou Daily, 2019). The renovation of Enning Road started in 2006, but by then the government used demolition as their urban renewal approach, and received strong opposition from citizens, academics, and NGOs (Liu et al., 2015; Tan et al., 2018). This resulted in the stagnation of the plan, as well as the place. There were reports illustrating the stagnation of the project, saying that the Arcaded streets (corridor-style architecture. The first floor is built as a pedestrian corridor, and the second floor is for residence) (figure 6) has become a scrapyard and the old streets and alleys have become garbage sorting places. The situation stayed still until 2015, when the Guangzhou Urban Renewal Bureau was established. Later that year, Yongqingfang was chosen as the pilot project to promote micro renovation, and the situation has changed. (Tan et al., 2018).





Figure 6. Arcaded streets in Guangzhou (Gzdavidwong, 1937; Gzdavidwong, 2011)

Since the micro renovation of Yongqingfang aims to preserve and promote its history and culture, this study will then give a brief introduction to the cultural and social values embedded in Yongqingfang. In this way, readers can have a better understanding of the local culture and the necessity of micro renovation in this case.

4.2.1 Cultural values

In terms of cultural value, Enning Road, where Yongqingfang is located, is the most complete and longest Arcaded street in Guangzhou. It is famous for its Lingnan and Xiguan cultural characteristics, and is one of the birthplaces of Cantonese opera, with a good cultural atmosphere and various cultural heritages (Chen, Y., 2018; Chen, C., 2018).

In 2012, the Guangzhou municipality put forward the *Protection Plan for the Historic and Cultural City*, in which the historical values of Yongqingfang were identified (Liu et al., 2014; Zeng et al., 2020). However, due to the lack of attention and protection at the beginning, the cultural values of Yongqingfang were to some extent lost. Hence, this area needed to be renewed and revitalized.

4.2.2 Social values

In terms of its social value, the process of urban renewal in Guangzhou has evolved from large-scale demolition in the 2000s (Tan et al., 2018; Liang, 2020; Liu & Chen, 2020) to the current micro renovation, which reflects the current urban renewal trend: from the one-sided pursuit of economic benefits to the human-oriented approach, paying more attention to the old city region's culture and the protection of residents' interests (Cai et al, 2017; Zhang et al., 2017).

A lot of problems emerged in Yongqingfang due to the lack of government guidance and attention to public interests. Most of the residents chose to move out, which broke the social networks. Vacant houses were not effectively used, and due to the lack of efficient management, they became shelters for the homeless. Some of the houses were rented out to couriers, goods were stacked randomly, and the streets were occupied and messy. The security and environment of the whole community have seriously deteriorated (Chen & He, 2014; Tan et al., 2018).

The micro renovation brought the renewal of Yongqingfang back on the agenda. The renovation and utilization of vacant and rented houses gave new value to the buildings and improved the efficiency of land use. The increase of infrastructure effectively improved the living environment, both within and outside Yongqingfang. And the renewal of houses enhanced the overall community appearance. The intervention of micro renovation was an important initiative to revitalize the community, which will be explained in the next section.

Understanding the cultural and social context guides micro renovation in this case. For example, there are many historical buildings in Yongqingfang, but not all of them contain cultural values. This leaves the questions of how to categorize those buildings, what measures should be implemented accordingly, etc., all of which require a deep understanding of the contexts.

4.2.3 Micro renovation of Yongqingfang

Before we dive into the concrete measures, we can perceive the micro renovation from the urban acupuncture perspective. In Yongqingfang's case, at a smaller scale within Yonggingfang, the public open spaces such as community plazas can be seen as acupuncture points within the neighborhood (red dots in figure 7a). They are frequently used for social and cultural activities, which play an important role in revitalizing the neighborhood. While the small paths act as meridians, which connect residents' homes and those public spaces and enable more social interaction. From a wider scale, the project of Yongqingfang is also closely related to the surrounding areas, such as Shameen (also known as Shamian Island in Guangzhou), Shangxiajiu Commercial Street, Liwan Lake Park and so on. Those points are outside Yongqingfang, but can be seen as urban acupuncture points in the wider area, which could trigger further influences in the surroundings (figure 7b). After the renovation, the economic, social and cultural benefits brought by Yonngqingfang have increased (Peng, 2018; Deng, 2020). And within the whole area, Yongqingfang as one of the tourism attractions, is well connected to Shameen and Shangxiajiu Commercial Street. The connection and interaction among those acupuncture points made this area one of the most popular and attractive places for citizens (Deng, 2020, Li & Zou, 2020).



Figure 7a and 7b. Urban acupuncture within Yongqingfang (left) urban acupuncture outside Yongqingfang (Lab D+H; 2017)

After running through the literature and news reports about the studied cases, and referred to other scholars' classifications (Wei, 2017; Chen, 2019; Jiang, 2018; Zhou, 2019; Al-Hinkawi et al., 2020; Usama, 2021), this thesis categorizes four aspects that are caused by micro renovation and tries to figure out how residents perceive those changes in Chapter Six. In this chapter, we will introduce micro renovation from those four aspects, respectively physical infrastructure, buildings, clean and green and public open spaces, in order to better understand how micro renovation is applied in China's context.

Physical infrastructure

Physical infrastructure was defined as the basic physical structures required for an economy to function and survive, such as transportation networks, a power grid and sewerage and waste disposal systems. In the case of Yongqingfang, we can observe the renovation of physical infrastructure such as roads, pedestrian paths, sewer systems, electrical wiring, etc. Measures included adding sanitation facilities such as garbage cans, and street furniture such as door panels, signage, lamps, etc.







Figure 8a, 8b and 8c. Renovation of public facilities in Yongqingfang (GDW, 2019; Maccan, 2019; Shejilian, 2018)

Buildings

The buildings within Yongqingfang have been categorized according to their cultural and historical values and the extent of damage (figure 9a). The renovation repaired the facades of most buildings, and generally, most of them retained their original façade styles. In terms of the color, some heritage architecture retained their original color scheme, others were replaced with gray-toned bricks, and individual residential buildings were decorated with white metal frame facades and exterior walls. In order to meet the indoor lighting needs, some buildings were equipped with new types of external projecting windows, and some of them added balcony fences and tiles. Catering to the functional needs, some of the flat roofs were changed into sloped roofs (Li & Lin, 2017; Tan et al., 2018).

In addition, the internal structure of some buildings is modified. In general, more than half of the buildings in the area have internal structures that need to be readjusted. The micro renovation followed the requirement of not changing the external form of the buildings, tried to open up the internal walls and used glass structures to create spacious and bright spaces (Li & Lin, 2017).

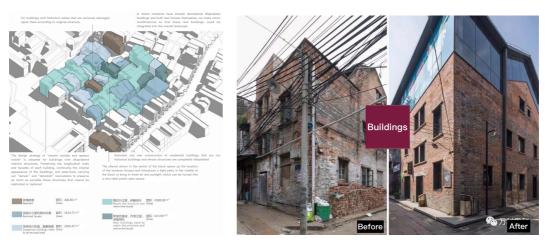


Figure 9a and 9b. Micro renovations of buildings within Yongqingfang (after ArchDaily, 2019; vankeweekly, 2018)

Clean and Green

The term *clean and green* is an implementation framework for sustainable rural sanitation, which was put forward by Dagerskog and Dickin (2017). However, this thesis only takes its literal meaning, which refers to sanitation and greenery. The demolition phase of Yongqingfang left behind many problems, such as environmental problems caused by vacant houses and dilapidated streets and alleys. During the micro renovation, the streets and alleys were renovated, houses were repaired, and green belts were added (figure 10a and 10b).



Figure 10a and 10b. The improvement of living environment (Vankeweekly, 2018)

Public open spaces

Public open space (POS) is defined as publicly and privately owned managed open space, usually parks, green spaces and playgrounds, but also includes non-parkland areas such as plazas, beaches and shared public areas important for recreation and physical activity (Paul et al., 2020). In the case of Yongqingfang, the micro renovation has turned an old red brick building into a community center, and besides it, there was a community plaza

being created. The large public steps inside and outside the community center are used to carry public activities and can be used as a connection and transition space between the interior and exterior. (figure 11a and 11b). These modern buildings and designs integrated modern components into historic neighborhood, and the integration of historic and modern styles can bring new insight to the old city regions (Li & Lin, 2017; Zeng et al., 2020).





Figure 11a and 11b. The community Plaza within Yongqingfang (Vankeweekly, 2018; ArchDaily, 2019)

Except for Yongqingfang, the micro renovation of nearby public open spaces – Shamian (also called Shameen), is also worth noting.

By widening the sidewalk by 1,320 square meters, optimizing 16 barrier-free designs (e.g., slopes, blind tracks) and other micro measures, a car-free pedestrian network was created for citizens. Besides, the original lawn and parking lot were turned into two plazas in the park, which can facilitate public events.







Figure 12a, 12b and 12c. Renovation in parks (Shao, 2021; Information Times Report, 2020)

The case of Yongqingfang, as the pilot project of micro renovation in China, has laid the practical foundation for other projects in the future. By reflecting on the interventions of Yongqingfang, the measures can also be improved and be better implemented.

The next section will present and discuss the second case, Shawan Ancient Town. Similar to Yongqingfang, Shawan Ancient Town is also using tourism as its economic driving force. However, due to the differences between location, resources, etc., the focus and measures are different.

4.3 Shawan Ancient Town

Founded in the Southern Song Dynasty, Shawan Ancient Town located in Guangzhou is an ancient town with a history of more than eight hundred years of Lingnan culture, with an area of 153 hectares, and a total population of around 10,000 (Xu, 2013).

With more than 800 years' history, Shawan has formed and well-preserved Lingnan culture. It is rich in both tangible and intangible cultural heritage, such as ancestral halls, temples, Cantonese opera, dragon and lion dance, etc. In recent years, intending to encourage economic development, Shawan Ancient Town used tourism as its economic driving force, and micro renovation has been implemented to improve the overall landscape. The following is the description of Shawan Ancient Town and its local values.



Figure 13. The location of Shawan Ancient Town

4.3.1 Cultural values

As a typical Lingnan old town, Shawan Ancient Town has a long history from various dynasties, thus surviving with a rich historical imprint and cultural heritage. These cultures and histories have shaped and continue to influence the lives of the residents through diverse cultural activities, folk festivals, etc.

In terms of physical cultural heritage, Shawan Ancient Town has a well-preserved ancient village pattern and a large number of historical buildings from the Ming, Qing and Republican periods (Guo & Yan, 2014; Ou, 2018). For example, the Liugeng Ancestral Hall was built in the Southern Song Dynasty (1275) and suffered from destruction several times. The current scale of the hall is expanded in the Qing Dynasty and now occupied more than 3000 square meters. The streets and alleys still maintain the basic structure formed during Qing Dynasty (1644-1911) (Guo & Yan, 2014). In addition, as the hometown of folk

sculpture, Shawan Ancient Town has preserved a large number of brick, wood and stone carvings.

Regarding intangible cultural heritage, Shawan Ancient Town is famous for Piaose (a parade that originated in Shawan, which is a confluence of drama, acrobatics and decorative modeling techniques), dragon and lion dance, sculpture art and food. It is also the birthplace of Guangdong music. Known for its delicacy and ingenuity, Shawan Piaose is also called the *frozen drama and moving sculpture*, which is a provincial intangible cultural heritage. The lion dance of Shawan has a long tradition of blending folk martial arts and southern lion dance routines, and has become a national intangible cultural heritage along with Cantonese music.







Figure 14a, 14b and 14c. Piaose (left), lion dance (middle), brick sculpture (right) (Zhang, 2019; SWAT, 2021; Peng, 2019)

The visual artist Yip Kam Tim once said that the only way to preserve tradition is to find a way that can link the past and the present while constantly overturning it, establishing a new era of divine thought, tracing its model, and achieving the sense of common pride and belonging (Zhang, 2019).

This corresponds to the requirement of revitalizing the community and stimulating its vitality in micro renovation. Analyzing the influence and significance of cultural factors on the whole settlement in the past are important when considering revitalizing the community (Xu, 2013).

Although rich in its cultural features and activities within the town, it is still difficult to generate independent renovations due to the lack of funding and policy support. The micro renovation in Shawan Ancient Town is mainly for public space, measures include widening, repairing and optimizing the space where cultural activities can be held, so that it can better accommodate various public and social activities. Developing other cultural venues (e.g., Cantonese opera venue) is also a way to highlight the local cultural characteristics. The specific measures will be discussed later in the following sections.

4.3.2 Social values

One thing that distinguishes Shawan ancient town from many other old towns in China is its native residents (Xu, 2013). Here native residents refer to the residents who were born and bred in Shawan Ancient Town. According to the sixth census of Guangzhou, about 10,000 people were living in the core area of the town, including 2,853 in Shawan East Village, 2,194 in Shawan West Village, 1,810 in Shawan South Village, and 3,780 in Shawan North Village, of which 60% were native residents (Xu, 2013). To a certain extent, the high local population has its advantage, because many local cultures and festivals have been preserved intact.

However, social networks are also changing. The original social network of Shawan ancient town is mainly connected by family relations (Xu, 2013), but nowadays more and more floating population moved into the area, the social network gradually changed, and Shawan ancient town is no longer composed of blood relations only. Therefore, it is worthwhile to explore how to connect residents through the renewal of the old town and how to create suitable spaces and places for social interaction (Ou, 2018).

The next section will introduce the renovation measures in Shawan Ancient Town, all of which will also be categorized into four aspects: physical infrastructure, buildings, clean and green and public open spaces.

4.3.3 Micro renovation in Shawan Ancient Town

Using urban acupuncture strategy, the measures of micro renovation within Shawan Ancient Town started from the public open spaces such as public squares, which can be considered as acupuncture points within the town (purple dots in figure 15a), while the roads can be considered as meridians (dotted lines in figure 15a). In a wider area, Shawan Ancient Town is also connected to other acupuncture points such as Dishuiyan Forest Park and Baomo Garden nearby (figure 15b). However, we can see from figure 15b that the connections among those points are relatively scarce compared to Yongqingfang. Therefore, renovation outside Shawan Ancient Town is the main focus of spreading influence from a point to the surroundings. Since there are still few links between Shawan Ancient Town and the surrounding acupuncture points, and relevant information and literature are lacking, this study will mainly focus on exploring the micro renovation within Shawan Ancient Town. The relevant measures will be described as follows.

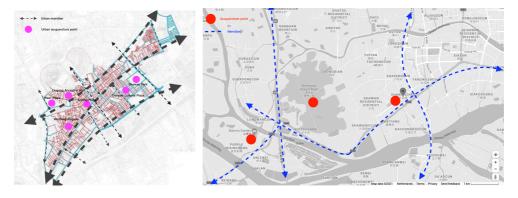


Figure 15a and 15b. Urban acupuncture within Shawan Ancient Town and wider urban acupuncture (after Ou, 2018; after Google Maps, 2021)

Physical infrastructure

The micro renovation of physical infrastructure includes municipal facilities such as road and traffic system, sewerage system, etc.; street furniture such as signage, streetlights, benches, etc.



Figure 16a, 16b and 16c. Renovation of public facilities (Hancy, 2021; Shawan Ancient Town, 2016)

Buildings

With its long history, Shawan Ancient Town has all kinds of buildings from different dynasties, which has a great impact on the overall landscape. The micro renovation focused on restoring the historical features, demolished and renovated some new-style buildings that do not conform to the traditional appearance, and restored the traditional commercial scene of upper floors of residences and lower floors of stores (Ou, 2018). For some wooden-framed historical buildings, the doors, windows and frames are partly replaced; most of the building facades have been refurbished (Fan, 2018).





Figure 17a and 17b. Refurbishment of buildings (Xiang, 2021; Shawan Ancient Town, 2020)

Clean and Green

The renovation of Shawan ancient town in terms of clean and green includes the following points. One is the treatment of water (Shawan local government, 2020). As a traditional Lingnan ancient town, water culture is one of the characteristics of Shawan ancient town. The improvement of rivers and surges has ensured sanitation within the town.

The refurbishment of buildings has also helped to improve sanitation. Bricks and tiles have been restored, so the overall landscape feels better.

Trash cans and other sanitary facilities have been added, some previously abandoned corners have been transformed into small public spaces, and the markets along the roads have been moved from the center to the perimeter of the town, which helps ensure sanitary conditions.

Greenery has also been added and adjusted to the town (Fan, 2018; Shawan local government, 2020). For example, in the selection of plants, the micro renovation chose native plants such as banyan trees and plantain, which protected the local ecosystem and enabled local residents and tourists to sit under the shade. (Fan, 2018).





Figure 18a and 18b. Renovation of sanitation and greenery (SWAT, 2018, 2020)

Public open spaces

Public open spaces are the structural carrier of most public activities. The renovation of public open spaces in Shawan Ancient Town mainly focused on public squares and ancestral halls that are often used to hold cultural activities.

For example, the meausres of Liugeng Ancestral Hall and the West plaza in front of it included the repair of the square and buildings, the renovation of the water feature and the increase of lights. And another public open space, Anning plaza, was divided into a large square and a small courtyard. The large square can be used for cultural activities, and the small courtyard can provide seats for residents and visitors (Ou, 2018).





Figure 19a and 19b. Public squares in Shawan Ancient Town (Ji, 2021)

This chapter showed the measures of micro renovation in both cases and divided them into four main categories, which helped us to establish the themes and framework of the subsequent interviews. And the research methodology utilized in this thesis will be introduced in the next chapter.

Chapter 5 Research Methodology

5.1 Chapter introduction

In the previous chapter, we introduced the cases studied in this thesis. The purpose of this chapter is to discuss research methodology and explain research strategy, in order to answer the research question and research objectives we outlined in Chapter One.

5.2 Research methodology

5.2.1 Semi-structured in-depth interview

Interview is chosen to answer the research question by exploring how exactly things work in real life.

Interview is an excellent method of gaining access to information about events, opinions and experiences (Dunn, 2016). In order to ask questions that are relevant to the research question, an interview guide was created (Appendix A).

A semi-structured interview is supposed to be open, flexible, which can help the researcher to gather the right information. In this study, a semi-structured interview is considered as appropriate method since the researcher has an idea of questions to ask, but also wants to let participants to take it in another direction if necessary. Besides, interview is also ideal if the researcher wants a new light.

Although all of the interviewees gave permission to use their real names, it is decided to anonymise them to protect their identity. Appendix B displays the pseudonyms of the respondents. The surnames are selected on the basis of the "10 most-common surnames" in China. The real names are known to the researcher and can be asked for anytime.

The researcher is aware that no general conclusion can be made solely based on these interviews since statistically the number of interviewees is highly limited.

5.2.2 Multiple case studies

Case study is defined as "an intensive study of a single unit for the purpose of understanding a larger class of (similar) units", which is often used to better understand and sometimes directly resolve concrete problems (Baxter, 2016). Multiple case studies are considered appropriate in this study because it provides the researcher a broader basis

for exploring theoretical concepts and explanations of phenomena, and also consistent with the objective to examine how micro renovation works and provide experience for the future research.

5.3 Data collection strategy

According to Yin (2014), case studies require multiple data collection methods, such as direct observation of activities and phenomena and their environment; structured or unstructured interviews; records, etc. In this thesis, the data collection methods would be interviews and documentation review of the studied cases.

Interviews are conducted with residents living near the studied cases (Yongqingfang and Shawan Ancient Town), which indicates that the micro renovation of these cases would affect their lives and well-being. Although the essence of acupuncture is that the wider environment could be affected as well, here we choose the residents living near the studied cases because they are most affected. In addition, they are more likely to have a clearer understanding of how micro renovation impacts their daily lives than that living far away. What is more, the impact of micro renovation on the area may be delayed because the construction takes time, as well as its after-effects. Therefore, it would be ideal to choose the residents living near the studied cases. The interviewer is given permission to record the interview and the interviewees will be anonymized in order to protect their identity. The interview contains 17 questions, which were split into four aspects, respectively public open spaces, buildings, physical infrastructure and clean and green. The interview would take approximately 30 to 90 minutes.

5.4 Data analysis strategy

Researchers analyze interview data to seek meaning from the data. They construct themes, relations between variables, and patterns in the data through content analysis (Luo, 2019).

Content analysis is a research tool used to determine the presence of specific words, themes, or concepts within some given qualitative data (i.e. text) (Luo, 2019).

Thematic analysis is also a method of analyzing qualitative data such as interview transcripts (Caulfield, 2019). The researchers examined the data carefully to identify common themes (Caulfield, 2019).

This study combines thematic analysis and content analysis. The recorded interviews will be transcribed into Word documents in Chinese and then printed out for analysis.

In this chapter we introduced the methods we use in this study, the next chapter would be results and analysis of interviews, which attempts to perceive from respondents' perspective and explore how micro renovation affects their well-being.

Chapter 6 Results and Analysis

6.1 Chapter introduction

In Chapter 4, we have categorized four aspects of changes brought by micro renovation, respectively physical infrastructure, buildings, clean and green and public open spaces, all of which were frequently mentioned in the relevant literature and news reports. However, it is still superficial. So in this chapter, we want to explore further how residents perceive those spatial changes, which aspect has the greatest impact on their daily lives, and what are the inconveniences caused by the micro renovation process. This thesis will use Maslow's hierarchical model to analyze and understand how micro renovation affects residents' well-being. The words and phrases extracted from the transcripts can corroborate the impact of micro renovation on the residents' well-being.

6.2 Results and analysis

6.2.1 Physical infrastructure

Public Transport

Before the renovation of Yongqingfang, the traffic network of Yongqingfang was disordered, and the bus and subway were not well-connected, thus causing greater inconvenience to the residents in their commuting. In this case, part of the micro renovation focuses on the constructions of traffic connection and walkability to improve the well-being of residents.

I'm quite satisfied with the traffic system now, it's very convenient and the subway really makes travel a lot greener and faster. There are also many more subway entrances, so I don't have to walk a lot. So it's definitely a good thing (Mr. Liu, resident living near Yongqingfang).

Many bus lines here are connected to the subway now, so sometimes if I am too lazy to walk to the subway station, I will take the bus first and then transfer to the metro (...) and the nearby bus lines are also connected to some important places, such as the hospital, parks and so on (Ms. Zhang, resident living near Yongqingfang).

From Ms. Zhang's transcript, we can notice that more bus lines are added, which improves the connectivity and accessibility in Yongqingfang. This measure unblocked the meridians near Yongqingfang, and connect it with other important acupuncture points such as Shameen, Shaxiajiu Commercial Street nearby.

Compared with Yongqingfang, Shawan Ancient Town is lagging behind in terms of public transport facilities. The interviewees said that although the public transport in Shawan Ancient Town can meet the needs of residents, the lagging public transport system hinders their leisure and entertainment options, especially for the young, who have a higher demand for leisure.

Well, the buses can meet our daily needs, but it is a problem if we want to go further (...) It takes one and a half hours to commute (from Shawan Ancient Town to the center of Guangzhou), which is quite inconvenient, especially for the people working there (Ms. Wu, resident living in Shawan Ancient Town).

To sum up, most of the respondents believe that the improvements in public transport can enhance their well-being, and in particular Shawan can use more enhancement. And from urban acupuncture's perspective, the renovation of public transport system can be measures that unblock "meridians" and connect urban acupuncture points in order to create wider impacts.

Sewer system

The issue of sewerage renovation was mentioned by two interviewees in the case of Yongqingfang. Due to Guangzhou's subtropical location and abundant rainfall in summer, along with rapid urbanization, many infrastructures have failed to keep up with the pace of urban development, resulting in many urban problems, one of which is waterlogging.

Before, it (the phenomenon of waterlogging) was super serious, especially when there is a typhoon. Now the renovations of sewer system are being implemented, this kind of renovation benefits a lot of people (Ms. Zhang, resident living near Yongqingfang).

Interviewees in Shawan ancient town reported the same renovation.

(...) there is always waterlogging during the heavy rain, we cannot even get out of our house (...) I think they recently improved it through widening the underground waterways, though I do not know if it would work, so far the situation is okay (Ms. Wu, resident living in Shawan Ancient Town).

Electrical wiring

From the interviews, we can find that before the renovation of the old city region around Yongqingfang there are many safety issues, one of which is the hanging electric wires:

The electric wires were just hanging in the sky, it felt quite dangerous (Ms. Li, resident living near Yongqingfang).

This electrical wiring, on one hand, is a sanitation problem; and on the other hand, it is also a serious safety issue. After the renovation, residents said:

Now it feels much better, the wires are installed into the kind of white small electric box inside, it looks way better than before, and also safer (Ms. Li, resident living near Yongqingfang).

Road and traffic system

Yongqingfang is located in the center of the old city region of Guangzhou, which is next to the Shangxiajiu Commercial Street. The commercialization of this region attracted a large flow of people, but the disordered road and traffic system always resulted in traffic jams and safety issues to pedestrians. Shawan Ancient Town has a similar problem with its road and traffic system. With its eight hundred years of history, many streets and roads in the town can no longer meet current needs. In this case, micro renovation of the road and traffic system has increased the safety needs of people.

The first is the renovation of pedestrian paths. The repair of sidewalks benefits both pedestrians and the disabled.

The pedestrian paths annoyed me a lot (before), since they were quite damaged and when it rained, a lot of water would stay there and splash all over you when you stepped on it (...) there are a lot of elderly people living here, and wheelchairs as well. Before, the wheels were always stuck in the cracks of the floor tiles, it was very inconvenient for them (...) now those bricks are repaired and the situation is much better (Ms. Zhang, resident living near Yongqingfang).

The second measure is the separation of pedestrian and vehicular systems.

The roads are separated for the pedestrian and vehicular system, which is much safer for pedestrians, especially for kids (Mr. Liu, resident living near Yongqingfang).

The third measure is two-way traffic construction. It is implemented in Shawan Ancient Town, which has serious road and traffic problems. This measure to a certain extent helped solving the traffic jam, especially near schools:

Recently they made it (the road) from a one-way road to a two-way road, so it is less congested (Mr. Zhao, resident living near Shawan Ancient Town).

Lightings

The increasing number of streetlights has also been proven to affect residents' well-being, mainly by improving their sense of security.

(More street lights) is certainly a good thing for me. My work requires me to work at night so I can only go back late at night. Although my home is very close to the subway station, I still feel unsafe if there is no light. Therefore, more street lights would be much better (...) it feels a lot brighter and safer than before (Ms. Zhang, resident living near Yonggingfang).

In addition, the lighting not only provides a brighter living environment, but also revitalizes the atmosphere of neighborhoods.

As I mentioned, the streetlights make the overall environment brighter at night, so more people are willing to go out for a walk after dinner, or take their children out to play. It feels like the atmosphere of the whole neighborhood is better than before (Mr. Wang, resident living near Yongqingfang).

The respondents in Shawan ancient town believe that the streetlights can also improve local cultural and historical atmosphere.

They added lights to the buildings and the nearby canals (...) the overall landscape and environment is a lot more beautiful, visitors, us as well, can feel the cultural atmosphere (Mr. Chen, resident living near Shawan Ancient Town).

In general, the renovation of physical infrastructure is the most frequently mentioned aspect from the collected data. Most of the measures from this aspect mentioned above are mainly catering to residents' physiological and safety needs. Therefore, the improvement of physical infrastructure can enhance residents' well-being through meeting their basic needs.

6.2.2 Buildings

Residential buildings

As a physical shelter for human beings, houses and buildings play an essential role in an individual's well-being. Through the interviews we can find that the micro renovation mainly starts from the exterior of the house.

The houses in the district were repainted, it's much cleaner and more beautiful (Mr. Liu, resident living near Yongqingfang).

Some of the neighborhoods added elevators to the residential buildings, which benefits the elderly a lot:

There was no elevator in our neighborhood, but they added it in the last two years (...) for the elderly and the disabled, it would be much more convenient. (Ms. Zhang, resident living near Yongqingfang).

The stairs and lights were also being renovated:

The walls were repainted, as well as the stairs, and the lights within the building were replaced with new ones (Ms. Zhang, resident living near Yongqingfang).

The lights are now sound-activated (Mr. Liu, resident living near Yongqingfang).

The renovation of buildings is also showed in Shawan Ancient Town.

Many residential buildings and heritage buildings have been renovated (...) especially the dormitories in schools. Because they were built around the 1980s and were quite shabby (...) it is a lot cleaner and tidier now (Mr. Huang, resident living near Shawan Ancient Town).

The refurbishment of buildings and building infrastructure (e.g., stairs, lights) ensure the quality of shelter for residents, which improves their well-being.

Historical buildings

As both cases are very cultural cases, there are many buildings in the district that have a long history, and many of them have historical and cultural values. Therefore, the micro renovation of historical buildings requires more consideration than the residential buildings. And from residents' perspective, the micro renovation of historical buildings affects their well-being differently. One of the interviewees who lives near Yongqingfang said:

The most impressive thing... I think it is the renovation of historical buildings (...)

I feel that the sense of local characteristics is stronger after the renovation, which is great. and I always bring my friends there when they come to visit me (Mr. Wang, living near Yongqingfang)

The impact of buildings on residents' well-being can be seen from two aspects. Firstly, micro renovation of residential buildings increases the safety of housing through measures such as refurbishing residential houses and improving the quality of houses, which meets people's physiological and security needs. On the other hand, micro renovation of historical buildings highlights local characteristics and local culture, as well as improving the overall landscape in this area, thus improving residents' well-being by meeting people's higher-level psychological needs.

6.2.3 Clean and green

Sanitation

The hygiene of the living environment often has a direct impact on people's lives, and sanitary status is not only closely related to people's physical health, but also affects their subjective feelings toward a place. According to the interviewees, before the renovation, Yongqingfang, as an old city with high population density and poor sanitary environment, had many environmental hygiene problems.

Before, there was a lot of garbage on the ground, and the alley inside felt particularly dirty (Ms. Zhang, resident living near Yongqingfang).

(...) there were a bunch of broken bicycles parked everywhere (...) the air smelled like mud, there was no sidewalk (...) The bricks were fragmented, and not painted (Mr. Liu, resident living near Yongqingfang).

In response to sanitation requirements, more facilities have been added (e.g., classified garbage cans); and sanitation-related regulations have been set up (e.g., sewage disposal rules, garbage classification) to ensure the cleanliness of the living environment.

Garbage classification is doing quite well, the garbage cans are more than adequate, they also put a hand-washing tray and hand sanitizer next to the garbage cans, which is good (...) there are also a lot of sewage discharge regulations for restaurants (Ms. Zhang, resident living near Yongqingfang).

I was impressed by the change of sanitary conditions (...) before it was kind of disordered everywhere, now it is much better, a lot less garbage on the ground (Ms. Li, resident living near Yongqingfang).

Interviewees in Shawan Ancient Town also reported that the sanitation of the living environment has been improved compared to before, measures include relocating markets, restricting street vendors, adding sanitation-related equipment, etc.

That the environment is indeed much cleaner (...) Before a lot of stores would put their goods on the side of the road, so it seems that the road is very narrow and messy, now they are not allowed to do that (Ms. Wu, resident living in Shawan Ancient Town).

Green

As one of the most important components of the urban fabric, greenery has a positive effect on people's mental health. Vegetation cover is often used as one of the indicators to measure whether a city has a reasonable structure, and cities with high vegetation cover are often considered more livable, which contributes to well-being. The micro renovation aims to improve the residents' well-being by gradually increasing the green belts in the neighborhoods and improving the greening facilities in public places (e.g. flower base, lawns, etc.).

Yongqingfang was an old neighborhood before, the environment was fine, but a bit messy. I feel that there were basically very few green belts (...) After the renovation, I feel that the overall landscape is much better (Mr. Liu, resident living near Yongqingfang).

The sense of community can also be realized through the increase of greenery:

There are more trees in the neighborhood. I like sitting under those big trees, especially in summer (Ms. Li, resident living near Yongqingfang)

We (me and my child) always go for a walk after dinner. In our town, greening is good, and with the wind at midsummer night, it is very comfortable (Ms. Wu, resident living in Shawan Ancient Town).

The improvement of sanitation-related infrastructures and the settlement of regulations, such as garbage sorting, have laid the foundation for the improvement of sanitation, which caters to the physiological needs of residents. While the renovation of green is mostly meeting people's psychological needs.

6.2.4 Public open spaces

Parks, squares and community centers

Based on the information collected from the interviews we can find that public open spaces inside and outside the neighborhoods were mentioned frequently by the respondents. It has been proven that public open spaces inside the neighborhood (e.g. community centers, playgrounds, etc.) and public spaces outside the neighborhood (e.g. parks, public plazas, etc.) have a significant effect on residents' well-being (see Hunter et al., 2019; Paul et al., 2020). Those public open spaces provide residents with places to interact with each other and build bonding between them.

In our neighborhood, there are big banyan trees that have been growing for many years. There are often elderly chattering under the trees (...) we don't have a lot of people playing outside before, probably because we are not familiar with each other at the very first beginning. Now I know where people gather, I would sometimes go there and talk to people (Ms. Li, resident living near Yongqingfang).

There is sometimes square dancing in the public plaza, and you can always see people sitting next to the small round table beside the exercise equipment (Mr. Liu, resident living near Yongqingfang)

We have a community center in our neighborhood, and then the retired elderly can go there to play card games or Mahjong (Ms. Zhang, resident living near Yongqingfang).

The scope of the micro renovation also includes the parks nearby, when being asked what changes in the parks make the residents satisfied, the interviewees said:

The fence (in Shamian Park) was removed, the whole space felt more spacious (...) There is also a sidewalk built on the lawn, so for us, we don't have to walk around anymore, which is convenient (Ms. Zhang, resident living near Yongqingfang).

I found that the sidewalk had been turned into a running path (in Shamian Park), and I saw many people running there in the early morning and after dinner, which I thought was quite good (Mr. Liu, resident living near Yongqingfang).

Unlike Yongqingfang, there are fewer parks around Shawan Ancient Town, but the micro renovation also provides residents with more public spaces to hang out through micro improvements.

For example, the road located at the back of the school I mentioned, which is also connected to the ancestral hall. It was not good before, but now it's repaired,

so people would be more likely to go there for a walk (Mr. Chen, resident living near Shawan Ancient Town).

Except for the functions mentioned above, public open spaces are also closely related to people's higher-level pursuit and can help to realize self-actualization.

There are sometimes musical performances played by the retired (in Shamian Park) (Ms. Zhang, resident living near Yongqingfang).

The plaza in the middle of the park has been repaired, and sometimes there are singers singing there (Mr. Liu, resident living near Yongqingfang).

From the above transcript, we can see that the public open spaces (here refer to parks) offered residents a place to develop their own interests (musical performances, singing).

We can also perceive this from the urban acupuncture perspective. From the statements we can find that the renovations of public open spaces such as adding running paths in parks, renovating public plazas, can encourage social interaction. Those public open spaces, as acupuncture points, are chosen according to their locations and functions. For example, the Anning Square in Shawan Ancient Town is a crucial acupuncture point since it is located in the center of the town, and it is also one of the structural materials for cultural activities. Therefore, the renovation of these acupuncture points encourages more frequent social and cultural interaction, which brings vitality to a specific point and also has wider impacts to the whole area.

Cultural activities and cultural identity

Cultural integrity is influential in the development of the city; it is related to historical events and it cannot be separated from its historical past (Shao et al., 2017). Cultural consciousness is a fundamental condition for improving well-being, which is based on the cultural subject's understanding and love of his or her own national and regional culture, and is a form of value identity (Hao, 2015). According to Diener et al. (2002), culture provides form and shape to the self, which in turn influences how individuals feel and think about various aspects of their lives.

As the birthplaces of Cantonese opera, Yongqingfang and Shawan Ancient Town both contain immeasurable cultural values. Residents generally agree that the micro renovation has brought out the historical and cultural values, and believe that this dissemination and transmission of history and culture can enhance their sense of cultural identity.

The biggest impact is that it makes my life more colorful. For example, if my friends come to visit me, I can take them to the Yongqingfang, they have many interesting and decent activities there (Mr. Wang, resident living near Yongqingfang).

Compared with Yongqingfang, the culture of Shawan Ancient Town is deeply penetrated into residents' daily lives, so the residents of Shawan Ancient Town are more deeply tied to the local culture.

We have a pen ceremony for children, children are dressed the traditional clothing, and teachers would lead them to Liugeng Hall (a historical architecture of Lingnan characteristics which was built in Yuan Dynasty), it is a blessing activity that wishes kids with high grades in their studies (Ms. Wu, resident living in Shawan Ancient Town).

The cultural activities provide residents with more leisure options, which enrich their daily life:

The market has been changed into a small plaza. There are sometimes interesting activities there, such as Cantonese opera, book reviews and so on. We can listen to free operas together, that's kind of fun (Ms. Wu, resident living in Shawan Ancient Town).

Various cultural activities (Cantonese opera performances, photography exhibitions, etc.) also offer residents the opportunity to engage and participate.

There was a Cantonese opera performance that impressed me a lot. It was in 2019, the opera was held on the street, like a large cultural show (...) children were also involved, they were wearing traditional costumes and putting on makeup, which was quite fun (Mr. Liu, resident living near Yongqingfang).

To sum up, the residents are satisfied with the detailed changes of public space and recreation space, and this kind of micro changes of public space can enhance their well-being through meeting their psychological needs.

6.2.5 The downsides of micro renovation

Cultural atmosphere

Although most of the interviewees agree that the overall landscapes have been improved by micro renovation, there are residents from Yongqingfang who argue that the renovation has led to commercialization, which results in the loss of the original Lingnan atmosphere, and also completely changed the original characteristics of the area and the atmosphere of the old Canton, especially in Yongqingfang.

It was a residential area, but now it turns out to be a commercial center. It had a peaceful feeling before, but look what we have right now (...) I'm now getting used to it but it is weird when you can actually feel the atmosphere here fade away (Mr. Wang, resident living near Yongqingfang).

Well, sometimes it bothers me. Before the renovation, it was very quiet and I have a sense of belonging here, I was familiar with my neighbors and friends, but some of them left because of the demolition or the tourism and commercialization here, so the renovation kind of broke my connection with old neighbors (Mr. Liu, resident living near Yongqingfang).

Noise pollution

Although there is a gradual improvement by micro renovation, we found during the interviews that many residents believe that the renovation of Yongqingfang has caused noise pollution to their lives, mostly caused by continuous construction and tourists.

Now the second phase of the project is not allowed to be constructed at night because the noise was too loud (Ms. Zhang, resident living near Yongqingfang). I think the bad impact of it, hmmm, because here is quite commercialized now, and then tourism is also dominating, there is always a lot of tourists, it is of course much noisier, I sometimes feel annoyed (Mr. Wang, resident living near Yongqingfang).

So from this side, although the micro renovation of Yongqingfang has comprehensively changed the previous dilapidated appearance of the old city region, there are still bad impacts.

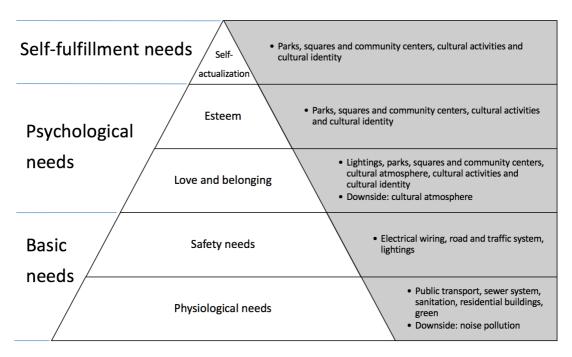


Figure 20. Influence of micro renovation on residents' well-being

Using Maslow's hierarchy of needs theory, this chapter focuses on understanding the impacts of micro renovation on the residents' lives from their perspective. The analysis provides insight into how these measures affect residents' well-being through satisfying what kinds of needs.

Chapter 7 Conclusion and Discussion

7.1 Chapter introduction

The following chapter concludes this study. A summary of the research is presented, and the findings of the study are discussed and interpreted. The significance of this study in the effect of micro renovation on residents' well-being is examined. Limitations and recommendations for further research end the chapter.

7.2 Conclusion and discussion

This study aims to understand and explore the latest urban renewal approach in China by answering the research question:

How does micro renovation affect residents' well-being?

Through the case studies and interviews, we notice that micro renovation can affect residents' well-being from four aspects, respectively buildings, clean and green, physical infrastructure and public open spaces.

According to the interviews, the renovation of physical infrastructure is the most frequently mentioned aspect, from the road tiles to road and traffic system, residents' feedback on the changes of physical infrastructure are mostly positive, so it can be seen that micro renovation of physical infrastructure can improve residents' well-being.

From the perspective of Maslow's hierarchy of needs, the micro renovation of physical infrastructure is mainly focused on satisfying people's basic needs, i.e., the lowest level of physiological needs and safety needs. It is noteworthy that since both cases use tourism as a regional development strategy, the renovation of lighting has more functions such as highlighting the cultural characteristics of the place, thus enhancing the sense of community and satisfying people's needs at the psychological level.

In terms of clean and green, it is the indicator that people generally feel most impressed. Compared to the previous scene where there were dilapidated houses and broken bicycles parked everywhere, the renovation has completely changed the overall landscape.

Analyzing it using the hierarchical model, the micro renovation of sanitation has largely ensured people's physiological and safety needs (basic needs), while the renovation of

greening is more complicated. On the one hand, the increase in greenery has improved environmental hygiene and created a better living environment for residents, thus improving residents' well-being by meeting their basic needs. On the other hand, this improvement in greening also encouraged people to engage more in social activities. For example, a resident from Yongqingfang said that the improvement of greenery in the neighborhood and public open spaces made them more willing to hang out and participate in social activities. Therefore, we can find that clean and green can enhance residents' well-being through catering to their basic needs and psychological needs.

This thesis divided the buildings into residential buildings and historical buildings. In terms of residential buildings, the micro renovation is mainly focusing on ensuring people's physiological and safety needs by adding elevators, refurbishing façades, while the renovation of historical buildings is more for the purpose of highlighting local culture. Therefore, the micro renovation of buildings caters to both basic and higher-level needs.

The public open spaces are closely related to people's higher stage needs. As the structural carriers of people's social life and cultural activities, public open spaces play a crucial role in meeting people's social needs.

This study found that public open spaces can also be considered as a precondition for people's highest level needs. As we mentioned in the case study and interview analysis, the newly created and the optimization of existing public open spaces provide a place for residents to realize their ambitions and participate in social and cultural activities, which contributes to the well-being of residents.

Therefore, we can conclude that micro renovation has increased the standard of living, quality of life and well-being for local residents through the renovation of physical infrastructure, buildings, clean and green and public open spaces.

In terms of what aspect is considered as most important, this study found that the renovation of physical infrastructure is most frequently mentioned, which influences people's well-being through meeting their basic needs. While the public open spaces are found closely related to residents' higher level needs (psychological needs and self-actualization needs).

Although micro renovation has its advantages, the downsides that could weaken residents' well-being should also be paid attention to. The first is the noise pollution that is caused by micro renovation itself, especially the night construction. Since there are always

time limits for the project, the construction sometimes has to take place at night, which weakens residents' well-being at least during the renovation.

Second is the weakening of the cultural atmosphere, which is more obvious in Yongqingfang. Although most of the respondents agree that the renovation can highlight local culture, some of them are concerned about the decaying of the cultural atmosphere. They argue that although the micro renovation has restored the buildings and transformed the neighborhood, some of the latest cultural elements (e.g., new-style buildings) incorporated therein have destroyed the original cultural feeling of the area. Moreover, as the development strategy of this area is mainly commercialization and tourism, it also destroys the previous residential atmosphere to a certain extent, resulting in the weakening of the original cultural atmosphere.

In this paper, Maslow's hierarchy of needs theory plays an important role. We used the theory to represent residents' well-being, so that each measure of micro renovation can be made to correspond specifically to which levels of residents' needs are met, thus understanding how micro renovation affects residents' well-being.

The application of urban acupuncture theory, on the other hand, is related to the subsequent development of the region. From the case studies and analysis, we can find that in both cases, within the neighborhoods, micro renovation uses public spaces (e.g., community centers, public plazas) as acupuncture points, and promotes social interaction through the revitalization and improvement of those public open spaces. This statement is also proved by respondents (they are more likely to go to the public open spaces after the micro renovation). And the renovation of road and traffic systems can be considered as an unblocking of meridians, which expanded the impact of acupuncture points outward.

From a wider perspective, Yongqingfang itself is also connected to the acupuncture points nearby (e.g., Shameen, Shaxiajiu Commercial Streets, etc.), thus revitalizing the whole area. The micro renovation of Shawan Ancient Town is also connected to the surrounding areas (e.g. Dishuiyan Park and Baomo Garden next to the town), but its acupuncture effect is not as significant as that of Yongqingfang due to its remote location and immature road and transportation system.

The next section is the limitations of this study and recommendations for further research.

7.3 Limitation and Recommendation

This research has some limitations that should be addressed by future research. The first is the limitation of the hierarchical model we use in this study. In our case, one of the problems is that the same product or service can gratify a number of needs at once (Rao, 2017). For example, in this study, the renovation of public open spaces can satisfy several levels of needs. This is a downside of this study, and also a drawback of the model.

The second limitation concerns the age of interviewees. Because this thesis utilized a telephone interview (online interview) format, those who were willing to be interviewed were generally young (aged around 18-40 years old). And for younger respondents, their concerns were different from those of the elderly or children. For example, for young people, the ways of leisure and entertainment may be more diverse and they are more receptive to new things, such as the integration of modern and ancient cultures. So for them, participating in the cultural activities in Yongqingfang is a good way to spend their time, which enriches their leisure options, thus enhancing their well-being. While for the elderly, they may be more concerned about the micro renewal of public open spaces such as community centers and parks. As individual's needs and preferences vary from those of younger or older age cohorts (Ruth & Franklin, 2014), their definitions and perspectives towards well-being would differ, therefore, the age of the respondents in this research might limit the factors that affect the well-being of the elderly and children.

Third, both cases in this research are using tourism as a development strategy, hence, the improvements and problems might also be related to tourism development (e.g., noise pollution).

Fourth, the two cases in this study are about micro renovation of historic neighborhoods with long history and cultural heritage, so the micro renovation measures are more related to the preservation of cultural heritage. Compared with micro renovation in historic neighborhoods, the focus in ordinary neighborhoods may differ, and the factors affecting residents' well-being may be different. Hence, the conclusions in this thesis do not apply to all micro renovation cases.

In this study, we did not include the impact of public engagement since our interviewees are not engaged in the process. However, we also realized that public participation is one of the ways for citizens to achieve their self-actualization needs. Hence,

for further research, it might be a good idea to include and explore the relationship between citizen participation and their well-being.

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Appendix

Appendix A. Interview guide (based on Hay, 2016)

Type of	Example Questions	Reasons	Literature
questions			
Descriptive	What is the full name of your	Easy to answer	General Questions
(Primary	neighborhood? How close it is to	Opening question	
question)	Yongqingfang/Shawan Ancient Town?		
	How long have you been living here?		
Opinion	Can you tell me about the history of		
(secondary	your neighborhood and		
question)	Yongqingfang/Shawan Ancient Town		
	nearby?		
Storytelling	Do you have any interesting story to	Details on informants'	
(primary	share? For example, some interesting	lives and experiences.	
question)	story about your childhood or the		
	time you spend here (in the		
	neighborhood and		
	Yongqingfang/Shawan Ancient Town)?		
Descriptive	How do you think of the micro		Upcoming
(secondary	renovation in Yongqingfang/ Shawan		questions
question)	Ancient Town? What changes of micro		(optional)
	renovation in Yongqingfang/ Shawan		
	Ancient Town brings to you? What		
	impress you most (for example, the		
	renovation of housing, the		
	improvement of infrastructure and		
	public spaces, etc?)		
Descriptive	Can you give me an example and		
(secondary	explain how it impacts your life?		
question)			

Physical infrastru	cture			
Descriptive	Are there any changes regarding to	Allows informant to	Physical	
(primary	the infrastructure and public spaces?	become accustomed to	infrastructure and	
question)	(For example, transport infrastructure	the interviews for asking	well-being	
	such as bus stops, metro station, etc.)	deeper reflection later		
Descriptive	Can you give me an example of how	Identify what changes did		
(secondary	they changed and how they influence	micro renovation bring to		
question)	your life?	the physical		
Opinion	Do you think it is a good change or	infrastructures and how		
(secondary	maybe you have opposite view?	they influence people's		
question)		lives		
Buildings				
Descriptive	What changes has micro renovation	Allows informant to	Buildings and well-	
(primary	brought regarding to the buildings	become accustomed to	being	
question)	(such as the infrastructure in the	the interviews for asking		
	dwellings, e.g., elevators, stairs and so	deeper reflection later		
	on)?			
Descriptive	Can you give me an example of how	Identify whether they		
(primary	those changes on buildings influence	think the improvement		
question)	your life?	on buildings can affect		
		their well-being		
Clean and green (sanitation and greenery)			
Descriptive	How do you feel about the sanitation	Identify the changes of	Sanitation,	
(primary	and greening before and after	sanitation and greenery	greening and well-	
question)	renovation? Can you describe it, for	and see how it impact	being	
	example, what impress you most in	residents' well-being		
	terms of the living environment?			
Public open spaces				
Descriptive	Where do you usually go when you	Identify whether the	Public open spaces	
(primary	are free?	micro renovation affect	and well-being	
question)				

Descriptive	You mentioned that you've been living	the public spaces nearby	
(primary	in this neighborhood for xx years, are	and how	
question)	there any changes after the micro		
	renovation of Yongqingfang/ Shawan		
	Ancient Town regarding to your		
	community/ neighborhood? Is there		
	any change before and after the micro		
	renovation regarding to the		
	community?		
Descriptive	Can you give me an example of how it	Encourages sustained	
(secondary	changed? (For example, there are now	input from the	
question)	more public spaces for residents so	respondent	
	they can have more activities in those		
	places)		
Opinion	Do you feel like home in this		
(primary	neighborhood? What brings you the		
question)	sense of belongings?		
Descriptive	Since Yongqingfang/ Shawan Ancient	Figure out the	
(primary	Town is cultural heritage that can	development model	
question)	represent Guangzhou's culture, what		
	effect do you think the micro	Allows informant to	
	renovation has brought regarding to	become accustomed to	
	culture and cultural activities?	the interviews for asking	
		deeper reflection later	
Opinion	What do you think are the	Identify the drawback of	
(primary	disadvantages of micro renovation?	micro renovation and see	
question)		how to improve this	
		approach	
	Do you have any question for me?		Clearing house
			question (Closing)

Appendix B. Pseudonyms of respondents

MR. WANG Resident who lived near Yongqingfang for Data gathering: Semi-structured inmore than 5 years. Location: Home MS. LI Resident who lived near Yongqingfang for Data gathering: Semi-structured inmore than 4 years. Data gathering: Semi-structured indepth interview (phone interview) Location: Home MS. ZHANG Resident who lived near Yongqingfang for Data gathering: Semi-structured in-			
MS. LI Resident who lived near Yongqingfang for Data gathering: Semi-structured inmore than 4 years. depth interview (phone interview) Location: Home	ı	more than 5 years.	depth interview (phone interview)
MS. LI Resident who lived near Yongqingfang for Data gathering: Semi-structured in- depth interview (phone interview) Location: Home			
more than 4 years. depth interview (phone interview) Location: Home			Location: Home
Location: Home	F	Resident who lived near Yongqingfang for	Data gathering: Semi-structured in-
	1	more than 4 years.	depth interview (phone interview)
MS. ZHANG Resident who lived near Yongqingfang for Data gathering: Semi-structured in-			Location: Home
	ANG I	Resident who lived near Yongqingfang for	Data gathering: Semi-structured in-
more than 25 years. depth interview (phone interview)	1	more than 25 years.	depth interview (phone interview)
Location: Home			Location: Home
MR. LIU Resident who lived near Yongqingfang for Data gathering: Semi-structured in-	ا ا	Resident who lived near Yongqingfang for	Data gathering: Semi-structured in-
more than 15 years. depth interview (phone interview)	ı	more than 15 years.	depth interview (phone interview)
Location: Home			Location: Home
MR. CHEN Resident who lived near Shawan Ancient Data gathering: Semi-structured in-	IEN F	Resident who lived near Shawan Ancient	Data gathering: Semi-structured in-
Town for more than 10 years. depth interview (phone interview)	7	Town for more than 10 years.	depth interview (phone interview)
Location: Home			Location: Home
MR. YANG Resident who lived near Shawan Ancient Data gathering: Semi-structured in-	NG F	Resident who lived near Shawan Ancient	Data gathering: Semi-structured in-
Town for more than 20 years. depth interview (phone interview)	1	Town for more than 20 years.	depth interview (phone interview)
Location: Home			Location: Home
MR. HUANG Resident who lived near Shawan Ancient Data gathering: Semi-structured in-	JANG F	Resident who lived near Shawan Ancient	Data gathering: Semi-structured in-
Town for more than 8 years. depth interview (phone interview)	7	Town for more than 8 years.	depth interview (phone interview)
Location: Home			Location: Home
MR. ZHAO Resident who lived near Shawan Ancient Data gathering: Semi-structured in-	AO I	Resident who lived near Shawan Ancient	Data gathering: Semi-structured in-
Town for more than 8 years. depth interview (phone interview)	7	Town for more than 8 years.	depth interview (phone interview)
Location: Home			Location: Home
MS. WU Resident who lived near Shawan Ancient Data gathering: Semi-structured in-	J	Resident who lived near Shawan Ancient	Data gathering: Semi-structured in-
Town for more than 30 years. depth interview (phone interview)	1	Town for more than 30 years.	depth interview (phone interview)
Location: Home			Location: Home