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South China University of Technology

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基于“日常都市主义”的广州老旧小区公共
空间更新

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Renewal of Old Community Public Space in Guangzhou Based on "Everyday Urbanism"

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摘 要

中国近 20 年的城市设计主要注重城市空间美学的营造与大型城市项目的建造，却忽略了城市设计应该基于人的日常生活进行有温度的设计。老旧社区作为当前中国存量优化时代下的主要更新对象，与城市自上而下的规划建设密不可分，但同时也不乏使用者的自我意识在公共空间中的作用与体现。以往以物质空间规划为主的自上而下的设计模式开始逐渐显示出其不足的方面，这种设计模式会以一种强介入的方式忽略普通人的日常生活。因此，在设计过程中关注居民的日常生活显得十分重要且迫切。在此形势下，日常都市主义对普通大众开放式的关注，使其被看作是一种对公共空间价值进行多维度思考的城市设计方法。本研究试图以日常都市主义为理论基础，分析广州老旧社区公共空间中居民自发性行为的特点与成因，从而提出一套相对新颖的老旧社区公共空间更新设计方法，以增加城市更新对居民日常生活的关注。

本文首先论述了日常都市主义理论的起源与发展，发现日常都市主义理论适用于指导中国老旧社区公共空间更新。并通过对比分析单向主导的城市更新案例和双向结合的城市更新案例，以映证日常都市主义理论应用于中国城市更新的合理性。然后，对广州的德欣社区、共和村社区和昌乐园社区进行调研，总结出广州老旧社区公共空间中现存的五种自发性行为，并根据其行为特征提出五类广州老旧社区公共空间更新设计方法。最后，将这五类更新设计方法与广州昌乐园社区的具体现状结合，以解决实际场地中的矛盾。并且，在设计的过程中收集居民的需求与其对设计方案的评价，以保证设计方案能真正满足居民的日常生活需求。

关键词：日常都市主义；老旧社区；公共空间更新；自发性行为

Abstract

China's urban design in the past 20 years has mainly focused on the creation of urban space aesthetics and the construction of large-scale urban projects, but neglected that urban design should be based on people's everyday life. As the main renewal object in the current era of stock optimization in China, the old community is inseparable from the top-down planning and construction of the city, but at the same time, there is also the role and embodiment of the user's self-awareness in the public space. The previous top-down design model based on material space planning has gradually shown its shortcomings. This design model often ignores the everyday life of ordinary people in a way of strong intervention. Therefore, it is very important and urgent to pay attention to the everyday life of people in the design process. In this situation, the open attention of everyday urbanism to the general public makes it regarded as an urban design method that considers the value of public space in multiple dimensions. This study attempts to analyze the characteristics and causes of residents' spontaneous behavior in the public space of old communities in Guangzhou based on the theory of everyday urbanism, so as to propose a relatively new design method for the renewal of old community public space in order to increase the attention of urban renewal to the everyday life of residents.

This article first discusses the origin and development of Everyday Urbanism, and finds that the Everyday Urbanism is suitable for guiding the renewal of old community public space in China. And by comparing and analyzing the case of urban renewal dominated by one direction and the case combined by two directions, it proves the rationality of everyday urbanism theory in urban renewal in China. Then, through the investigation of Dexin Community, Gonghe Cun Community and Changleyuan community in Guangzhou, this article summarizes five kinds of spontaneous behaviors existing in the public space of old communities in Guangzhou, and puts forward five kinds of renewal design methods of old community public space according to spontaneous behaviors' characteristics. Finally, these five types of renewal design methods are combined with the specific status quo of Changleyuan Community to solve the contradictions in the actual site. In the meanwhile, collecting the needs of the residents and their evaluation of the design to make sure that this design scheme can truly meet the needs of residents in their everyday lives.

Key Words: Everyday Urbanism; Old Communities; Public Space Renewal; Spontaneous Behavior

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Chapter 1 Introduction

1.1 Research Background

1.1.1 The Essence of the City is Life

People are the protagonists of the city, and their everyday life constitutes the largest phenomenal field of the city. According to the famous French historian Brodeur, the structure of history is ultimately a "structure of everyday life", and human civilization is made up of the most ordinary and mundane everyday lives of individuals ^[1]. It is the constant combination and change of each individual's ordinary everyday life that gives the city its rich dimensions and meaning.

In the past few centuries, the study of architecture and urban planning has deconstructed and analyzed cities through abstract concepts, emphasizing the structural and regular aspects of cities, and imposing order on the chaotic spatiality and behaviors in urban environments. However, this approach gradually neglects the need for a genuine grasp and understanding of urban space. It requires not only top-down summarization, but also the abandonment of abstract concepts and theoretical formulas. It necessitates placing humans as the foundation for urban research and delving deep into the essence of urban space – the everyday life, and returning to the living nature of urban space ^[2].

1.1.2 The Limits of Urban Design in China

China's urban design over the last 20 years has been a dream of urban designers speculating on the aesthetics of space. However, the truth is that Chinese cities are still losing their character and becoming increasingly alienated, as the big axes, big squares and big roads are followed by more and more spectacular and concentrated shopping streets, large shopping malls, theme parks, and costly and innovative public cultural buildings. These one-size-fits-all urban designs organize spectacular urban spaces, but ignore the fact that urban design should be based on the human scale of subtle creation, and their quick and easy logic has led local governments to increasingly recognize urban design as a means of attracting funding ^[3]. Some of them have succeeded, but the majority have failed, as they consistently demonstrate design ideologies that are increasingly deviating from the essential nature of publicness in urban design and indiscriminately dismissing the everyday life practices of the general public ^[4].

In reality, these 'intact' urban public spaces are actually being re-inhabited, re-used and re-created by residents in new ways, and are participating in their own design in a self-constructive way (Figure1-1). However, these spontaneously transformed spaces that arise from the differentiated everyday lives of the people are often subjected to rectification or eviction due to

their informal and unauthorized nature ^[5]. Nevertheless, the users of urban public spaces continue to maintain their own habits. Millions of ordinary people accumulate their everyday lives day after day, thus reconnecting the isolated spaces and constantly modifying the existing urban reality that designers have evaded when designing cities ^[6]. Designers must realize that taking care of the mundane but extremely important aspects of everyday life is the most important part of the urbanization task ^[7].



a) A well-ordered square - Mini Park

b) Community public space - informal food market

Figure 1- 1 The Informal Evolution of Urban Spaces

(Source: Reference [3])

1.1.3 Deviations in Implementation Effect of Old Community Renewal

After the establishment of New China, in order to quickly address the nationwide housing problem, a large number of residential buildings were constructed. According to statistics from the Ministry of Housing and Urban-Rural Development in 2017, old residential communities accounted for 40% of the total housing stock nationwide, with a combined floor area of 4 billion square meters. According to the Property Rights Law of China, the land use period for residential purposes is 70 years. Therefore, these old communities built in the 1980s still have at least 30 years of usability, which means that these old residential buildings from the 1980s will continue to serve their functions in the current stage and for a considerable period in the future. These large in number and still valuable old communities have become the main focus of urban development in China's current stage. Driven by the market economy, most of the renewals of these old communities adopt an approach of extensive demolition and construction, aiming for standardized upgrades. However, this approach often fails to adapt to the specific needs and everyday lives of the community residents.

The renewal of old communities involves actions to improve living conditions, but often lacks communication with residents and attention to their everyday lives. These efforts to enhance residents' living conditions are typically implemented in a top-down manner, with

limited communication and observation of residents' activities in the community. Residents often find themselves at the receiving end of decision-making and management systems, passively accepting the outcomes of the renovations. However, residents are the primary participants in the reality of community life, their active engagement and diverse agency are not fully utilized. This mismatch leads to deviations between the outcomes of the renovations and the everyday life needs of the residents.

In February 2023, the Department of Housing and Construction and the Department of Urban Planning and Natural Resources in Guangzhou jointly issued the "Implementation Measures for the Revitalization and Utilization of Existing Buildings in Old Communities in Guangzhou." The aim is to promote the sustainable development of old communities, improve public services, enhance community vitality, strengthen cultural functions, stimulate market vitality, and promote innovation and entrepreneurship. The Measures specifically emphasize that in the revitalization and utilization of existing buildings in old communities, three major principles should be followed: "prioritizing people's livelihood and addressing shortcomings," "improving quality and enhancing functionality," and "co-governance, sharing, and organic renewal." This is to address the significant deviations between the actual effects and implementation outcomes of the renovations of old communities.

As the main venue for the daily activities of the residents in the community, the aim of renovating the public spaces in old communities is to satisfy the needs of the users while preserving the original community memory. An important prerequisite for meeting the daily needs of residents is to fully understand the role of public space in relation to the daily activities of residents in old communities, as well as the distribution of their daily activities ^[8].

1.1.4 Urban Space Renewal Begin to Return to Everyday Life

Currently, China's urbanization rate has exceeded 60%, and urban development has shifted from rapid urbanization to a stage of deep urbanization ^[9]. The focus of urban construction in China has shifted from incremental expansion to stock development. In 2017, the Ministry of Housing and Urban-Rural Development issued the "Urban Design Management Measures," which explicitly stated that urban design work should respect the laws of urban development and adhere to the principles of people-oriented and gradual advancement. In his visit to Shanghai in 2019, General Secretary Xi Jinping put forward the important concept of "people's city built by the people, people's city for the people", and urban governance should follow the right path of "people's city". Guided by the concept of "people's city", China's urban development has started to return to the humanities, focusing on people's everyday life and the

high-quality construction and development of micro everyday life spaces.

As the fundamental unit of a city, the community bears the everyday life and social activities of residents and is the closest domain to their lives. Since 2019, the nationwide campaign for the renovation of old communities has been extensively carried out, with the aim of improving residents' quality of life and creating a better living environment. Community public spaces, as typical venues for residents' daily interactions, hold various possibilities for new social compositions and spatial developments^[10]. High quality community public space is an important guarantee to enhance residents' sense of access, happiness and security^[11]. To construct high-quality community public spaces, it is crucial to return to the realm of everyday life and observe these spaces from a bottom-up perspective.

The concept of Everyday Urbanism is based on the phenomenon that "well-designed" spaces are continually reused and recreated by residents in new ways. It offers a fresh perspective for understanding urbanization and expresses a social language, local culture, and urban design attitude derived from localized urban life. Nowadays, architects, planners, and students around the world have begun to actively consider Everyday Urbanism and the everyday life of existing cities in their designs. They are gradually adjusting their design strategies accordingly^[12]. As Jane Jacobs advocates in *The Death and Life of Great American Cities*: before you start planning and designing, look out the window; look around you; look at the lives of people^[13].

1.2 Subjects of Study and Related Concepts

1.2.1 Subjects of Study

This thesis focuses on "public spaces in old communities in Guangzhou".

"Old Community" refers to a community where the old residential buildings and their living environment gradually undergo a process of comprehensive obsolescence in terms of natural geographical space, socio-economic form, and a specific period of use^[14]. According to the time of community construction, old communities can be classified into three specific types: traditional neighborhood communities, danwei-based communities, and street-based communities. This study focuses on the danwei-based communities within the old communities, specifically referring to the communities that were originally constructed based on the planned economic system with units as the core organization, but gradually transformed due to the introduction of market economy, unit relocation, or dissolution.

According to statistics, there are 779 old communities in Guangzhou with inadequate functional support, outdated facilities and equipment, ageing infrastructure and poor

environment. They have a total floor area of 51.8 million square metres and involve 2.6 million residents, accounting for 18% of Guangzhou's resident population. Since 2016, promoting the transformation of old communities has been included in Guangzhou's government work report, and is increasingly becoming a core task of urban renewal in the city ^[15]. The danwei-based communities are the main type of existing old communities in Guangzhou. With the dissolution of units, the composition of community residents has changed. The influx of non-unit residents from outside has resulted in danwei-based old communities not only retaining the united culture of the original unit residents but also possessing a diverse culture from the incoming population. As a result, these communities have developed rich community culture and everyday life. Therefore, this study specifically focuses on the danwei-based old communities in Guangzhou.

Community public space is a place for the everyday life of community residents, and it is closely linked to the community residents. Compared to urban public spaces, community public spaces tend to be more oriented towards a shared "common space". In this article, community public space mainly refers to the open public spaces within the community, including the street space, centralized public green spaces, plazas, park spaces, as well as the public territory spaces between adjacent residences within the community.

1.2.2 Related Concepts

1.2.2.1 Everyday Urbanism

In the late 20th century, Margaret Crawford, John Kaliski, and others established a connection between "everyday life" and "urbanism", forming a critical approach to modern urban design along with the New Urbanism and Post Urbanism. This provided a new perspective on understanding urbanization and sparked people's attention to local cultural life ^[3].

However, Everyday Urbanism is different from both New Urbanism and Post Urbanism. New Urbanism attempts to restore traditional spatial forms and create a completely new urban space. Post Urbanism aims to shape novel spatial forms through avant-garde and radical spatial strategies, making everyday spatial experiences unfamiliar. Everyday Urbanism is an urbanist tendency to rediscover the significance of established spaces from everyday life, transforming spatial environments into micro and low-tech urbanisms through the rediscovery of everyday experiences ^[16,17].

Everyday urbanism, with its focus on the everyday, pays particular attention to the collective wisdom and local experiences that are often overlooked by urban planners, architects, and other professionals (Figure 1-2). It maintains an open attitude towards urban diversity and,

based on this, seeks to construct an inclusive, diverse, and non-dogmatic approach to urban renewal.



Figure 1- 2 Everyday Life Full of People's Wisdom

(Source: Reference [3])

Everyday urbanism requires a complete repositioning of designers, transferring the power from professional experts to ordinary people. It utilizes the extensive knowledge found in everyday life as a catalyst to bridge the gap between professionals and users, as well as between professional expertise and daily experiences. By doing so, it aims to resolve social conflicts at their root ^[18].

1.2.2.2 Everyday Life and Everyday Spaces

Everyday life is the non-abstract and actual life. Most scholars define everyday life as "activities primarily involving ordinary people, routine and less ceremonial, centered around secular life, such as the basic activities of clothing, food, housing, and transportation, as well as social interactions including marriage, funeral, conversation, and other activities, along with non-creative everyday conceptual activities that occur alongside these activities" ^[16]. Everyday life always takes place within a person's immediate environment, characterized by spontaneity, unconsciousness, repetitiveness, pragmatism, and empiricism ^[19]. Henri Lefebvre pointed out that the essence of everyday life is ambiguity, which is reflected in the interweaving and overlapping of everyday life activities. However, the clear functional zoning in modern urban design often obscures the richness of everyday life. This has led to various practices of everyday urbanism, which redefine space through small-scale and incremental functional expansions, such as roadside stalls and street performances. These practices involve recombining, interpreting, and creatively exploring micro-spaces within the city, in order to better meet the everyday life needs of residents and even evoke broader social impacts through cumulative

effects ^[20].

Everyday life space refers to the space occupied by various activities generated in people's everyday lives. Its essence lies in the spatial projection of various activities that constitute people's everyday life and the corresponding social relationships. Everyday life space is neither simply a materialistic, geometric physical space, nor is it solely an abstract space determined purely by psychology and actions. It is the sum of individuals, their activities, and the space they occupy.

Everyday life space not only provides necessary spatial conditions for people's diverse everyday lives but is also an important component of the urban spatial system. Starting from everyday life space, architecture and the city can be understood as symbols and markers of different individuals and their everyday lives. People's everyday lives always unfold through continuous transitions between different spaces, including residential dwellings, workplaces, consumer spaces, and non-consumer public places.

Furthermore, everyday life space is not only the material space where people organize their lives but also provides an environmental atmosphere for satisfying their spiritual needs and relieving stress. Therefore, in addition to residential spaces, workplace spaces, and consumer spaces, the public domains of the city such as squares, streets, parks, and green areas that serve as spaces for interaction and leisure also fall under the category of everyday life space ^[21].

1.2.2.3 The Spontaneous Phenomenon of Public Space

From the perspective of everyday urban theory, urban public spaces exhibit spontaneity. Within urban public spaces, there are numerous resident-led spatial practices such as space appropriation, self-initiated constructions, and spontaneous redesigns. The aggregation of these spontaneous actions can be seen as spontaneous spatial phenomena. (Figure 1-3)



a) Hanging objects on parapets



b) Use of private furniture in public spaces

Figure 1- 3 Spontaneous Spatial Phenomena in Everyday Life

(Source: Author's own photograph)

According to the relevant explanations in the theory of self-organization, the "spontaneity" in spontaneous spaces does not imply unrestricted behavior. Instead, it refers to activities that

are not driven by external "specific" instructions but can autonomously organize and evolve construction activities ^[22]. These non-organized, spontaneous behaviors initiated by individual agents based on their own volition are the result of individual autonomous choices, independent of the will of others. However, they are highly dependent on external environmental conditions and influenced by relatively broad factors such as geographic climate, historical context, spiritual beliefs, folk culture, and lifestyle habits.

1.2.2.4 Danwei-based Old Community

"Old community" refers to the overall functional state of residential units and their living environment, which undergoes a process of "comprehensive obsolescence" within a certain natural geographical space, socio-economic form, and period of use ^[14].

The danwei-based community is a product of the socialist public ownership and planned economic system in the backdrop of the establishment of New China. Under this system, danweis (work units) allocate housing and corresponding living facilities to their employees within defined land areas. The majority of residents in a danwei-based community belong to the same work unit, sharing a common danwei identity and a strong sense of danwei affiliation. Housing is provided by the work units, and the management of the residential area becomes part of the work unit's affairs, implemented by the work unit's logistical department. The danwei-based community reflects and represents the entire danwei system in urban social life^[23].

1.2.2.5 Community Public Space

The term "public space" first emerged in sociological and philosophical works in the 1950s. In the early 1960s, the concept of "public space" gradually became incorporated into the field of urban planning and appeared in publications by authors such as Jacobs (1964), Mumford (1960), and later in architectural academic works. In a broad sense, community public space refers to the open spatial entities between buildings within a community or group of communities. It serves as an open place for community residents to engage in public interactions and various activities, with the purpose of serving the general public. Its formation and changes occur within the larger context of urban public space and possess the fundamental attributes of public space. Community public space extends beyond individual living spaces and is a spatial entity that revolves around human participation and social activities ^[24].

1.3 Research Purpose and Research Significance.

1.3.1 Research Purpose

As a typical space for daily social interactions among residents, community public spaces have rich spontaneous renewal phenomena. However, research on the renewal of old

community public spaces based on everyday urbanism has not yet gained momentum in China. There is still a lack of a systematic theoretical framework, both in terms of overall research quantity, depth and quality of research.

This article aims to explore from the perspective of everyday urbanism, focusing on the everyday life of ordinary residents in old communities. It takes the spontaneous renewal phenomena in old community public spaces as a starting point, returning to the essence of things to seek the fundamental principles and methods of spatial design. Considering the needs of modern societal development, it attempts to find inspiration from bottom-up spatial creation and spontaneous design for the renewal of old community public spaces. The article seeks to discuss sustainable community revitalization and development directions that can both accommodate the uniqueness of old communities and meet the evolving needs of residents' everyday lives.

1.3.2 Research Significance

The core value of this study is to start from life phenomena and return to the essence of things to find the basis and methods for design. By observing the widespread phenomena of "spontaneous redesign" and "space reuse" in old community public spaces from a bottom-up perspective, this article aims to identify potential deviations in top-down strategies for revitalizing old communities. It provides targeted, supplementary, and corrective measures to emphasize the importance of continuity in everyday life within public spaces during the renewal of old communities. Additionally, it highlights the significance of improving spatial quality and refocuses the attention of old community revitalization on the everyday lives of residents. The ultimate goal is to gradually rebuild a healthy and culturally rich public space system for old community public spaces, improve the quality of living spaces for residents, and revitalize old communities.

1. Theoretical significance

The spontaneous self-organization of residents in their everyday lives creates a unique community atmosphere, with a considerable vitality and sustainable development potential, which serves as a powerful complement to the personalized shaping of cities. However, unlike professional planning, design, and construction, these spontaneous practices may result in chaotic and disorderly spaces. Nevertheless, it is undeniable that the motivation behind these activities is the desire and need for a better everyday life within the constraints of limited resources.

While reflecting on the problems of top-down community public space renewal

construction in China, this article thinks about the role and significance of residents' spontaneous behaviors based on their everyday life needs for the public space of old communities, so as to further promote and supplement the research topics related to the renewal of old communities. At the same time, this article will further explore the localized application of the theory of everyday urbanism.

2. Practical significance

Based on the research of everyday urbanism theory, this article starts from a micro perspective of everyday life and combines practical experience to conduct field research on spontaneous renewal phenomena in public spaces within old communities in Guangzhou. By observing and analyzing the underlying logic behind these phenomena, a comprehensive strategy for public spaces in old communities, based on residents' daily lives, is proposed. This strategy aims to promote the tailored development of old communities, meeting the actual needs of residents' everyday lives. It provides a new logic of thinking for urban design in China.

1.4 Research Content and Research Methods

1.4.1 Research Content

This article first discusses and analyzes the origin and theoretical development of relevant concepts in everyday urbanism. Through research, it is found that existing theories have guiding significance for studying the renewal of public spaces in old communities.

Secondly, based on the theory of everyday urbanism, this article takes the phenomenon of spontaneous construction and use of public spaces in old communities in Guangzhou as a starting point. It adopts a bottom-up perspective to observe and summarize the types and spatial characteristics of spontaneous use behaviors in public spaces within the daily lives of residents in old communities in Guangzhou. Furthermore, it analyzes and summarizes their causes and attributes.

Lastly, based on the characteristics of spontaneous construction and use of public spaces in old communities, a set of strategies for regenerating public spaces in old communities based on everyday life is outlined. These strategies aim to guide the unique spontaneous renewal and usage behaviors in public spaces within old communities in Guangzhou in a humanized, positive, and diverse parallel development manner. The Changleyuan community in Guangzhou is selected as a application object to address practical renewal issues encountered on-site, attempting to provide a new approach for future practices in the renewal of old communities.

1.4.2 Research Methods

This article primarily establishes the theoretical research foundation of everyday urbanism

through methods such as literature analysis and case induction. By reviewing relevant books, journals, and online English materials, the existing theoretical framework and its development status are elucidated. Building upon this foundation, the article conducts empirical studies and field surveys to research, classify, and summarize the typical public space systems and spontaneous renewal behaviors in old communities in Guangzhou. Finally, based on the findings from the investigation and analysis, the article will propose a set of strategies for regenerating public spaces in old communities along with their corresponding implementation. The complete strategy system will be applied to specific public spaces within old communities.

1. Literature analysis and theoretical research

Taking everyday urbanism and the regeneration of old communities as the main focus, this article lays the foundation for studying the spontaneous renewal phenomena in public spaces within old communities by collecting and reviewing a large number of related literature, theoretical works, and research methods. Both domestic and international studies on everyday urbanism and community renovation are collected, analyzed, and summarized, providing a basis for understanding and studying the spontaneous renewal phenomena in public spaces within old communities.

2. Case studies

This article compares and summarizes the mechanisms and experiences of public spaces renewal through case studies both domestically and internationally. The aim is to analyze the causes and development patterns of different cases and demonstrate the necessity of applying everyday urbanism perspectives in renewal strategies for old communities' public spaces.

3. Fieldwork and cartographic analysis

Through field investigations on several representative old communities in Guangzhou with different geographical locations and environmental conditions, behavior observations, tracking interviews, and other methods are used to observe and summarize the phenomena of spontaneous renewal in public spaces of old communities. By using mapping and other visual languages, the spontaneously updated spaces recorded are categorized and compared typologically, transforming the perceptual understanding of spontaneous updating phenomena in community public life into spatial language. This serves as the basis for the next step of community public space renewal strategies.

1.5 Research Framework

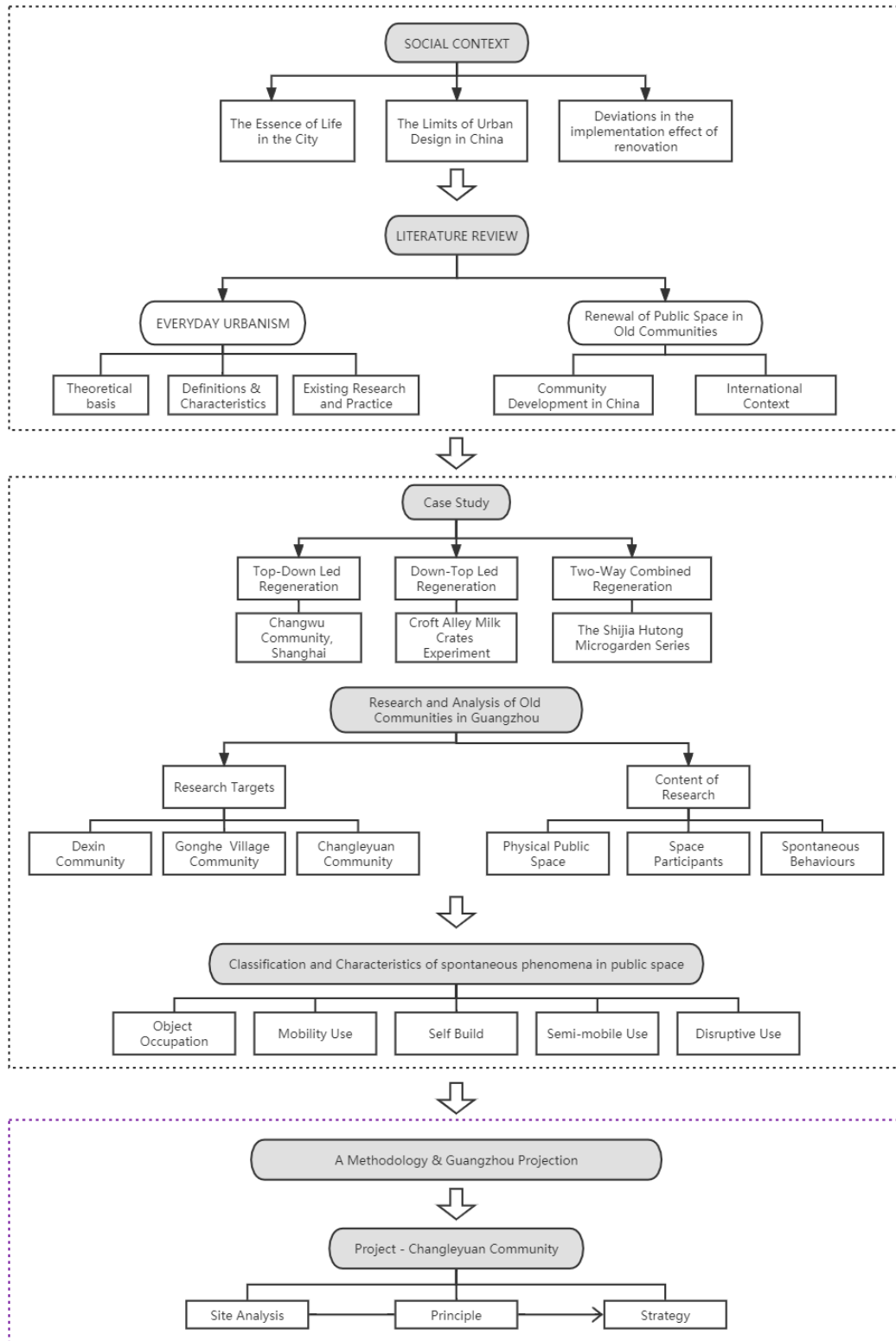


Figure 1- 4 Research Framework
(Source: Self-drawn by the author)

Chapter 2 Community Renewal Based on Everyday Urbanism

2.1 Theoretical Studies of Everyday Urbanism

2.1.1 Theoretical Background and Connotations of Everyday Urbanism

1. Theoretical background of everyday urbanism

Everyday urbanism originates from "everyday life", which is a philosophical concept initially introduced by Husserl in his 1936 work "The Crisis of European Sciences and Transcendental Phenomenology". He believed that everyday life, as opposed to the scientific realm, provided a solution to the crisis of European sciences ^[25]. Subsequently, this concept attracted the attention of Marxist philosopher and sociologist Henri Lefebvre, avant-garde filmmaker and potential revolutionary Guy Debord, and anthropologist and historian Michel de Certeau, and developed into a seminal topic of the century ^[26,27]. Scholars have pointed out that everyday life is the most real and fundamental domain with essential significance for humans in the urban context. As Lefebvre stated, "It is precisely the seemingly trivial everyday life that constitutes the foundation of social experience and the true realm for spatial debates." Subsequently, Wajiro Kon, known as the "father of ethnography" in Japan, pioneered an urban research method called "ethnography of everyday life" in his book "Japanese Dwellings"^[28]. In 1986, Toshiro Fujimori and others built upon Wajiro Kon's ethnographic approach and proposed the "observational study of streets," sparking a wave of observations on urban everyday life. The book focuses on everyday activities such as clothing, food, housing, and transportation, examining the changes in the daily lives of ordinary citizens ^[29]. In his book "Life between Buildings", Jan Gehl drew examples from his in-depth observations of everyday life and suggested that design must take into account the needs of everyday life ^[30]. "Everyday Urbanism" is an urbanist tendency that stems from everyday life and rediscovers the meaning of existing spaces ^[16].

2. The connotation of everyday urbanism

In the late 20th century, Margaret Crawford linked "everyday" with "urbanism" and published the book "Everyday Urbanism". In this book, "everyday" refers to elements of ordinary human experience and, at the level of common sense, describes the shared life experiences of urban residents. "Urban everyday life" is defined as collective, repetitive, or spontaneous behavior that occurs in the gaps between home, work, and institutions. "Everyday space" naturally becomes the carrier of urban everyday life, characterized as "ordinary, recurring, and spontaneously generated landscape spaces" that are "vibrant, significant, spontaneous, and inclusive," often overlooked by urban residents, urban planners, and social

critics [18].

The author unified the phenomenon of spatial transformation in Los Angeles in the 1990s under the concept of everyday urbanism. This refers to the continuous reoccupation and re-creation of "well-designed" spaces by residents in new ways. The people of Los Angeles actively participate in this process in a constructive manner, such as through street vending, garage sales, and other activities (Figure 2-1).



a) Street vending in Los Angeles

b) Los Angeles garage sales

Figure 2- 1 Residents Renovate Spaces in a Constructive Way

(Source: Reference [18])

The everyday urbanism advocated by Margaret does not strive to become an extraordinary or perfect approach to urban design; instead, it seeks heterogeneity and diversity. They call for viewing urban planning as a social entity, focusing on everyday life and neighborhood changes, placing the design's emphasis on studying residents' everyday lives and reconstructing the fragmented and regional aspects of the area. Professor Yuan Wang from Huazhong University of Science and Technology, in his journal "De-urbanization and Everyday Urbanism Strategies", outlined the theory of "everyday life" and defined "everyday urbanism." He believes that everyday urbanism is an attempt to interpret everyday life in existing spaces, transforming the spatial environment into a micro-level, low-tech urbanism through the rediscovery of everyday experiences [16].

3. Everyday life under the understanding of everyday urbanism

Everyday urbanism explores how space can meet people's everyday life needs. It emphasizes that space is shaped by the everyday practices of residents. Therefore, understanding everyday life forms the foundation for the development of everyday urbanism [3].

(1) Potential dimensions within the dichotomy of the ordinary and the modern

Henri Lefebvre distinguishes two coexisting states in everyday life: the ordinary and the

modern. The ordinary represents an eternal, modest, and naturally repetitive rhythm of life, while the modern is characterized by constant changes and updates driven by material desires and technology. Building upon this duality, Lefebvre constructs an analysis of the hidden dimensions within everyday life, aiming to uncover profound elements of human nature that still exist within it. He seeks to rediscover the ordinary qualities concealed in the corners, edges, and gaps of the city. These qualities are often hidden alongside streets, sidewalks, urban spaces, city parks, or at intersecting border zones.

(2) Differentiation and ambiguity

Everyday life is a collection and reflection of people's spontaneous and subconscious activities, which often occur at the intersections between individuals, communities, and the city. These intersections are places of various social and economic transactions, as well as emerging and contentious public spaces. People accumulate diverse life experiences in these spaces, and every individual's actions have the potential to adjust the environment, leading to better and more ethical designs. Everyday urbanism believes that these points where differences collide or influence each other are often the places where urban vitality is unleashed. It embodies the diversity and ambiguity of urban life, which is widely present in China but may not be fully understood or recognized yet.

(3) The dynamics of time

Everyday life is closely intertwined with time and constructed by multiple temporal systems. This includes natural cycles such as the rotation of day and night, the changing seasons, yearly cycles, and climate cycles. It also includes linear time structures such as work hours, regularly scheduled routines, and holidays. Additionally, it encompasses moments of discontinuity and spontaneity that are inherent in everyone's everyday lives, revealing the possibilities and limitations of life. Everyday life is a flexible amalgamation of thoughts and practices across different times, capable of being reconfigured based on specific contexts and manifested through concrete events.

In summary, everyday urbanism's open focus on the ordinary public has made it an unorthodox, bottom-up mechanism for urban development, in stark contrast to conventional top-down mechanism ^[20,31].

4. Spontaneous behaviour in the perspective of everyday urbanism

The urban space under the perspective of everyday urbanism is characterised by many spatial practices such as spatial alienation, autonomous creation and spontaneous redesign. Residents sometimes act without the consent of the government, using their own improvisation, life experience and resilience to improve and occupy unused spaces. These spatial practices

take on a distinctly temporary character, such as street vendors and outdoor drying in spaces that are unstable and ready to be moved at any time (Figure 2-2). These spontaneous acts are an art of improvisation, and it is unreliable to plan, manage and zone them. These activities have an architectural significance in themselves, as people's activities give form to space, and the spaces created by people's spontaneous activities are different from those deliberately designed to be 'intact' in the city, but rather the urban facility is a resource for the actions to take place. These spontaneous acts also represent a form of urban culture in miniature.



Figure 2- 2 Temporary Outdoor Drying

(Source: Author's own photograph)

While understanding the existing urban conditions is the starting point of everyday urbanism, its essence lies in reinterpreting and reimagining them. Finding untapped possibilities in ordinary places requires creativity. Therefore, everyday urbanism necessitates a dual approach of working from the bottom-up (empathizing with spontaneous renewal phenomena) and the top-down (utilizing complex knowledge and technology) ^[18].

2.1.2 Existing Theoretical Research and Practice of Everyday Urbanism

Margaret Crawford and Chen Xuan (2019) also pointed out in their exploration of China's urban design process that contemporary Chinese urban design has achieved certain accomplishments in terms of technical frameworks and control methods. However, an excessive pursuit of aesthetics has led to a lack of attention to the rich, specific, and diverse aspects of everyday life. By examining the development of everyday urbanism in the United States and its application in China, the two scholars argue that everyday urbanism serves as a supplement to the current urban design framework in China ^[3].

In fact, there have been scholars in China who have proposed the importance of "everyday life" in urban construction. Zhang Jie et al. (2003) critically examined the current large-scale

urban design in China and proposed an urban design philosophy centered around "everyday life space," along with accompanying strategies for creating such spaces ^[32]. Wang Gang et al. (2007) pointed out that China's long-standing adherence to a functionalist approach in urban planning has resulted in cities losing their vitality and diversity. They explored the necessity of returning to an everyday life perspective in urban planning from a philosophical standpoint ^[33]. Wang Yuan (2009) proposed everyday urbanism as a new urbanism trend by analyzing the issues of zero-degree space, which may inspire planners and designers to rethink urban spaces ^[16]. Tan Ying (2011) pointed out that urban design strategies based on everyday life spaces can effectively restore urban vitality, using Chongqing as an example to explore the city's design strategies rooted in everyday life ^[34]. Ren Yanmin et al. (2013) conducted an empirical study on the new community of Jinshazhou, Guangzhou, focusing on the daily behaviour of the residents of the protected housing community and their interaction with the local government and the market, providing reference for the formulation and implementation of relevant policies based on everyday life theory ^[35]. Zhang Danyin (2019), on the other hand, focuses on the field of urban community micro-renewal and proposes a micro-renewal strategy based on everyday life orientation, using Shanghai as an example ^[36].

These researches conducted by numerous scholars echo the principles of everyday urbanism, and people are increasingly realizing the importance of everyday life in cities. In order to incorporate everyday urbanism into urban planning and design and harness its transformative power in shaping urban spaces, it is necessary to refocus on the aspects of everyday life that have long been overlooked by traditional planning and design approaches, and examine the relationship between everyday life and the spatial environment.

The wisdom of everyday life advocated by everyday urbanism is actually widely present in Chinese cities. Based on everyday life, urban design is an inclusive and practical way of urban production. Its design approach includes taking existing environmental interests as a starting point and using democratic design interactions to make residents accept reform points. Additionally, it applies smart design applications to implement the ideas and needs of everyday design discourse. In recent years, there have also been some design practices based on everyday urbanism both domestically and internationally.

In 2007, Margaret Crawford initiated a research project titled "101 Ways to Redeem the City" during her tenure at the Harvard Graduate School of Design. The project intentionally avoided the typical tools used by planners and instead focused on the uncertainty of subjective experiences. In the end, the students collectively proposed 101 suggestions for improving community life in Cambridge (Figure 2-3).



a) Additional roof garden

b) Composting

Figure 2- 3 101 Ways of Urban Redemption

(Source: Reference [18])

In China, there have also been a group of pioneering explorers who practiced everyday urbanism in their respective cities, with different professional backgrounds and intervention approaches. For example, the "Mapping Workshop" founded by He Zhisen at South China University of Technology conducted a project on Guangzhou's meat and vegetable markets. The workshop intervened in the street spaces of the community at a small scale, creating diverse and small-scale spaces that seamlessly integrate inexpensive materials with the existing site conditions. For instance, the Changjie Banquet utilized 36 old wooden beds as the infrastructure for hosting events. Through visual experiences, it stimulates people's interest in exploration and creation, redefines the essence of public spaces in the community, and imbues them with new meanings. It also revitalizes traditional street life, achieves a synergy in spatial functions, and stimulates social and diverse interactive activities (Figure 2-4).



Figure 2- 4 Long Table Feast Using Old Items

(Source: He ZhiSen mapping workshop)

In addition, there have been several research initiatives that explore the impact of everyday life on urban design in China. These include the "Urban Informality Lab" organized by Chen Xuan at Hunan University, the exploration of "Everyday Inputs" by Long Yuan at Huaqiao

University, the social organization "Four-leaf Clover Hall" led by Liu Yue from Tongji University, the "Big Fish Community Development Center" in Shanghai, and the "Quanzhou Beautiful Ancient City Home Construction" practiced by Liu Zhaoyin from Nostalgia Economics School. These research findings, coming from different cities, different stages of development, and different perspectives, analyze the influence of everyday life on urban design in China, and they inspire more people to join them in exploring these aspects collectively.

Everyday urbanism is ultimately a call to action, aiming to inspire individuals to rethink the ways in which designers approach their daily works. It seeks to unlock the creativity and imagination that already exists in everyday life, and initiate changes in both the urban experience and the city itself, by reconnecting design to people's real everyday lives, starting from the smallest details. The concept of urban design under everyday urbanism is based on the understanding of humans as the foundation of design. It requires designers to study how people live and work, map out the socio-geographical forms of the city, and use them as a starting point to construct the dimensions of design. It explores the unforeseen possibilities of ordinary places, unleashing the creativity and imagination inherent in everyday life. Ultimately, it aims to reconnect design with human and social concerns [3].

2.2 Theoretical Studies of Community Renewal

2.2.1 A Brief History of Community Development in China

The concept of community originated in Western societies that experienced early industrialization and urbanization. It can be traced back to the publication of "Gemeinschaft und Gesellschaft" (Community and Society) by German sociologist Ferdinand Tönnies in 1887. Tönnies pointed out that a community is a social union based on kinship ties. Community renewal, as a type of urban renewal, has gradually gained widespread attention due to its close engagement with people's everyday lives [37]. The official use of the concept of "community" in China first occurred in 1991. However, based on our definition of the term "community," communities have actually existed in modern China for quite some time [38].

At present, there are three types of older communities in the country: traditional neighbourhood communities, danwei-based communities and neighbourhood communities:

Before 1944, community in China primarily referred to traditional-style neighborhood. These communities were characterized by long history, well-preserved old residences, and local residents who had been living and reproducing there for generations. From the 1950s to the late 1970s, with the establishment and development of China's planned economic system, the traditional neighborhood communities began to transform into street-based communities and

danwei-based communities. The structure of these communities was formed based on the transformation of the existing neighborhood communities at that time. Danwei-based communities were generally affiliated with specific work units, and the people living in these communities were referred to as "members of work unit". The management and governance of danwei-based communities were centered around the national institutions where the residents worked, and the community's resources were limited and allocated by the work unit, resulting in a certain level of closure and exclusiveness. In addition to the majority of "members of work unit", there were also individuals who did not belong to any specific work unit, known as socially independent individuals. They resided in street-based communities within the cities, which were managed by the corresponding street committees. In the late 1970s and early 1990s, as China gradually transitioned from a planned economy to a market economy, the danwei-based system continued to play a role in stabilizing society, but the influence of the market began to penetrate various aspects of society with the deepening reforms. In 1990, China's first Urban Planning Law was introduced, which did not incorporate the advanced western urban planning and urban public space design theories, residential communities began to flourish in China. In the early days of ordinary residential neighbourhoods, residents included those from different work units and with different identities, which made the neighbourhoods now have a mixed and comprehensive nature (Figure 2-5).

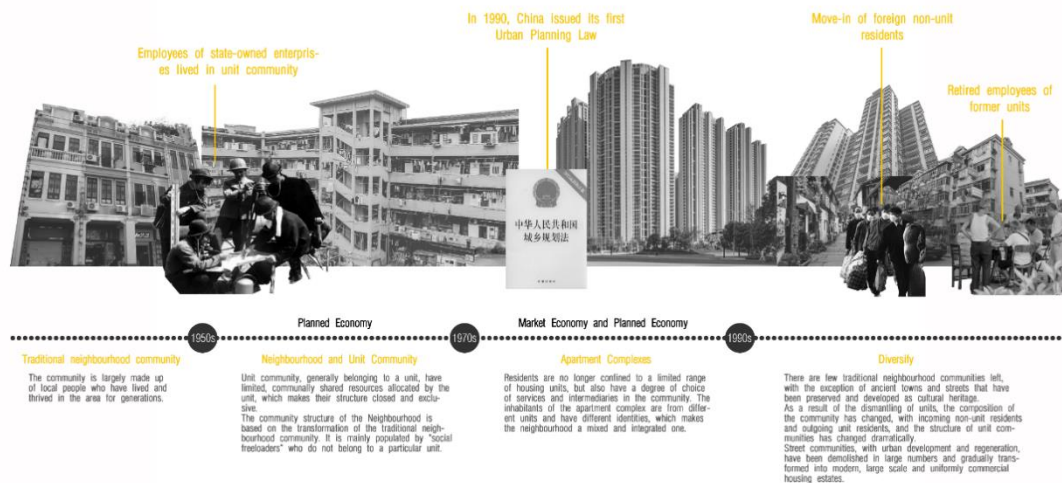


Figure 2- 5 Community Development History of China

(Source: Self-drawn by the author)

Today, traditional-style neighborhood communities in China, except for ancient towns and streets protected and developed as cultural heritage, are rarely seen. Street-based communities have undergone extensive demolition and transformation into modern, large-scale, standardized residential complexes due to urban development and urban renewal. With the dissolution of

work units, the composition of unit-based communities has changed, and the influx of non-unit residents has diversified the population, resulting in a rich cultural background. In terms of quantity, unit-based communities have become the main type of old communities in contemporary China.

2.2.2 Status of Public Space Ownership in Old Communities in China

Currently, first-tier cities such as Shanghai and Guangzhou have taken the lead in moving towards stock or even reduced planning, a trend that is first manifested in a few megacities, but is also an important issue for the future development of most cities. In incremental planning, there is an implicit assumption that urban land ownership is single, and the government and planners design the city according to the principle of maximum efficiency. However, in stock planning, the government and planners cannot avoid the fact that they have to face a large number of existing property owners, and if they carry out urban renewal according to the incremental approach, the government will have to face the problems of huge capital compensation and the erosion of the urban fabric, etc. The reason for the gradual decline of urban resources is that most of the cities have to face the problems of future development. The reason for the gradual decay of urban stock is that the inefficient use of existing resources is difficult to be replaced by more efficient use. This requires planners to weigh the pros and cons, reduce transaction costs, and maximize benefits in the process of stock renewal, taking into account the specific characteristics of the actual project.

Due to our housing inheritance system, as well as the incompleteness of the relative tax system, the property rights of housing in some old communities are highly fragmented, and the property owners may not be able to reach a consensus on housing repairs due to disagreement. At the same time, there are also a large number of public property, mixed property and other complex property rights in the old community. The complexity of property rights leads to extremely complicated negotiation objects, resulting in an extremely complicated process of renovation of old communities.

For the complexity of housing ownership of the old community, its public space renewal can be based on the basic unit of the house base to carry out small-scale, progressive community renewal, do not seek a one-time all the transformation, adhere to the core project as a driving force, the accumulation of a small number of points to bring the surface, the cellular gradual renewal.

2.2.3 The International Context of Community Renewal

Category	England	Japanese	China Taiwan
Concept	社区建筑 (Community Architecture)	造町/造街运动 (Machitsukuri)	社区营造 (Improvement Program)
Start time	1960s	1960s	1990s
Organizational model	The residents first democratically elect a community organisation and then, with the support of the community organisation and other social organisations, they establish a creative partnership with external professionals. On the basis of this cooperation, the professional worker takes into account the real needs of the community and the capacity of the inhabitants to provide renovation solutions, helping the community to organise its architectural form and solve technical problems.	The Street Making Association, a non-profit organisation, is the main body responsible for formulating community development plans and effective planning strategies. During the implementation and follow-up phase of the planning process, the Street Making Association works in partnership with the implementing entities to facilitate the implementation of the plan and the subsequent management and operation of the community. Local governments provide comprehensive support to municipalities through a system of "street-making activity grants", which are highly autonomous and discretionary.	In 1994, the Council for Cultural Affairs (the predecessor of the Ministry of Culture in Taiwan) proposed a community creation system of policy development, concept promotion, ongoing seminars, and pilot site programs, and the Council's community creation policy and implementation methods led to the participation of other government departments (Urban Development Bureau, Environmental Protection Agency) and civil society.
The main content	A certain amount of government investment to attract private investment, community self-help development, selective government involvement, attempts to incorporate community input into plans and a greater focus on meeting community needs within regeneration; encouragement of multiple partnerships, establishment of community regeneration funds, government investment focused on community building; policy funding to encourage decaying area development, community partnerships and exemplary community practice	A community regeneration plan for old cities that incorporates the community into the decision-making system and focuses on community development. "The District Street Making Plan is based on the Street Making Ordinance and is resident-based, encouraging the identification of street making themes such as landscape, housing, history and industrial revitalisation based on local characteristics. The content includes the integration of spatial regeneration, community participation, rule-making, industrial development and other hard and soft elements. After administrative approval, the District Plan regulates the spatial content of the District Street-making Plan in the form of a detailed plan to guide regeneration activities and achieve overall community regeneration.	We will seek to understand the community, form a sense of community, and establish a cultural identity for the community; find the needs for community creation from six entry points: humanistic education, environmental landscape, environmental protection and ecology, industrial development, social services and medical care, and community security; find the local characteristics of the community from five aspects: people, culture, place, production and scenery; gather community consensus, shape a common vision, and construct a participation mechanism, with community participation being the main axis of community creation; cultivate mature community citizens, actively participate in public affairs, build community autonomy, and promote community creation in general in perpetuity.
Related policies	Community Development Plan, New Deal for Communities Plan, National Neighbourhood Renewal Strategy, Sustainable Communities Plan	Urban Planning Act, Urban Redevelopment Act, Central City Land Revitalization Act, Urban Regeneration and Improvement Plan, Promotion of Specific Non-Profit Activities Act, Street Creation Ordinance, Street Creation Deposit System, Urban Regeneration Special Measures Act, Urban Regeneration Agency Act for Independent Administrators, etc.	Community Development Work Programme, Community Master Plan Award, Community Cultural Re-engineering Programme, Community Environmental Transformation Programme, New Hometown Community Building and Local Cultural Hall Programme, Community Building Innovation Network Programme, Community Organisation Renewal Mentoring Programme, Six Stars for Healthy Communities Programme
Practice features	Returning power to the people and encouraging participation; adjusting roles and changing methods; small-scale and gradual and process-oriented	A strong emphasis on the role of non-profit organisations and public participation, a combination of hard and soft and top and bottom, and an emphasis on the relevance, comprehensiveness and process of planning content	Emphasis on the existence and consciousness of community community and joint participation in community affairs; active participation of residents as the most important force in the transformation and revitalization of the community; emphasis on the overall creation of the community including culture, industry, environment, education, public administration, etc.; emphasis on the creation of one's own district and community by oneself, and a bottom-up (community) approach (government)

Figure 2- 6 Comparison of Community Renewal Models in Typical Countries or Regions

(Source: Self-drawn by the author)

In the era of existing stock, community renewal has gradually gained widespread attention as a major type of urban renewal. From international experiences, the significance of community renewal lies in preventing community deterioration, as the more severe the deterioration, the higher the cost and the greater the impact of urban renewal. Therefore, since the 1960s, countries such as the United Kingdom, the United States, and Japan have initiated community renewal movements with the goal of urban revitalization. Since the 1990s, the community renewal movement has expanded to regions including Taiwan, China, and Taiwan's community development has had a profound impact on the global community renewal movement (Figure 2-6).^[15]

In general, community regeneration initiatives in these countries and regions have focused on issues such as social justice and pluralism, and there has been a gradual shift from government-led to pluralistic participation that includes communities as decision makers, with the goal of regeneration shifting from architectural and morphological beauty to people-centred and sustainable, and a more rational approach to the content and methods of regeneration. Specifically, this is manifested by the shift in planning objectives from single objectives to multiple objectives, where planning content focuses on community governance, economic revitalization, and self-construction at the neighborhood level. The approach to renewal has transitioned from complete demolition and reconstruction to a more gradual and sustainable process. Planning forms have also shifted from traditional urban renewal focused on physical structures to community development planning aimed at improving living environments, creating employment opportunities, and fostering neighborhood harmony as primary goals. Additionally, there is an increasing emphasis on public participation.

However, in China, the renewal of communities is still in the exploratory stage, and the renewal system for various spaces within communities is also under exploration. Although current community renewal efforts have started to prioritize community residents' participation, there remains a lack of research and analysis on residents' everyday lives.

2.3 Summary - The Applicability of Everyday Urbanism to the Renewal of Old Community Public Space in China

Against the backdrop of both China's urban planning and social governance shifting towards community-level development, the transformation of old communities has become a focal point of attention for various sectors. In heavily urbanized areas such as Beijing and Shanghai, a series of beneficial explorations have been carried out, starting from micro-renewal of community public spaces and focusing on the needs of residents' lives, thereby promoting the improvement of spatial quality.

However, the success of such projects is partly attributed to the support from star communities, star teams, and key projects, making it difficult to replicate their success in ordinary communities that lack prominent resources and sufficient funding support. On a national scale, community renewal that is widely promoted relies mostly on top-down government forces, with funding and resources tilted more towards building facade renovation, lift retrofitting and the replenishment of community infrastructure services (Figure 2-7). But this way of update is difficult to precisely match residents' needs.



a) Inside the building renovation



b) Lift retrofitting

Figure 2- 7 A Single Approach to Community Renewal

(Source: Author's own photograph)

In recent years, the urban renewal model in China has gradually shifted from "demolition, renovation, preservation" to "preservation, renovation, demolition" and from "individual building renewal" to "comprehensive renewal of districts". "Progressive renewal" and "micro renewal" have become key trends in the renewal of old communities in China, with increasing emphasis on the participation of community residents in the design process and addressing their everyday life demands. However, there is still a lack of a systematic theoretical framework and extensive empirical evidence for the impact and application of this concept in the renewal of old communities.

There are several reasons why the theory of everyday urbanism can be used to guide the renewal of public space of old communities in China:

Firstly, everyday urbanism is not universally applicable, as it responds and adapts diversely to different practices and locations. The pursuit of diversity and heterogeneity in everyday urbanism does not aim to become an extraordinary and comprehensive design approach or seek to replace other urban design practices. Instead, it works flexibly in conjunction with other design approaches. This design concept aligns with the current trend in China's renewal of old communities and is applicable to the practice of public space renewal in these communities.

Secondly, everyday urbanism calls for urban planning and design to return to everyday life and attach importance to everyday life spaces. As the smallest unit of social space, the community is a carrier closely related to the daily activities of its residents. Old communities have a long history, a large number of migrant people have moved into old communities, creating a complex composition of people in old communities. The richness of everyday lives formed by the diverse backgrounds of the community residents in the old communities also means that old communities in China can become a fundamental field for the theoretical

practice of everyday urbanism.

Finally, one of the qualities of everyday urbanism lies in the production of space through low-cost and low-technical requirements for renewal, such as the implantation of small retail stalls in community public spaces. This modest practice often involves fine-tuning existing small-scale spaces and reinterpreting existing elements in terms of function and connotation. According to statistics, a total of 114,000 old communities will be renovated nationwide from 2019 to 2021. In 2022, according to the Ministry of Housing and Construction, the number of old communities which will be renovated in China reaches 170,000. From 2019 to 2022, the central government has arranged subsidies of 121.5 billion yuan to support the renewal of old communities, but such a huge number of old communities to be renovated will also still require huge investment. The design approach based on Everyday urbanism can achieve the effect of changing the situation of urban communities by accumulating small changes. The low-cost and low-tech features of this design approach are suitable for the renewal practice of a large number of old communities in China.

Chapter 3 Case Studies

Everyday Urbanism focuses on the changes in public space and everyday life triggered by specific phenomena (e.g. temporary sales activities, mobile vendors, etc.) in everyday life that are easily overlooked, emphasizing the authenticity and ordinariness of everyday life in the real world^[39]. Its open-ended focus on the general public makes it inadvertently an unorthodox, bottom-up mechanism for urban development, as opposed to orthodox top-down development. Everyday urbanism is regarded as a design method that thinks about the value of public space in multiple dimensions and does not pursue an ideal city in the sense of perfection which makes it have its own fans in many cities, and spread the seeds of its own theory and practice all over the world.

3.1 Top-down Led Community Renewal - Changwu Community Renewal

Changwu Community is a danwei-based community in Zhoujiadu Street, Shanghai. During the urban renewal campaign in Shanghai in 2018, illegal shops around Changwu Community were demolished, and a new boundary wall was built for the community. However, this wall resulted in the formation of numerous fragmented and disorderly spaces surrounding Changwu Community, filled with household waste and miscellaneous items. Moreover, due to its age, the community lacks high-quality public spaces and has many deficiencies in terms of facilities, spatial environment, and architectural quality.

Professor Tong Ming from Southeast University took inspiration from the techniques used in Suzhou gardens to renew Changwu Community. By designing a zigzagging garden path and using uniformly toned facade materials with interspersed plants of varying heights, the boundary wall of Changwu Community was renovated (Figure 3-1). This project was also recognized as one of the shortlisted projects for the "Public Space Award" and received a gold award nomination^[40].



Figure 3- 1 Shanghai Changwu Community Renewal
(Source: Ziyunzai Architecture)

3.1.1 The Update Process

The regeneration of the public space in the Chang Wu community can be divided into three stages: proposal, public participation, and spontaneous re-regeneration of the space:

① Phase 1 - The Design Team Proposes a Proposal

After conducting a site survey, the design team found that the newly constructed boundary wall created fragmented spaces around the demolished illegal shops. This nearly 400-meter-long strip of open space could provide the necessary functions for the community residents, supplementing the lack of public spaces in such old communities. As a result, the design team planned to transform the fragmented spaces along the wall into a continuous and usable corridor. Taking into account the varying distances between the wall and residential buildings, they envisioned connecting the segments like a threaded needle, creating an expanded spatial environment for the residents. They proposed incorporating amenities such as fitness trails, ping pong tables, and square dance areas in this corner space, providing recreational opportunities for the community.

However, the design team's proposal faced strong opposition from the community residents. Those living adjacent to the boundary wall expressed concerns about their privacy and security being compromised. They preferred to maintain the current environment, which resembled a junkyard, rather than having multi-functional spaces. They were unwilling to have their living surroundings transformed into public areas for activities.

② Phase 2 - Public Participation

The residents' denial and rejection provided the design team with an opportunity to engage in communication with them. This process of negotiation itself serves as a form of public participation. The transformation project of the boundary wall provides residents with a means and platform to express their emotions and desires regarding their living environment. In this sense, it is not merely a physical construction project involving the erection of a new wall, but rather a transformative process that fosters the social structure of the entire community and encourages residents to actively participate in the development of public spaces.

After continuous communication with the residents, the design team ultimately decided to minimize alterations to the inner side of the residential area, maintaining its relatively enclosed state. The inner side remained a quiet corner, while the construction of public spaces was shifted to one side adjacent to the street. This area served as a buffer zone between the community and the road, enhancing interaction with the outside.

The finalization of the design proposal does not mean the end of public participation.

During the construction process, designers and residents continue to negotiate. As the construction site is open, residents can supervise the transformation process throughout. With frequent feedback from residents such as "This cannot be placed right at my doorstep" or "That area needs to be adjusted as well," the design team has to make adjustments based on these opinions. However, it is often difficult to balance the opinions of individual residents with those of the majority. The high cost of project changes has also led to a temporary halt in the construction, and the construction site has temporarily turned into a "public restroom."

Under intense pressure, the design team adjusted and completed the transformation of this vacant space based on the original design proposal and feedback from residents. This corridor serves both as a fitness trail and an additional pedestrian pathway, combining sightseeing and recreational activities (Figure 3-2).



a) Before Renewal



b) After Renewal

Figure 3- 2 Comparison of Before and After Renewal of Changwu Community

(Source: Ziyunzai Architecture)

③ Phase 3 - Spontaneous Re-renewal of the Space

When Changwu community was initially built, it received positive feedback and had a good overall effect. However, over time, the actual usage of the promenade conflicted with the design team's vision. For example, residents spontaneously transformed certain areas of the long corridor into gathering spaces, and some spaces were occupied by residents as temporary parking lots. The overall functionality of the promenade was once again altered according to residents' own needs. Some of these spontaneous behaviors, which can be seen as "misuse," clearly deviated from the original purpose of the promenade as a passageway. Additionally, some of self-initiated uses have resulted in a disorderly environment for the entire promenade (Figure 3-3) ^[41].



a) The corner area of the promenade becomes a gathering place



b) The verandah is used for the storage of sundries

Figure 3- 3 The Current State of Changwu Community

(Source Reference [33])

This phenomenon also indirectly reflects the limitations of the design. The main population of the community is elderly people who often desire a space for leisure activities such as playing cards or chess in their everyday lives within the community. However, the design of the promenade did not effectively respond to this need, as the space was predominantly organized in a linear manner. This also highlights the fact that the daily habits of community residents will not disappear from public spaces due to the lack of attention from designers. On the contrary, residents will still occupy spaces according to their needs. This collision of different uses may stimulate residents' creativity and foster interactive activities, but it can also lead to a decline in the overall environmental quality of public spaces.

In addition, as the community did not establish a sound management system in the later years, the mixed use of residents and social groups lacked a sense of autonomy in maintaining the environment, which tended to cause the public space to decline again after renewal.

3.1.2 Top-down Renewal Mechanism

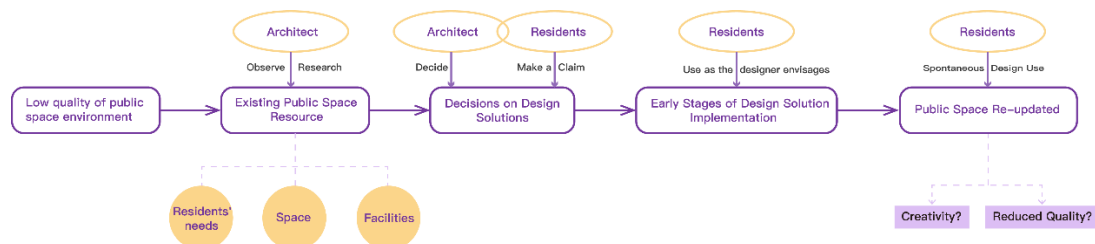


Figure 3- 4 Top-down Renewal Mechanism

(Source: Self-drawn by the author)

The top-down renewal mechanism refers to urban renewal led by "elites" such as designers and governments (Figure 3-4). This mechanism relies on the expertise and breadth of vision of the 'elite' such as designers.

1. Advantages

Spatial regeneration led by designers and other elites can quickly integrate and analyze spatial resources and residents' needs with a professional disciplinary background and technical means, promote spatial regeneration plans with a long-term vision, and achieve a harmonious aesthetic effect in a holistic order, and improve land use in a rational way to create a good urban environment.

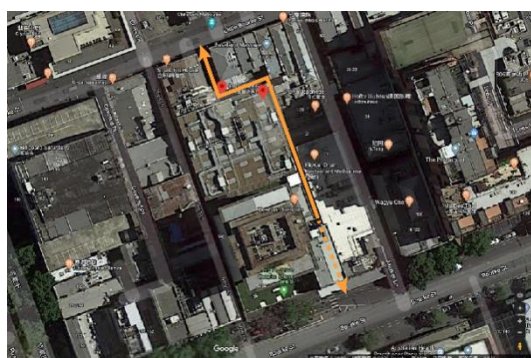
2. Problems

The top-down renewal mechanism is prone to subjective assumptions, unfairness and social problems while rapidly improving the quality of the urban environment; at the same time, residents often choose to passively accept the results of regeneration based on the influence of professional authorities such as designers. The public lacks enthusiasm for policy response and update plans, resulting in a relatively weak foundation for renewal implementation.

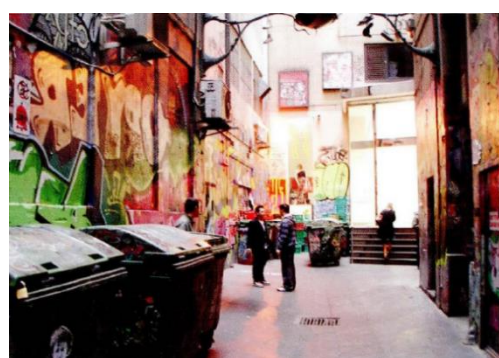
3.2 Bottom-up Led Community Renewal - Croft Alley Milk Crate Experiment

In Melbourne, Urban Informality Studio was co-founded in 2010 by Australian landscape designer Khaliah Zakariya and Dr. He ZhiSen. They aimed to examine the specific conditions of the city from a bottom-up perspective. Their approach suggests that designers should shed the label of "designer" and start the design from the existing patterns of site usage, seeking to achieve maximum results with minimal design interventions.

In 2010, the studio initiated the "Urban Acupuncture" project, aimed at revitalizing 12 different types of neglected public spaces in the central area of Melbourne. One of these "ailing sites" was the space for a litter box in Croft Alley (Figure 3-5).



a) Croft Alley location



b) A space for a litter bin in Coffee Street

Figure 3- 5 Croft Alley Location and Status

(Source: Drawn from Google Maps)

Croft Alley is one of the city's most active sites, thanks to the city's famous Croft Institute. The Croft Alley is home to a variety of colorful plastic bins (Figure 3-6) that are stacked throughout the year, attracting a variety of people to the street and generating a variety of

spontaneous behaviors that greatly enhance the vibrancy of the street. This phenomenon attracted the attention and interest of the studio.



Figure 3- 6 The Long Standing Milk Crate in Croft Alley

(Source: Adapted form reference [39])

3.2.1 The Update Process

① Phase 1 - Mapping Site

The members of the studio conducted a seven-day continuous photo documentation of people's engagement with the space using a "continuous point-in-time photography" approach. Through observations, it was discovered that 80% of the activities occurring in the alley were related to these milk crates (Figure 3-7). These scattered plastic crates found in the alley were rotational milk crates used by local milk companies for delivering milk to bars. The different colors of the milk crates represented different milk companies.



a) Milk crates as storage boxes



b) Milk crates as resting benches

Figure 3- 7 Spontaneous Behaviors Related to Milk Crates

(Source: Reference [39])

The residents engaging in activities on the street spontaneously utilize the milk crates for various purposes. These colorful and movable milk crates serve as partial public service functions within the alley, providing diverse temporary public spaces for people (Figure 3-8). They attract people to participate in spontaneous activities in the alley, strengthening the connection between the alley and the surrounding urban spaces, and enhancing the liveliness of the street (Figure 3-9).

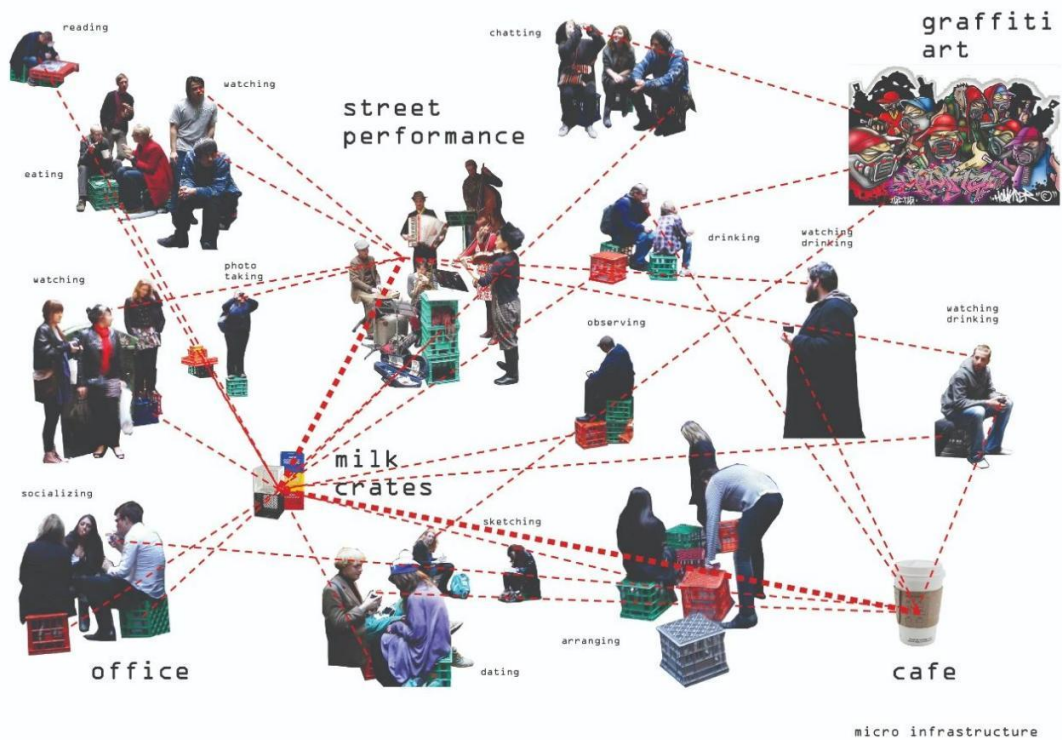


Figure 3- 8 The Relationship Between Human Activities and Milk Crates
(Source: He ZhiSen Mapping Workshop)

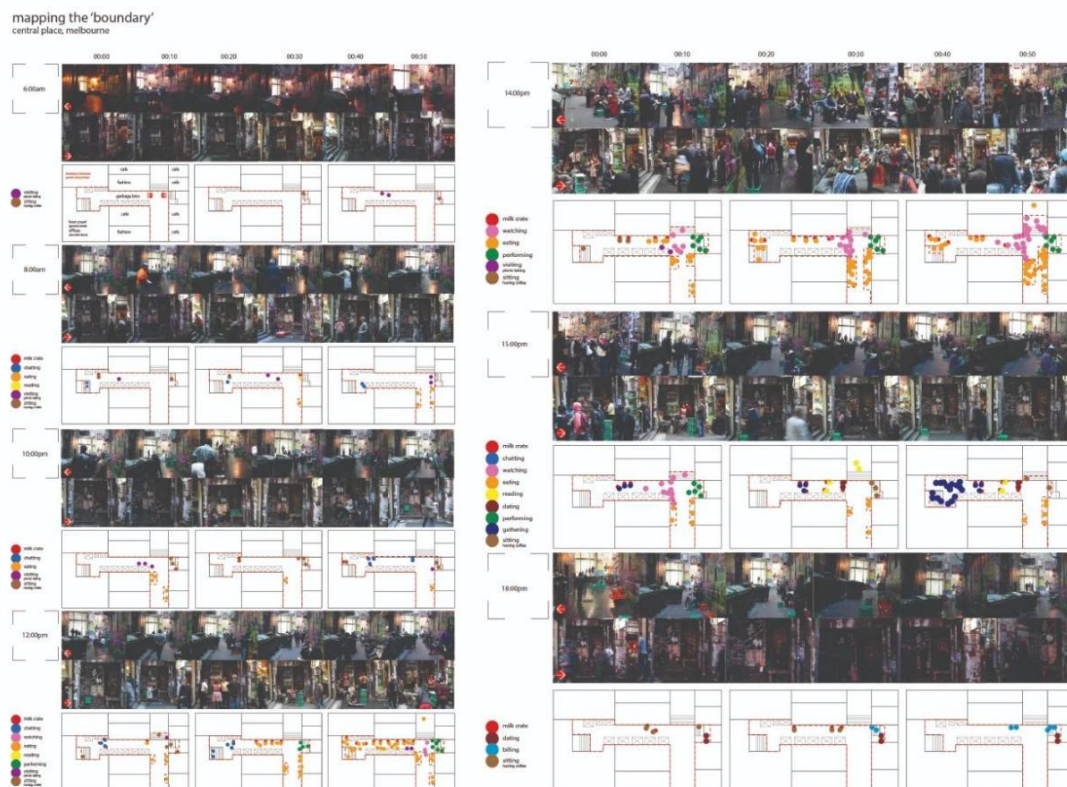


Figure 3- 9 Spatial and Temporal Distribution of Spontaneous Behavior
(Source: Urban Informality Studio)

On this street, the studio team observed that many people preferred to sit on the street

rather than inside coffee shops. They would use the milk crates as seats, which could be easily moved around. Some street artists even stacked the milk crates to create performance platforms, while pedestrians would stand on the milk crates to watch the performances. People on this street could spontaneously use the milk crates to redefine or design the street space, treating the milk crates as their own AutoCAD tool. Inspired by these micro-spaces formed by the milk crates, the studio team began contemplating this resident-led approach to space renewal. They decided to utilize these aggregative milk crates as intervention points for the spaces, activating the feasibility and potential of reinvigorating the neglected spaces in the alley through people's spontaneous activities ^[42].

② Phase 2 - Site Micro-interventions

The studio conducted a site experiment - stacking 100 milk crates in front of a coffee shop in the early hours of a Sunday morning in the area near the bins - and then recorded the people behavior and spatial changes in the area with a camera throughout the day (Figure 3-10).

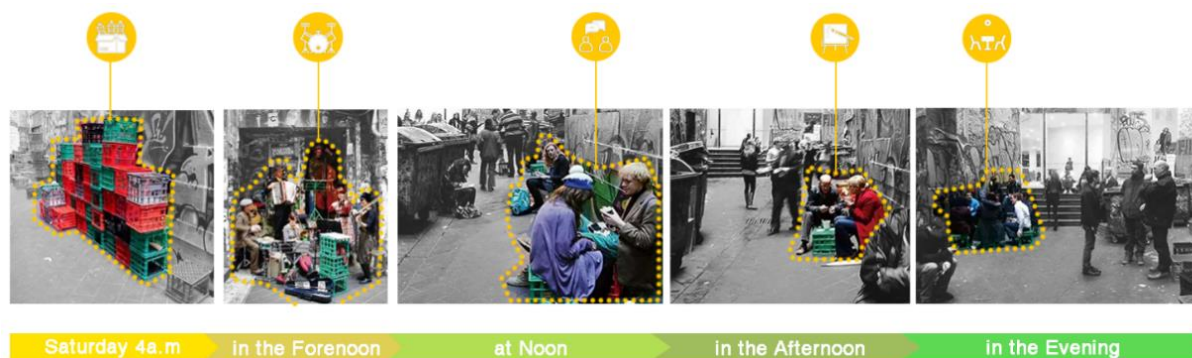


Figure 3- 10 Observation Record

(Source: Adapted form reference [39])

Through observations, it was discovered that in the morning, street performers were the first to notice the milk crates and moved them to one side of the street to create a larger performance space. The milk crates became their tables, stands, and storage boxes. The stacked milk crates gradually spread throughout the street. During lunchtime, office workers gathered in the street and used the milk crates to create makeshift tables and benches, forming small social spaces for dining, resting, and communication. The stacked milk crates continued to be utilized. In the afternoon, a group of high school students used the milk crates as easels and seats for sketching and painting, creating even more micro-spaces. In the evening, as people finished their work, they entered the street and turned the arranged milk crates into outdoor lounging areas for bars or cafes. In the corners of the street, there were even more intimate spaces enclosed by milk crates, serving as private couple spaces. The freely arranged milk crates became highly popular micro-spaces scattered throughout the street.

③ Phase 3 - Spontaneous Renewal

After the milk crates discreetly intervened in the negative spaces of the street by simply being stacked against the walls, through spontaneous human activities, they were scattered haphazardly throughout the street, creating a variety of micro-spaces with different sizes, functions, and forms. As time passed, these micro-spaces continued to evolve, influenced by changes in the users and their needs, resulting in variations in the scale and form of the spaces. The injection of vitality into the spaces led to the emergence of new activities and modes of spatial participation that no longer solely relied on the presence of milk crates (Figure 3-11).



a) Milk crates as storage boxes



b) Milk crates as resting benches



c) Young people playing Pokémon Go at Croft Alley

Figure 3- 11 The Emergence of New Activities and Micro-spaces

(Source: Reference [39])

④ Phase 4 - Strong Control by Administrative Force

As the neighborhood became more vibrant, Croft Alley became a popular venue for residents and visitors to the city. As the number of people gathered in the street increased, the Melbourne City Council placed several fixed stainless steel seats in the street for people to sit and emptied the milk crates in the street because of safety and environmental hygiene considerations. However, the result is that the whole street reverted to its previous state of silence and the spatial vitality is lost. (Figure 3-13).



Figure 3- 12 The Impact of Different Intervention Forces
(Source: reference [39])

3.2.2 Bottom-up Renewal Mechanism

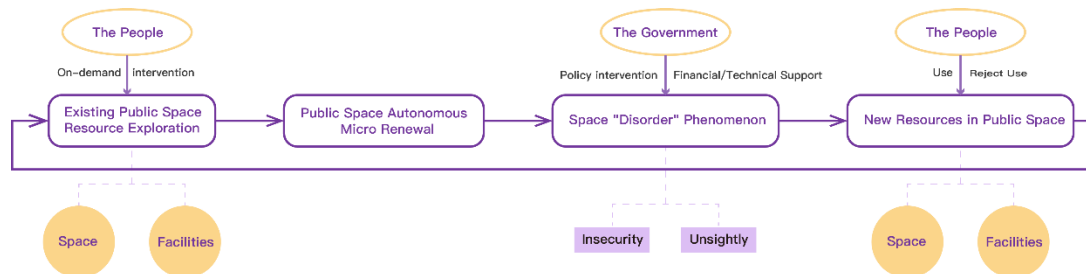


Figure 3- 13 Bottom-up Renewal Mechanism
(Source: Self-drawn by the author)

Residents initiate bottom-up spatial renewal based on everyday needs through creatively utilizing existing resources in public spaces. Different participants determine the usage of the space and establish connections with the surrounding environment, thus activating the public space. (Figure 3-13)

1. Advantages

The bottom-up renewal mechanism fully embodies the people-oriented principle. The renewal of old community public spaces is ultimately closely related to the everyday lives of residents. These bottom-up renovation initiatives initiated by residents based on their needs and everyday lives which represent their fundamental interests and are a true reflection of their everyday experiences. It is also the most cost-effective approach that can avoid the inefficiency and waste of space resources caused by the "one-size-fits-all" design by the government and designers of their own volition.

2. Problems

Due to the large number of residents involved, spontaneous transformations can sometimes face challenges in achieving consensus, leading neighborhood conflicts and hindering the

progress of the renewal process. Additionally, the varying levels of education among residents may result gaps in knowledge related to renovation, updates, and professional expertise, leading to safety issues that can potentially endanger the physical and mental well-being of residents.

3.3 Two-Way Combined Community Renewal – Shijia Hutong Micro-garden Renewal

In the hutongs and alleyways of Beijing's old city area, residents often spontaneously create micro-gardens using recycled objects and discarded materials in the alleyways or in front of their homes. They plant unique plants, fruits, and vegetables, ranging from a few potted flowers to forming an entire garden. These micro-gardens are typically small in scale but numerous and diverse. They serve functions such as aesthetics and food production, combining with residents' everyday lives and shaping the environment.

Each micro-garden in the hutongs is different, reflecting the unique aesthetics and needs of each household, while also maintaining overall coherence. These micro-gardens not only represent the residents' pursuit of a better quality of life but also showcase a distinct way of living. (Figure 3-14)



Figure 3- 14 Spontaneous Micro-gardens in Hutong
(Source: Reference [35])

The Shijia Hutong Micro-garden Series 2015-2019 is an exploration of landscape architects' intervention in Beijing's old city to improve the function of community public space and increase residents' participation in community governance, against the background of the city's shift from incremental expansion to stock renewal ^[43].

3.3.1 The Update Process

The research and practice of micro-garden can be divided into several phases such as observation and recording (mapping), exhibition and display interviews, interactive design workshops, participatory design creation and post maintenance. (Figure 3-15)

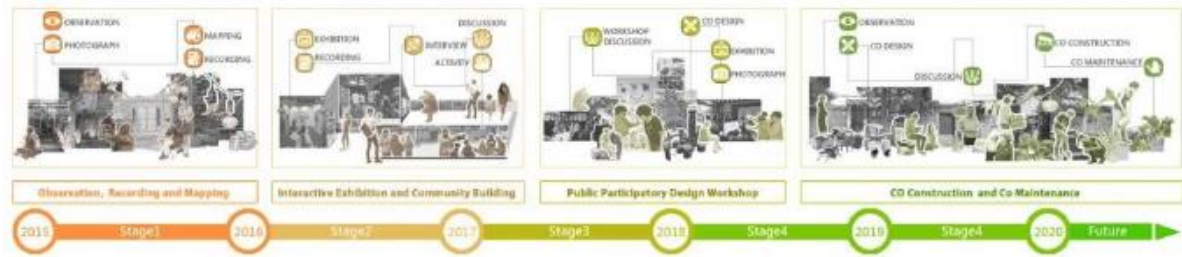


Figure 3- 15 Flowchart of Micro-garden Renewal Practice

(Source: Studio 17, School of Architecture, Central Academy of Fine Arts)

① Phase 1 - Mapping and Observing Micro-garden

Since 2014, the design team has been continuously mapping and observing micro-gardens in Beijing's old city area. During the research process, the design team documented all the self-built micro-gardens created by residents in the community through methods such as painting, surveying, and photography.

Based on this documentation, the team conducted analysis and interpretation of these micro-gardens, examining their materials and spatial composition, investigating the underlying reasons for their creation, and identifying their characteristics and types. (Figure 3-16)

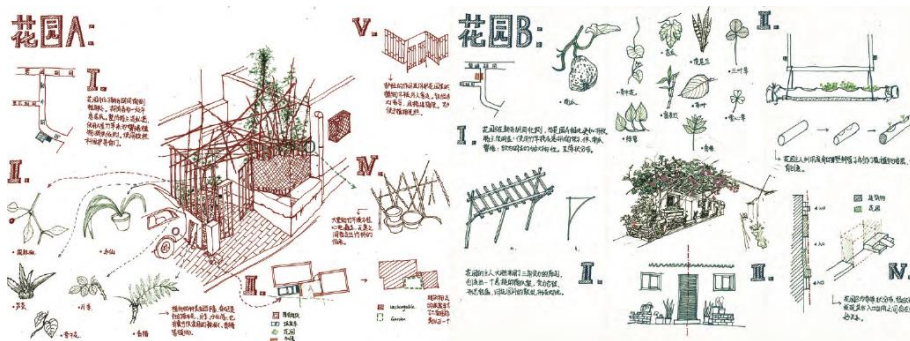


Figure 3- 16 Mapping and Observing Micro-garden

(Source: Reference [35])

During this process, the design team discovered that the creation of micro-gardens is not a straightforward task, but rather a "spiral" development process. It involves the willingness to plant micro-gardens, the selection of spaces and containers for micro-gardens, and the materials and space renewal for the micro-gardens, all of which undergo alternating changes and gradual updates (Figure 3-17). The renewal of micro-gardens is not merely an event on the material spatial level, but rather a reflection of social and lifestyle conditions.

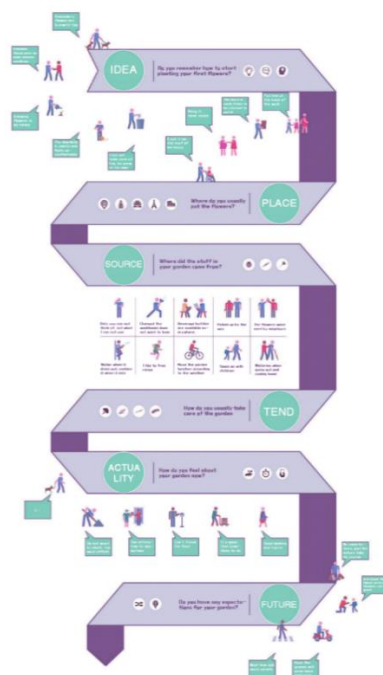


Figure 3- 17 Research and Analysis of Micro-garden

(Source: Studio 17, School of Architecture, Central Academy of Fine Arts)

② Phase 2 - Interactive Exhibits and Community Building

While discovering, documenting, and analyzing these micro-gardens, the design team also collaborated with the local street office to hold a series of exhibitions related to micro-gardens. The aim was to enhance residents' understanding and interest in micro-gardens. The exhibitions incorporated participatory research and interactive elements, including activities such as "upcycling planters". Residents were invited to personally transform old items into planters, engaging in artistic recreation and enhancement. Through community engagement, the project aimed to improve residents' aesthetic awareness and their love for green landscapes (Figure 3-18).



Figure 3- 18 Community Building - Transforming Old Things into Potted Plants

(Source: Studio 17, School of Architecture, Central Academy of Fine Arts)

③ Phase 3 - Public Participatory Design Workshop

The community is not just about the construction of physical space, but rather a social movement of "co-building, co-governance, and sharing" that requires the participation of multiple parties. Through ongoing exhibitions and community engagement activities, residents have gained a new understanding of micro-gardens. They have also begun to recognize the value of upcycling planters and have started to take care of their own micro-gardens.

Starting from 2017, a joint team consisting of the local street office, university students, and professional designers conducted public participatory design workshops to select some typical micro-gardens in Shijia Hutong based on the types of micro-gardens (Figure 3-19). Through voluntary registration, residents expressed their willingness to improve and transform the micro-gardens. The joint team aimed to establish micro-garden demonstration points in each area and use these points as references to encourage more residents to participate (Figure 3-20). By leveraging the influence of these demonstration points, the positive transformation of underutilized spaces within the community could be effectively promoted.

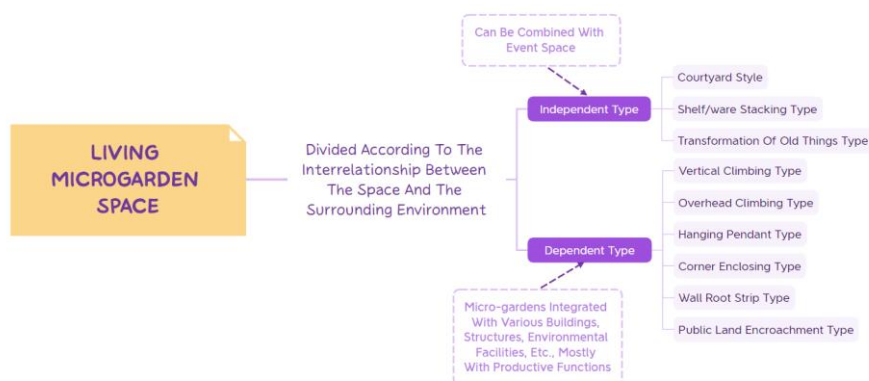


Figure 3- 19 Types of Micro-gardens

(Source: Adapted from reference [35])

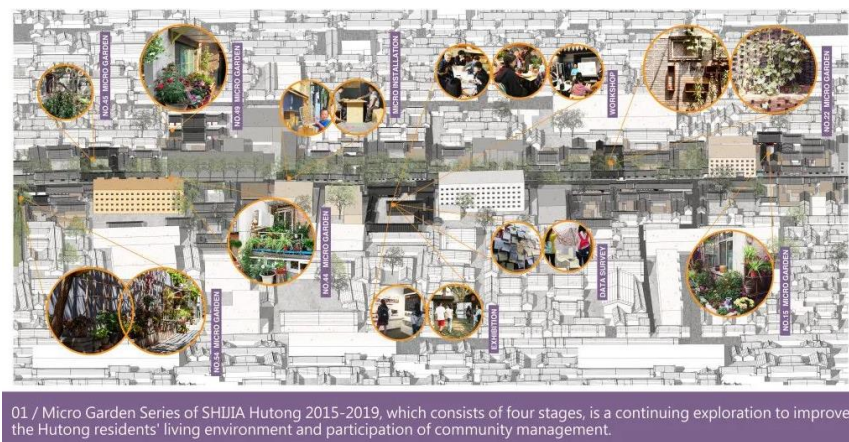


Figure 3- 20 Micro-garden Demonstration Points

(Source: Studio 17, School of Architecture, Central Academy of Fine Arts)

During the design workshops, the design team provided aesthetic and spatial creation guidance to residents, focusing on art aesthetics and landscape design. Together with the residents, they explored professional solutions in terms of spatial form, plant arrangement, rainwater utilization, and energy conservation. These solutions aimed to assist residents in effectively improving their micro-gardens in a low-cost, simple, and practical manner (Figure 3-21).



Figure 3- 21 Public Participatory Design Workshop

(Source: Studio 17, School of Architecture, Central Academy of Fine Arts)

All the improvement plans for micro-gardens adhere to the principles of authenticity, low cost, and upcycling (Figure 3-22). Residents are encouraged to maintain the habit of upcycling and utilize old items for transforming planters. By repurposing old bricks, pots, and jars that are accumulated in various spaces, these items can be turned into valuable resources for creating micro-gardens. This approach not only beautifies the environment but also reclaims previously occupied spaces (see Figure 3-23).



Figure 3- 22 Principles of Micro-garden Renewal

(Source: Studio 17, School of Architecture, Central Academy of Fine Arts)



Figure 3- 23 Micro-garden Reuse of Old Things

(Source: Studio 17, School of Architecture, Central Academy of Fine Arts)

④ Phase 4 - Participatory Co-construction of Micro-gardens

After the designers and residents discussed and designed together, they also participated in the micro-garden construction. Each garden is the result of the sweat and wisdom of the residents and designers, and the residents will treasure the garden after it has been renovated. The design team hopes that full public participation will encourage residents to maintain the micro-garden environment on their own initiative. At the same time, these micro-garden demonstration sites also raise an environmental concept that can be extended to households. It is not simply copied and extended, but respected and diversified (Figure 3-24).

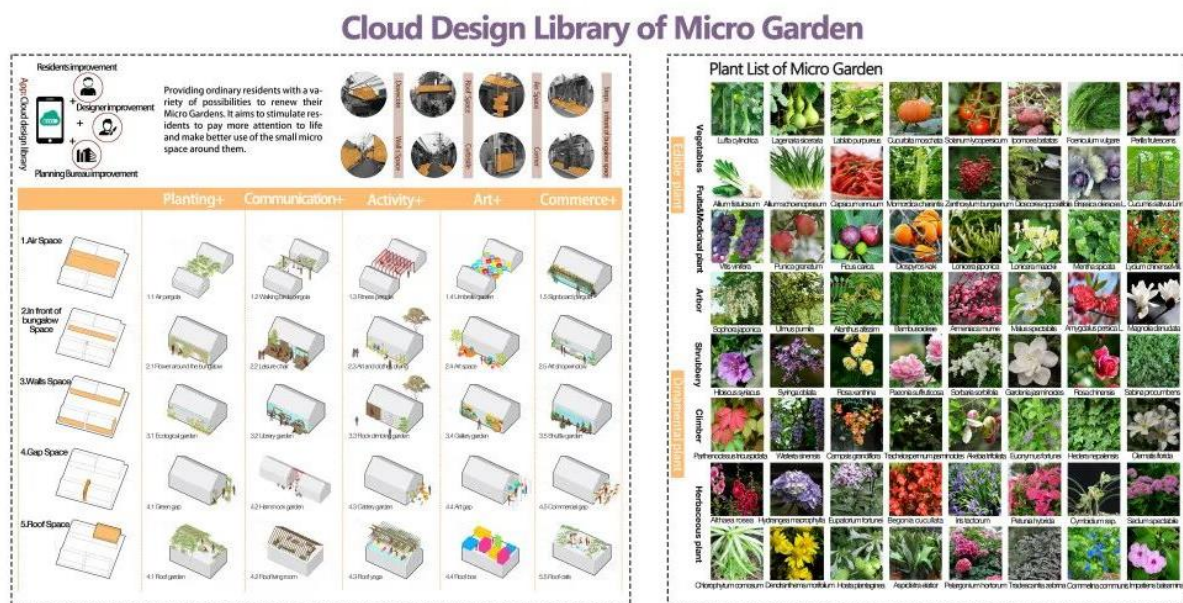


Figure 3- 24 Diverse Options for Micro-garden Construction

(Source: Studio 17, School of Architecture, Central Academy of Fine Arts)

3.3.2 Two-Way Combined Renewal Mechanism

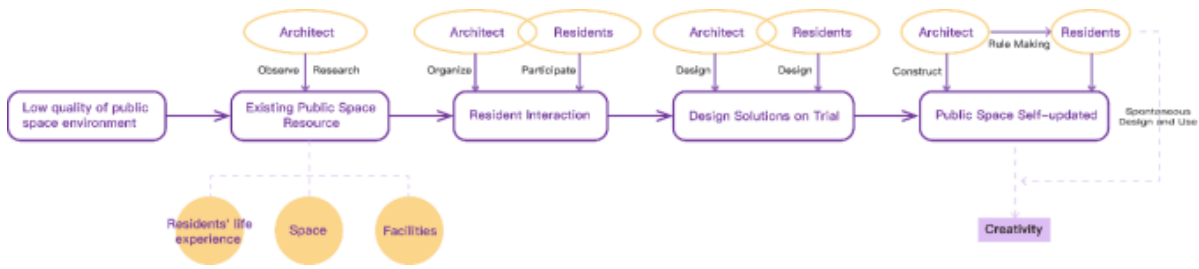


Figure 3- 25 Two-Way Combined Renewal Mechanism

(Source: Self-drawn by the author)

Through continuous micro-garden mapping work, it was discovered that micro-gardens have a significant presence in terms of quantity and diversity in the public spaces of old hutongs in Beijing. This is also a typical reflection of the cultural life in these old communities. In order to ensure the long-term sustainability of micro-garden improvements, it is necessary not only to have professional design but also to preserve and respect these localized spaces in a scientific and user-friendly manner. It is important to establish a diverse co-building and co-governance mechanism, as well as a maintenance system for the later stages.

The Beijing Old Town Micro-garden Renewal Project created a new type of renewal mechanism (Figure 3-26). Firstly, the government initiated and promoted the project development and start-up funding, and played a supervisory and supportive role to the project practice; Secondly, the professional design team was invited to participate in the project, and residents were invited to participate in the pre-design stage, so that they could participate in and fully understand the whole process of renewal through exhibitions, workshops, etc., which stimulated their interest and autonomy, and created a bridge of "communication" between the residents and the design team; and then, the residents' demands and suggestions were constantly collected by means of interviews in the pre-design stage, design stage, implementation stage, and after the construction stage. After the practice of public space renewal, the designers will guide the future residents in the transformation of the public space by formulating the rules of self-construction, so that the public space can have long-lasting creativity and vitality which can shape the rich and colorful everyday life. ^[44]

The two-way combined renewal mechanism based on everyday life can satisfy the residents' needs to spontaneously transform the space to meet their own everyday life needs that change with the times, and at the same time overcomes the cognitive bias towards everyday life and the quality problem of spontaneous renewal in the one-way renewal mechanism so that truly eliminates the distance between professionals and users, and between professional knowledge and daily experience.

3.4 Case Insights and Conclusions

The top-down regeneration model gives full play to the leading role of the government and relevant organizations in urban planning and regeneration. The government has the resources and authority to formulate overall plans and policies to guide the direction of urban development. This approach focuses on holistic and long-term approaches, and is able to take into account the macro-development of the city and the public interest. Government involvement can ensure the standardization, legitimacy and sustainability of urban renewal, as well as solving the major problems and challenges facing the city. However, a purely top-down approach to urban renewal cannot fully take into account the needs and opinions of residents.

The bottom-up regeneration model is driven by the needs of community residents, and the main body of the regeneration is the neighborhood and community organizations, creating a sustainable community with social justice and a good environment through spatial regeneration and other means. However, it is also very easy to cause social conflicts due to unfair redistribution of public space resources. Therefore, in the process of community public space renovation based on residents' everyday life, it is necessary to establish multiple and open communication channels among the government, designers and community residents in order to express the spatial demands of the relevant stakeholders of the public space in a normal and comprehensive manner.

Based on the specific and concrete realities in the city, the theory of everyday urbanism takes the experience of urban residents and their everyday life as the source of inspiration for design, and conceives an alternative, civilianized and realistic urban design concept for the city. The renewal of public space involves the conflicting interests of many parties, and a unidirectional mode of renewal will inevitably produce deviations and contradictions in design and use. But it is also under these conditions that the power of everyday life can shine through. Through the combination of "top-down" and "bottom-up" renewal mechanism, based on the residents' everyday life experience, the colorful picture of everyday life is depicted in a variety of forms and languages (Figure 3-26). This mechanism encourage the participation of all people in the whole process of urban space, and reconnect urban design, the general public and social life.

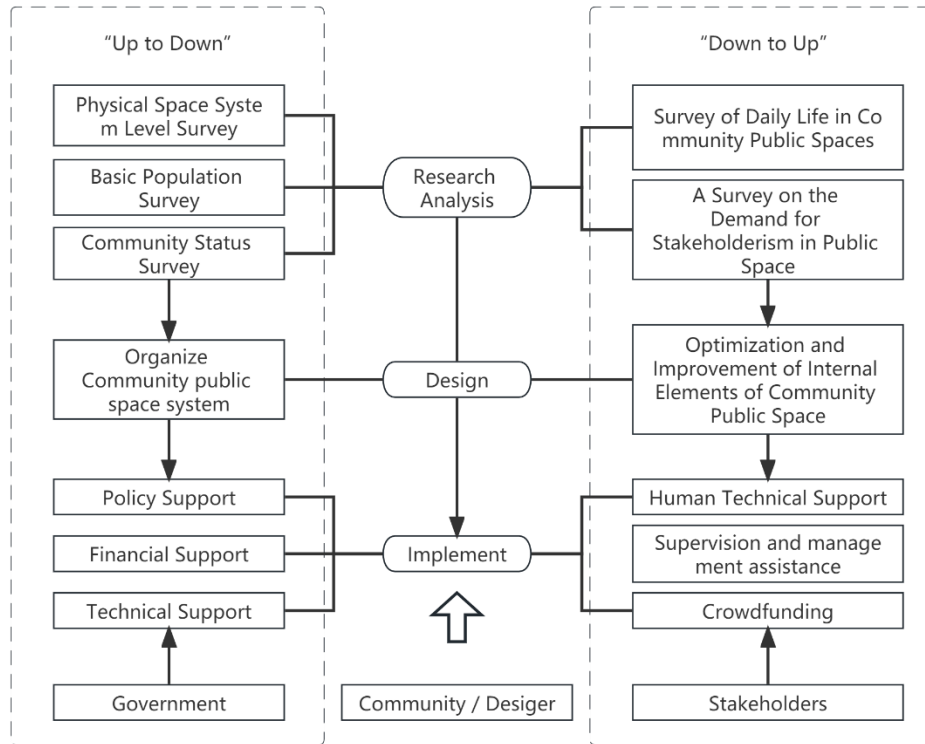


Figure 3- 26 A Two-Way Combined Framework for Public Space Renewal in Old Communities

(Source: Self-drawn by the author)

This chapter classifies the existing renewal mechanisms of public space into three categories from an everyday perspective: "top-down" led renewal mechanism; "bottom-up" led renewal mechanism; and two-way combined renewal mechanism with the participation of all people in the whole renewal process. Through a detailed analysis of these cases, the level of attention paid to the everyday lives of residents and the spatial renewal results they bring under different mechanisms are explored in depth, in order to argue for the shortcomings of unidirectional renewal mechanisms, as well as for the importance of combining bottom-up (empathy for the phenomenon of spontaneous renewal) and top-down (the use of sophisticated knowledge and technology) efforts.

Chapter 4 Research and Analysis of Old Community Public Space in Guangzhou Based on Everyday Urbanism

From domestic and foreign theoretical research on everyday urbanism, it can be concluded that three elements of public space in everyday urbanism are emphasized: Space, Subject, and Activities (Figure 4-1). These three aspects interact and depend on each other, thus forming the rich content of everyday life ^[45]. From the perspective of everyday life, subjects lead the occurrence of activities, which in turn give space its qualities, and space carries and guides the development of activities. A good space can provide people with diversified choices of activities, attract people to actively participate in the activities in the space, satisfy people's everyday life needs, and also lead people to be able to sexually renewal the space to adapt to the changes in lifestyles and types of activities, forming an organic everyday life system, and enhancing the vitality of urban space.

1. Space

Space is where individuals engage in practices and serves as the material carrier of local culture. Public spaces record and carry the everyday activities and culture of community residents. They are important platforms for community members to interact, fostering trust and a sense of belonging, and shaping the unique cultural identity of the community. Community public space, as an important carrier space for residents' everyday life, also needs to change itself to adapt to the unfolding of new activities and changes in the lifestyles of community residents. This adaptation to changing times, as time goes on, will give rise to new community cultures.

2. Subject

People are the main subjects in cities, serving as both producers and users of urban spaces. "Everyday urbanism" focuses on the individuals who utilize community public spaces as their main subject of study. These individuals possess ordinary citizen attributes and exhibit various natural characteristics (such as gender and age) as well as social characteristics (such as education, occupation, and ethnicity).

3. Activities

The subjects influence and give meaning to the space through activities. The activities that everyday urbanism focuses on are the everyday activities of residents, particularly their spontaneous use of public spaces in their everyday lives. The various everyday behaviors and activities of residents, repeated day after day, contribute to the formation of a local lifestyle, customs, and rules with distinct regional characteristics, gradually evolving into local culture.

This article examines and analyzes old communities public spaces in Guangzhou from the micro-perspective of everyday urbanism. It investigates the relationship between the subjects, activities, and space in these old community public spaces, aiming to identify the design issues at the material spatial level and address the true needs of residents' everyday lives.

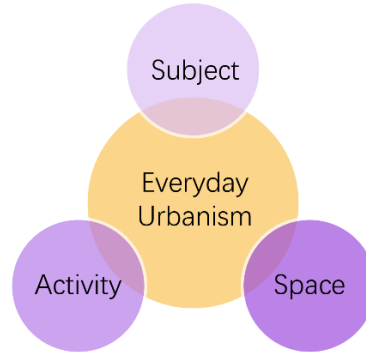


Figure 4- 1 Three Elements of Public Space Based on Everyday Urbanism
(Source: Self-drawn by the author)

4.1 Analysis of Old Community Public Space in Guangzhou

4.1.1 Physical Components of Community Public Space

The physical composition of community public space includes the elements of the morphological composition of the space itself and the elements of the public facilities located in the physical space.

4.1.1.1 Morphological Components of Physical Space

The morphological elements of public space consist of two main aspects - the base and the interface [46].

The base elements are the foundational elements of the public space form. When people observe and interact with vertical elements such as buildings or furniture within the space, they rely on the support provided by the base.

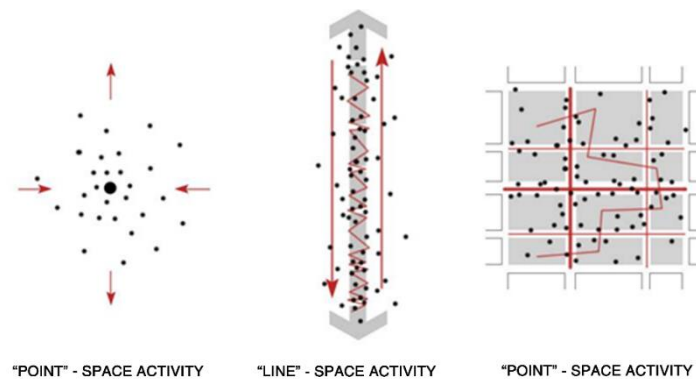


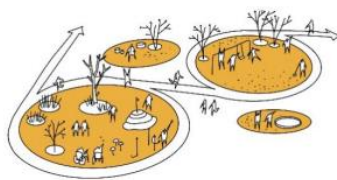
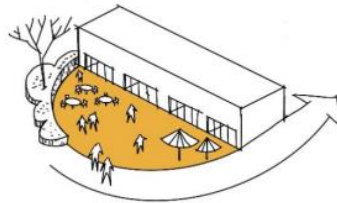
Figure 4- 2 Classification of Base Elements
(Source: Reference [47])

Within urban public spaces, spatial activities are an important factor that influences spatial form. Therefore, the base elements can be classified into "points," "lines," and "surfaces" based on the characteristics of spatial activities (Figure 4-2). The evaluation criteria for these elements are based on the overall features of spatial activities, such as crowd gathering and dispersal, as well as the degree and manner of aggregation ^[47].

1. Point-based space: "Point" spaces exhibit the highest degree of crowd gathering. They are usually triggered by chance events or spatial nodes with distinctive features, which attract crowds. Within these spaces, people constantly move in both centrifugal and centripetal directions. Point spaces are characterized by randomness, short duration, and high intensity. These point spaces become the vibrant centers of communities, forming "domains" that radiate outward and establish connections, ultimately becoming the center of residents' daily lives. Point-based spaces in community public spaces can be further categorized into scattered node spaces and portal node spaces, as shown in Table 4-1:

Table 4- 1 Classification and Characterization of Point-based space

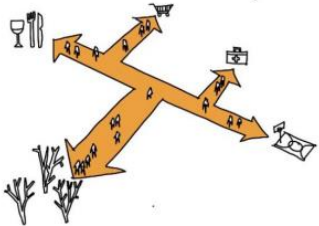

(Source: Compiled by the author)

Category of Element	Characteristics of the Elements	Examples of Element Types	Schematic
Scattered Node Space	It is Characterised by small, multiple, scattered and relatively single-function	Green spaces, pocket parks, corners, unused and abandoned spaces etc.	
Portal Node Space	Portal spaces do not only refer to the space of entrances and exits to building, but also include the space separating different zones	Space to stay at the junction of public and private space	

2. Linear-based space: The population aggregation in "linear" space is relatively high, the core that triggers the gathering is a line. People gather and move along a path or in one direction, or engage in small-scale "oscillating" movements within the path of linear-based spaces in community public spaces can be further categorized into community street spaces and linear landscape spaces, as shown in Table 4-2:

Table 4- 2 Classification and Characterization of Linear-based Space

(Source: Compiled by the author)

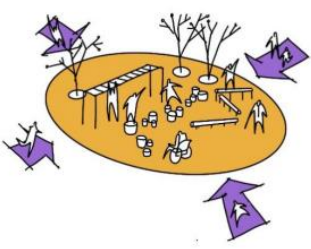

Category of Element	Characteristics of the Elements	Examples of Element Types	Schematic
Community Street Space	A linear street space around the community that functionally meets the needs of everyday life	It is suitable for everyday public life or pedestrian presence	
Linear Landscape Space	Through the linear arrangement of landscape elements to guide the public activities of residents.	Linear landscape, water landscape	

3. Surface-based space: Due to the large scale of the "surface" space, the crowd is more evenly distributed in the space and the average density is lower. The gathering of people in it is mainly around the building groups or important landscape nodes in the space. The mobility of the crowd is strong, and the trajectory of the crowd has a large span.

Surface-based space in the community public space can be further categorized into centralized plaza space and professional sports ground, as shown in Table 4-3:

Table 4- 3 Classification and Characterization of Surface-based Space

(Source: Compiled by the author)

Category of Element	Characteristics of the Elements	Examples of Element Types	Schematic
Centralized Plaza Space	Large community gardens or public activity venues, assuming the functions of community recreation, landscape, culture, etc	Community gardens, public green spaces, activity squares	
Professional Sports Ground	Professional sports facilities are available in the community for residents to exercise and work out professionally	Community playgrounds	

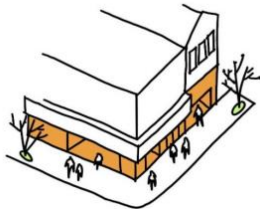

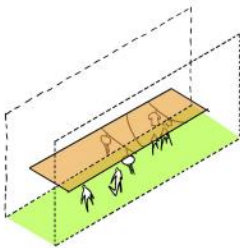
4. Interface space: Interface space refers to the architectural and physical entities that protrude from the base and enclose or divide it. They not only create a sense of visual closure or openness in public spaces, but also play a role in supporting or impeding behavioral activities within these spaces. The presence of interfaces also blurs the distinction between community

public spaces and private spaces.

Based on the morphological characteristics of interfaces, interface spaces can be further categorized into architectural interface, special interface, and sky interface, as shown in Table 4-4:

Table 4- 4 Classification and Characterization of Interface Space

(Source: Compiled by the author)

Category of Element	Characteristics of the Elements	Examples of Element Types	Schematic
Architectural Interface	The interface formed by the buildings surrounding a public space,	Vertical interaction interface between the private space on the first floor of the building and the public space	
Specific Interface	The interface formed by structures located within the scope of public space	Community basketball court fences, community walls, railings, etc.	
Sky Interface	Community public space is an outdoor open public space with a roof element that is generally the sky	Sky	

4.1.1.2 Public Facilities of Physical Space





Public facilities in community public spaces are integral elements in shaping and activating the everyday lives of community residents. The style, form, arrangement, and material colors of these facilities all influence how residents use public spaces. The layout of public facilities also affects the diversity of community public spaces, particularly flexible facilities and interactive experiential facilities, which are crucial for the development of residents' everyday lives and play a significant role in shaping people-centered community public spaces.

Public facilities, commonly known as urban furniture, need to fulfill functional rationality from a practical perspective. They also facilitate diverse daily activities. As essential elements in community public spaces, they should also possess artistic aesthetics and cultural significance, reflecting the expression of the community and showcasing the unique characteristics and temperament of the city.

In this article, public facilities are categorized into four types based on their functions: public leisure service facilities, small-scale landscape facilities, transportation service facilities, and basic service facilities, as shown in Table 4-5:

Table 4- 5 Classification and Characterization of Public Facilities

(Source: Compiled by the author)

Public Facilities	Characteristics of the Elements	Examples of Element Types	Schematic
Leisure Service Facilities	Meet the needs of residents for rest, fitness and recreation	Leisure seating, interactive activity facilities, flexible mobility devices, etc.	
Vignette Landscape Facilities	Meeting the ecological and aesthetic needs of residents in the outdoor environment	Flower beds, sculptures, ground art paving, etc.	
Transport service facilities	Fixed engineering facilities providing transport services for the travelling population and the transport of social products	Traffic signs, bicycle parking facilities, bus shelters, etc.	
Infrastructure services facilities	Provide basic living and health services to the population	Bins, public toilets, public drinking fountains, etc.	

4.1.2 Subjects of Community Public Space

The age structure in the old communities of Guangzhou is similar, with a higher proportion of middle-aged and elderly populations. The original residents in these communities are mainly concentrated in the age group above 40, while the proportion of young adults is relatively low. There are also some tenants in the community, mainly concentrated in the age group of 25-50. Furthermore, the utilization and primary activity spaces of community public spaces vary significantly among similar groups in different communities. A classification study on the living habits of different demographic groups is conducted, primarily including pre-school children, adolescents, middle-aged groups, elderly people, and other special groups ^[48].

1. Preschool children are a special group because the subject does not have the ability to participate in public activities independently, so the subject's daily public activities need to be bound to their guardians. The main community public space for their activities is the centralized

plaza space or the scattered node space in the community.

2. The youth group is the most active and mobile group in the community public space, and the public activities of this group have significant differences in different time periods. The public activities of this group mainly take place after school in the afternoon until 8 p.m. and all day on weekends. At the same time, the public activities of this group mainly take place in a relatively fixed number of public areas, and this kind of public space tends to have a greater impact on this group because of its privacy and spatial facilities, because they prefer public spaces with relatively strong privacy and facilities or venues for children's activities.

3. The middle-aged group has the highest proportion of people in the community, and this group of people is distributed in all kinds of public spaces in the community, which will generate rest, communication, and other occasional public activities. At the same time, due to the unique living habits of the residents in Guangzhou, the middle-aged group also has a strong public interest in recreational activities such as drinking tea, which mainly occurs in the centralized plaza space, scattered node space and portal node space of the community, thus triggering different degrees of crowd gathering.

4. The public life of the elderly in community public space is mainly concentrated in centralized plaza space and portal node space. Due to their limited mobility, this group of people generally chooses the community public space that is close by, with strong accessibility and good security, in order to satisfy the most basic leisure, fitness and communication needs

5. Special groups refer to a small number of people with distinct group characteristics present in the community, including tourists, merchants and other groups.

Overall, there are differences in the daily habits of various demographic groups in community public spaces. Residents' everyday lives in public spaces are significantly influenced by their lifestyle habits and interests.

4.1.3 Crowd Activities of Community Public Space

Old communities in China have very diverse and complex neighborhood relations filled with a variety of rich everyday lives. Everyday life is a general term for activities aimed at maintaining individual survival and reproduction, such as the acquisition and consumption of daily means of subsistence, daily interactions, and daily perceptions, involving work, study, housework, shopping, and leisure activities. Jan Gehl classifies people's activities in the outdoors into three types: necessity, spontaneity and social activities^[30].

Necessary activities are the everyday life affairs, work, study and necessary survival consumption that human beings must carry out under any conditions according to the necessary

needs for personal survival. Their occurrence is relatively less dependent on the external physical environment.

Spontaneous activities are everyday activities that humans engage in when time and place are feasible and there is a willingness to participate, such as walking, lingering, stopping and watching, and leisure-time consumption. This type of activity is highly dependent on external physical conditions, and high quality space can help to promote spontaneous activity.

Social activities are everyday activities involving multiple individuals. Greeting, conversation, and more broadly passive audiovisual sensations fall into this category and generally occur in conjunction with both necessity and spontaneity activities. People may be facilitating social interactions when they engage in both necessary and spontaneous activities.

Among them, spontaneous behavior is the proactive renewal of community public spaces by residents based on their own needs, which has a significant impact on the material public space of the community. Residents autonomously choose locations based on their activity needs and periodically engage in similar activities at the same location. Sometimes, these activities are accompanied by environmental renewal, resulting in unique spatial scenes. The emergence of such spatial scenes is not due to the specific preferences of a few individuals but rather the collective choice of surrounding residents, representing a collective and scalable phenomenon. Only through observing dynamically, summarizing usage patterns, and designing accordingly, community renewal can really meet the actual needs of community residents in their everyday lives.

4.2 Research on the Current Situation of Old Community Public Space in Guangzhou

4.2.1 Selection of Research Subjects

This article mainly focuses on studying the self-renewal phenomenon of public spaces in old communities in Guangzhou, China. Based on the definition of old communities in this article, referring to the danwei-based old communities built under the planned economic system. Due to the large number of danwei-based old communities within this definition, the author chose several representative communities for research. In order to summarize the common problems of danwei-based old communities in Guangzhou and make the research results more universal, the author conducted investigations in Gonghecun Community, Dexin Community, and Changleyuan Community, which represent old communities that are yet to be renovated, have already been renovated, and are in urgent need of renovation respectively. Overall, these three cases almost represent the current situation of danwei-based old communities in

Guangzhou.

During the research process, this article conducted investigations on the spontaneous activities of residents towards the physical spaces in the selected old communities. It analyzed and summarized the residents' needs behind these spontaneous renewal activities, and extracted the common problems existing in public spaces of old communities which will lay the foundation for the subsequent strategy summary.

4.2.2 A Site Research Methodology Based on Everyday Urbanism

In the book "Taipei Operations" by Sand Helsel, the author points out that in order to have a deeper understanding of a city and its complex everyday landscape, it is necessary to gather data through firsthand experiences and personal observations at specific locations, rather than relying solely on various geographic information systems (GIS) datasets and official census data. While quantitative data analysis can provide clues and directions for resource allocation on a macro scale, it tends to overlook the complexity and richness of the real-life world ^[49]. Renowned scholar Iain Chambers goes even further to criticize highly abstracted big data and top-down mapping techniques, stating that they can hardly describe and reflect human behavioral trajectories, nor can they observe the constantly changing everyday and global spatial conditions on the ground^[50].

Engaging in participatory and interactive observations of the site is the research method adopted in this article based on everyday urbanism. Designers actively observe everyday life in community public spaces, from passive to proactive, by observing and documenting people, events, and objects in small-scale spaces. Through these observations, the current situation and issues regarding the potential utilization of public spaces in old communities can be identified ^[44]. This study utilizes the method of mapping to observe and research public spaces in old communities. Mapping is a way of thinking and recording space, serving as a representation and feedback of spatial observations. Observers first conduct spontaneous observations of each type of community public space, then predict space and scenarios through observation, and extract useful spatial information from the complex and chaotic public life. James Corner, an American landscape designer, also believes that mapping is the initial intervention in site design ^[51]. By adopting a bottom-up approach to understand the everyday practices of ordinary people and their real spatial needs, we can uncover a set of spatial management and coordination systems that are spontaneously formed by ordinary people behind top-down urban governance mechanisms. These bottom-up spatial systems can not only be transformed into tools for urban planners' design but also provide strategies for urban managers or supplementary ideas for top-

down policy making. To uncover these hidden urban systems, the fundamental element is to closely observe people's everyday lives based on a human scale.

Observations can be divided into three parts: observation of spatial scenes, observation of the activities of users and observation of the use of public facilities.

Firstly, observe the spatial scenes of public spaces in old communities. Conduct a statistical analysis of the distribution of physical space types in the community, and then conduct research on the current situation of each type of space based on the spatial distribution map of the site. During the research process, various forms such as observation, drawing, measurement, and photography can be used to record and interpret mapping, facilitating the extraction and summarization of spontaneous behavioral patterns in everyday life scenarios for later analysis. In terms of time selection, it is preferable to choose sunny weekends and workdays, as the usage of public spaces is highest on such days, reflecting the most authentic everyday life and spatial participation of residents.

Next, observe the activities of the population using the public spaces in old community. In these spaces, there are diverse, vibrant, and dynamic scenes characterized by uncertainty. Different user groups actively transform and continuously utilize these public spaces, gradually forming patterns of behavior and activities. According to classification of the resident groups, representatives from different categories will be randomly selected and tracked within the community's public spaces. Their behavioral patterns and activity times will be recorded to summarize the activity characteristics and behavioral habits of different user groups.

Lastly, observe the use of public facilities in old community public spaces. Due to the age of these communities, many public facilities have deteriorated over time and can no longer support their original design purposes. By observing residents' use and transformation of these negative public resources, we can summarize their life experience and wisdom. This will serve as inspiration and provide guidance for supplementing public facilities during the subsequent renewal process.

4.2.3 A Renewed Old Community - Dexin Community

4.2.3.1 General Situation



a) Location of the Dexin community

b) Spatial distribution of substrates

Figure 4- 3 Dexin Community Location and Spatial Distribution Map

(Source: Self-drawn by the author)

Dexin Community is located on Tianhe East Road in Tianhe District, Guangzhou. It was established from the late 1980s to the early 1990s. The residential buildings within the community are all frame-structured, and it is classified as an old community under the unit-based system. The community covers an area of 45,000 square meters with a total construction area of approximately 92,000 square meters. There are currently 17 buildings, with around 49% of the houses being used for rental purposes. In 2017, the community underwent a public space renewal, becoming the first pilot project for revitalizing old communities in Tianhe District (Figure 4-3).

4.2.3.2 Spatial Distribution and Spontaneous Behavior

Based on the previous classification of public spaces according to their physical layout, record and analyze the occurrence of residents' spontaneous behaviors within these spaces.

1. Base elements of public space

(1) Point-based space

① Scattered node space

According to the research, scattered node space in Dexin Community are mainly distributed buildings and pocket plazas. Most of the time, these spaces do not have specific functional uses and are occupied by residents for parking, storage, and spontaneous gardening activities (Figure 4-4).



a) Parking

b) Storage

c) Spontaneous gardens

Figure 4- 4 Spontaneous Behavior in Scattered Node Spaces

(Source: Author's own photograph)

At the same time, residents spontaneously gather around public facilities in node spaces, relying on them (such as landscape trees, surveillance poles, etc.) for placing facilities, parking, drying clothes, and other activities. They also engage in the renewal of landscape node spaces by creating small gardens.(Figure 4-5)



a) Use of landscape nodes for drying clothes



b) Establishment of gardens using landscaped tree pools



c) Parking around public facilities



d) Conversion of landscape trees into basketball hoops

Figure 4- 5 Spontaneous Behavior of Public Facilities in Scattered Node Spaces

(Source: Author's own photograph)

② Portal node space

The spatial scale of the portal node space is generally small, and is distinguished and defined by the first floor residents with diverse techniques such as paving, lifting the ground, and fencing. This transitional space between public and private is often used by residents for temporary parking, storage, spontaneous gardening, drying and other functional spaces (Figure 4-6).

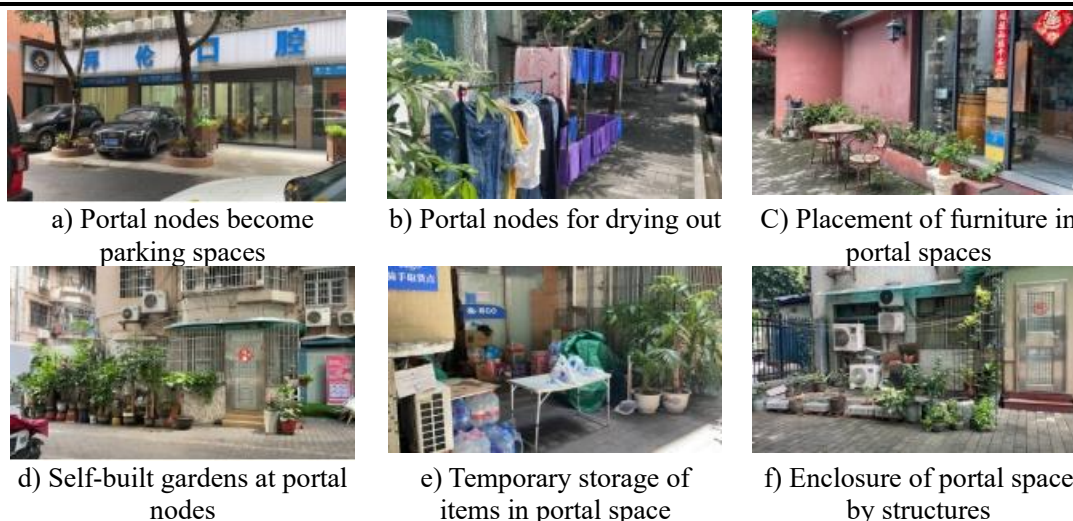


Figure 4- 6 Spontaneous Behavior in Portal Node Spaces

(Source: Author's own photograph)

These transitional spaces located between the street and the facades of buildings serve as one of the sources of vitality for community public spaces, and they exhibit diverse architectural forms. Common occurrences in these portal spaces include residents placing outdoor furniture and creating spontaneous gardens. These spontaneous activities not only enhance the functionality of community public spaces but also provide excellent venues for neighborhood interactions. They are the primary spaces where residents extend their private everyday lives to the realm of public everyday life.

(2) Linear-based space

① Community street space



Figure 4- 7 Spontaneous Behavior in Community Street Spaces

(Source: Author's own photograph)

Most of the time, the community street space accommodates vehicular and pedestrian traffic and parking. In addition to these functions, the street space also serves as a venue for daily leisure, communication, and relaxation within the community.

In the street space of Dexin Community, due to the insufficient parking spaces and recreational facilities, residents occupy it with temporary parking, spontaneous placement of furniture and miscellaneous items, and other behaviors. They also utilize public facilities such as road dividers at intersections and turning points as resting spots. These spontaneous behaviors address residents' daily life needs and bring vitality to the space. However, they often come with issues related to environmental hygiene and spatial safety (Figure 4-7).

② Linear landscape space

Linear landscape spaces in community public areas are generally arranged along the street space and buildings, serving as ecological and aesthetic features in the public space. After the upgrade and transformation of public spaces in Dexin Community, it now has relatively comprehensive linear landscape facilities. However, due to the persisting issue of insufficient parking spaces within the community, residents spontaneously park their vehicles along the linear landscape, creating a unique scenic route.

In addition, residents also utilize the natural characteristics of plant trunks in linear landscapes to transform them into supporting structures for outdoor drying spaces, which serve as essential areas for residents' needs of drying clothes. (Figure 4-8)



a) Parking along linear landscapes



b) Conversion to drying space with plants

Figure 4- 8 Spontaneous Behavior in Linear Landscape Spaces

(Source: Author's own photograph)

(3) Surface-based space

① Centralized plaza space

Centralized plaza spaces are relatively rare in the community's public system, but they serve as the main gathering and socializing areas for residents. They are equipped with sufficient recreational facilities, fitness equipment, and landscape elements. These spaces

provide the conditions for stimulating social and spontaneous activities, as well as occasional social interactions.



a) Temporary parking in plaza spaces



b) Gathering around fitness equipment



c) Playing cards with furniture in architectural vignettes

Figure 4- 9 Spontaneous Behavior in Centralized Plaza Spaces

(Source: Author's own photograph)

In the Dexin community, the plaza spaces are mainly concentrated in the northeast corner, featuring abundant recreational facilities and architectural elements. Residents engage in activities such as laundry drying and temporary parking in the plaza, while also spontaneously placing furniture in the architectural vignette for social activities like playing cards, chess, and conversations (Figure 4-9).

② Professional sports ground

Sports facilities in the community serve as the main spaces for residents to engage in daily physical activities. Special flooring, sports equipment, and fences are used to ensure the safety of these activities. In the Dexin community, the sports facilities are located adjacent to the plaza spaces. However, due to their specialized functional nature, they do not see as much spontaneous usage and activity from residents compared to the plaza spaces.

2. Public space interface

① Architectural interface

The architectural interfaces, as the main enclosing boundaries of community public spaces, serve various functions such as commercial activities and information dissemination. Particularly, the shops located within certain building walls (such as hair salons, fruit shops, convenience stores, etc.) not only fulfill residents' daily shopping needs but also provide diverse functionalities to the community buildings, offering residents a wide range of activity options and promoting neighborhood interactions.



Figure 4- 10 Commercial Use of the Architectural Interface

(Source: Author's own photograph)

Additionally, as the number of openings and visibility in architectural interfaces increases, commercial areas become more appealing to people. This enhanced connection with the outside world results in a closer relationship between individuals and the surrounding environment, leading to an increase in vitality within community public spaces (Figure 4-10).

② Specific interface

Specific interface structures in the Dexin community often take the form of community boundary fences, gate railings, and similar constructions. Residents typically utilize these structures to meet their own needs, such as drying clothes or placing miscellaneous items (Figure 4-11).



Figure 4- 11 Drying Behavior of Specific Interfaces

(Source: Author's own photograph)

③ Sky Interface

Since community public spaces are mostly open outdoor areas, the upper interface is often the sky. Due to the large spacing between buildings in the Dexin community, the upper interface remains primarily the sky, and no spontaneous modifications by residents have been observed.

4.2.3.3 Space Participants and Everyday Activities

The Dexin community has a total of 1,087 households and a permanent population of 4,215 individuals. The participants in the community's public spaces can be divided into two categories: indigenous residents and tenants, and outsiders. Among the indigenous residents and tenants, it can be divided into children, teenagers, middle-aged adults, the elderly and local

merchants. Outsiders can be further categorized into external merchants and tourists.

1. Indigenous residents and tenants

The Dexin community is an old community, with half of the permanent population being indigenous residents, while the other half consists of nearby commuters and commercial tenants.

① Middle-aged adults, the elderly and children

The indigenous residents, mainly consisting of middle-aged and elderly individuals as well as children, have been living in the community for a long time. They have regular daily routines and play a significant role in participating in and transforming the community's public spaces. Their everyday activities primarily involve outdoor laundry drying, using their own furniture for socializing, and maintaining self-built small gardens (Figure 4-12).



a) Pre-school children gather and play with a leader



b) Social gatherings of middle-aged and older persons

Figure 4- 12 Daily Activities of Middle-aged, the Elderly and Children

(Source: Author's own photograph)

Children are the most vibrant group in public spaces, and their presence is relatively regular. Preschool children are usually accompanied by parents to participate in activities or engage in group activities under the supervision of residents in public areas. Their presence often attracts other people to gather around them, enhancing the vitality of the space. School-age children's activities in public spaces typically occur after school and before meals, but their time is relatively short. However, due to the increasing prevalence of after-school tutoring, there are fewer instances of school-age children engaging in activities in public spaces within Dexin community.

② Youth and merchants

Apart from the local residents, there is also a portion of tenants in the community, with young people being the main demographic. Their everyday lives primarily revolve around commuting and work which make them have a lower level of participation in community public space activities.

The merchants in the community also represent an active group in the public space. They

can be divided into two types. The first type is traditional businesses operated by the local residents, such as barber shops and grocery stores. These businesses are often mixed with private living spaces and extend their commercial spaces to the entrance area. They primarily serve the permanent residents in the community. The second type consists of more modern businesses, such as children's tutoring classes, coffee shops, and flower shops, which cater to both community residents and outsiders. The interactions between these merchants and customers create mini interactive spaces within the community public space. These spaces serve as important venues for exchanging information and engaging in neighborhood interactions, thus adding vibrancy to the public space in De Xin community (Figure 4-13).



a) Traditional businesses in the community

b) Modern business in the community

Figure 4- 13 Various Types of Businesses in the Community

(Source: Author's own photograph)

2. Outsiders

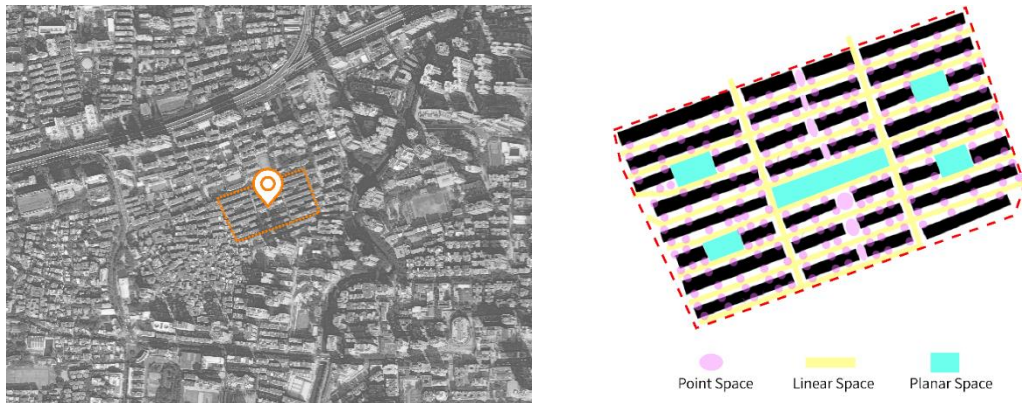
Dexin community is an open community, and after renewal, its rich commercial areas and well-equipped public spaces have also attracted visitors from outside, including residents from surrounding communities and tourists. Usually, these individuals engage in activities such as shopping, resting, and socializing while exploring the community's public spaces. The interaction between visitors and the community's public spaces is also a primary way for community to participate in urban life.

4.2.3.4 Summary

After the renewal of public spaces, Dexin community now boasts high-quality public space environments. Currently, there is still a vibrant presence of spontaneous activities in the community's public spaces, which can be seen as a combination of "top-down" and "bottom-up" approaches to spatial development. It is evident that through long-term adaptation and coordination, the form of the public spaces has become more appealing and conducive to the everyday lives of the residents. This has enhanced their sense of ownership and identification with the living environment.

4.2.4 An Unrenewed Old Community - Gongheacun Community

4.2.4.1 General Situation



a) Location of the Gongheacun community

b) Spatial distribution of substrates

Figure 4- 14 Gongheacun Community Location and Spatial Distribution Map

(Source: Self-drawn by the author)

Gongheacun Community is located in Yuexiu District, Guangzhou. The community was established in the late 1980s to early 1990s as dormitories for railway workers and was a place where early Guangzhou railway employees settled. Despite its long history, the public spaces of the community have not been renewed. The retired elderly residents still maintain their original way of life (Figure 4-14).

4.2.4.2 Spatial Distribution and Spontaneous Behavior

Based on the previous classification of public spaces according to their physical layout, record and analyze the occurrence of residents' spontaneous behaviors within these spaces.

1. Base elements of public space

(1) Point-based space

① Scattered node space

The buildings in the community follow a certain layout pattern. The scattered node spaces within the community are mainly distributed between residential buildings, road intersections, and at the ends of roads. Due to insufficient parking space in the community, these scattered node spaces are often used as temporary parking spaces. Additionally, in some node spaces at the ends of streets, they may become spaces for vendors to sell their goods. While these spontaneous activities bring vitality to the scattered node spaces, they often come with issues related to environmental hygiene and spatial safety (Figure 4-15).



a) Commercial activities



b) Parking

Figure 4- 15 Spontaneous Behavior in Scattered Node Spaces

(Source: Author's own photograph)

② Portal node space

To differentiate portal node spaces from other public spaces, residents in Gongheacun community often use methods such as paving the ground or installing fences. These "gray spaces" that fall between public and private areas are frequently used by residents for temporary parking, storing items, and creating micro-gardens or functional spaces (Figure 4-16).



a) Parking



b) Portal nodes for drying out



c) Placement of furniture



d) Self-built gardens at portal nodes



e) Temporary storage of items in portal space



f) Enclosure of portal space by structures

Figure 4- 16 Spontaneous Behavior in Portal Node Space

(Source: Author's own photograph)

(2) Linear-based space

① Community street space

According to research, the street layouts in Gongheacun community follow a straight-line

pattern, with an average width of 4-5 meters. The straight layout of the streets leads to short stays for residents. However, due to the incomplete functional spaces in some parts of the old community, the streets are often used for parking, storing miscellaneous items, or creating impromptu gardens. While these activities bring additional functionality to the street space, they also pose problems such as environmental hygiene and safety issues (Figure 4-17).



a) Placement of furniture in street spaces



b) Parking in street spaces



c) Piling of debris in the streets



d) Construction of street gardens

Figure 4- 17 Spontaneous Behavior in Community Street Spaces

(Source: Author's own photograph)

② Linear landscape space

The linear landscape spaces within the community are mostly arranged along the streets. Due to the age of the community, the quality of these linear landscape spaces is not very high. Residents have taken spontaneous actions to transform these spaces by storing miscellaneous items or creating small gardens, aiming to enhance the functionality and ecological quality of the linear landscapes. Additionally, residents also utilize the natural structures of plants within the linear landscapes to create natural supports for hanging laundry (Figure 4-18).



a) Placement of lockers in linear landscapes



b) Transformation of linear landscapes



c) Using plants to dry clothes

Figure 4- 18 Spontaneous Behavior in Linear Landscape Space

(Source: Author's own photograph)

(4) Surface-based space

① Centralized plaza space

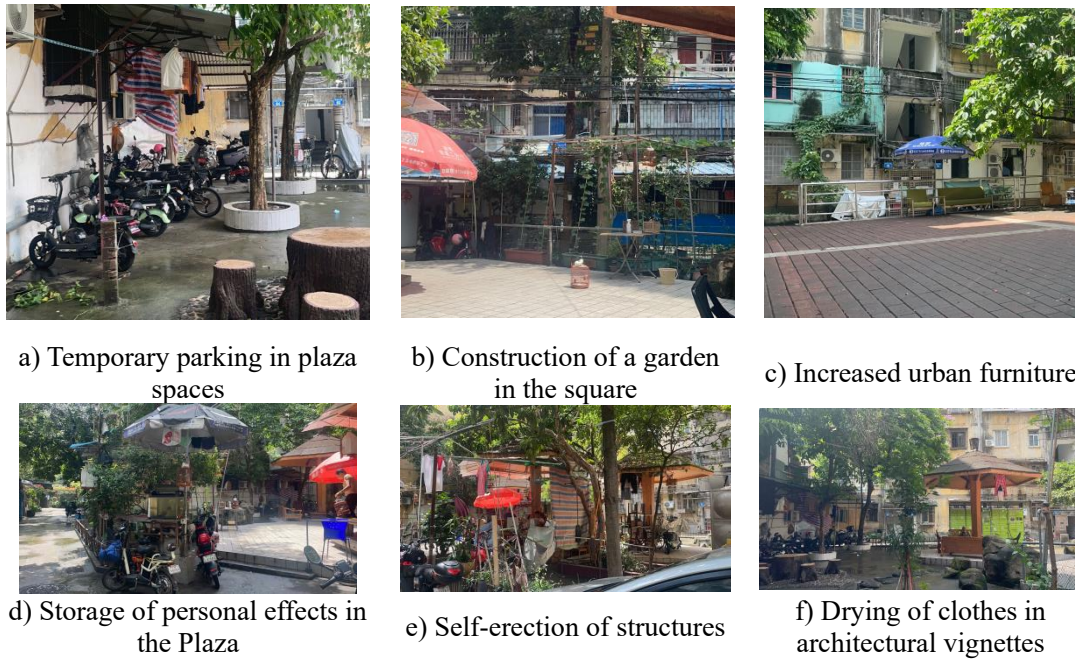


Figure 4- 19 Spontaneous Behavior in Centralized Plaza Space

(Source: Author's own photograph)

Within the public spaces of the community, there are five centralized plaza spaces, four of which are centralized squares located in the four corners of the community. Due to the age of the community, the public facilities in these spaces are outdated and lack diversity. Therefore, residents have taken it upon themselves to transform these spaces according to their needs. The centralized plaza spaces have become important places for residents to interact, exchange information, and expand their social networks. They play a crucial role in enhancing the vitality of the community's public spaces. Residents engage in various activities such as parking, creating gardens, storing miscellaneous items, and placing furniture in these spaces. Additionally, architectural vignettes are utilized for hanging laundry, providing shelter from wind and rain during these activities (Figure 4-19).

② Professional sports ground

The sports field in the community is located in the central area. It has been renewed by the residents and is the only space with relatively high quality and well-equipped facilities in the community. However, due to its specialized nature and the construction of sports fences, this space is primarily used for professional sports activities, and spontaneous behaviors from residents are less common. As a result, the vitality of this space is relatively low during most time periods (Figure 4-20).



Figure 4- 20 Professional Sports Grounds

(Source: Author's own photograph)

2. Public space interface

① Architectural interface

As the primary enclosure interface of the community's public space, the architectural interface serve various functions such as commercial activities and information dissemination. Especially with the presence of shops (such as barber shops and convenience stores) located within certain building walls, the doorways of these interfaces become passages for merchants and customers, fulfilling the daily shopping needs of residents. They also provide diverse functionalities to the community's buildings and promote neighborhood interactions.

At the same time, commercial tenants also carry out remodeling acts such as painting the building interface to highlight their commercial nature and attract patronage (Figure 4-21).



Figure 4- 21 Commercial Use of the Architectural Interface

(Source: Author's own photograph)

② Specific interfaces



Figure 4- 22 Hanging Behavior of Specific Interfaces

(Source: Author's own photograph)

Specific interface structures in the community often take the form of community boundary fences or guardrails. Residents typically utilize these structures to store miscellaneous items (Figure 4-22).

③ Sky interface

Since the public spaces in the community are mostly open outdoor areas, the upper boundaries are often the sky. Based on the observation, in Gongheacun community, due to its age and lack of unified reconstruction, there are complex municipal power transmission lines intertwined within the upper boundaries of the public spaces. Some residents even use them as clotheslines for drying laundry. This behavior poses significant safety hazards (Figure 4-23).



Figure 4- 23 Drying Behavior at the Sky Interfaces

(Source: Author's own photograph)

4.2.4.3 Space Participants and Everyday Activities

Gongheacun community consists of 1,087 households with a permanent population of 4,215 people. The participants in the public space of the community include two categories: indigenous residents and tenants, as well as outsiders. Indigenous residents and tenants can be further divided into children, adolescents, middle-aged adults, and the elderly based on their age. Outsiders can be categorized into two groups: external merchants and tourists. Each group of participants engages in different activities within the public spaces.

1. Indigenous residents and tenants

Gonghecun community is aged, with approximately 40% of the population being elderly individuals aged 60 and above. The floating population of outsiders is close to half of the total population, mainly consisting of nearby commuters and tenant vendors.

① Middle-aged adults, the elderly and children

The indigenous residents, mainly middle-aged and elderly individuals, as well as children, have been residing in the community for a long time. They actively participate in public space activities for leisure purposes and play a significant role in shaping and transforming the community's public spaces. Their everyday activities often involve sunbathing, outdoor laundry drying, socializing with their own furniture, maintaining self-built small gardens, and escorting children to and from school (Figure 4-24).



Figure 4- 24 Middle-aged and Elderly People Relaxed on the Streets

(Source: Author's own photograph)

Children appear in public spaces in a more regular manner. Preschool children are mainly accompanied by their parents to participate in activities, or they gather in public areas under the care of residents. They often create a magnetic effect, attracting people around them to gather around the children and thus enhancing the vitality of the space. School-aged children's activities in public spaces occur after school until dinnertime, and their activity time is relatively short. The community has good school resources nearby, and the majority of children in the community are aged 6-12. However, due to the old infrastructure of the community, most children spend their everyday lives having meals at their grandparents' homes or in daycare centers after noon dismissal. Then they return to their parents' homes in other communities in

the evening after school, resulting in limited everyday activities of children in the community's public spaces.

② Youth and merchants

In addition to the indigenous population, there is also a portion of tenants in the community, mainly consisting of young people. Their everyday lives are mainly focused on commuting to work which make them seldom participate in the community public life.

There are numerous businesses within the community, which can be divided into two types. The first type consists of traditional businesses operated by indigenous people, such as barbershops and grocery stores. These businesses are typically mixed with private living spaces and extend their commercial spaces to the portal space. They mainly serve permanent residents within the community. The second type of business focuses on children's tutoring classes and serves both community residents and students from nearby schools. The interaction between these businesses and residents forms mini interactive spaces in the community's public areas. These spaces serve as important places for information exchange and neighborly interactions, enhancing the vitality of public spaces in the Republic Village community (Figure 4-25).



a) Traditional businesses in the community
(hairdressers)



b) Modern business in the community (childcare
classes)

Figure 4- 25 Various Types of Businesses in the Community

(Source: Author's own photograph)

2. Outsiders

The Gonghecun community is an open-style community, but due to its old public facilities and limited variety of businesses, the main group of outsiders participating in activities within the community are customers of children's tutoring business. The participation level of these individuals in public space activities is relatively low.

4.2.4.4 Summary

The Gonghecun community was built a long time ago, and although the influx of outsiders has led to significant changes in the demographics, it has not altered the everyday lives of the indigenous population within the community. Instead, it has enhanced the vitality of public

spaces through commercial activities. Despite the relatively low environmental quality and limited public facilities within the community, residents have utilized their personal ingenuity to transform public spaces in various ways, creating diverse spatial forms and functions.

4.2.5 An Old Community in Urgent Need of Renewal – Changleyuan Community

4.2.5.1 General Situation

Changleyuan Community is located in Yuancun, Tianhe District, Guangzhou. It was established in the early 1980s and primarily consists of residential areas composed of staff dormitories from various ownership work units. The community has a total area of 0.11 square kilometers. The majority of residents in the community are retired workers from these enterprises. With the development of city, the community is now surrounded by three major CBDs, forming a sharp contrast with its outdated public environmental quality compared to its surrounding urban environment. As part of the integrated development of Zhujiang New Town, there is an urgent need to renewal the community's public environmental quality (Figure 4-26).

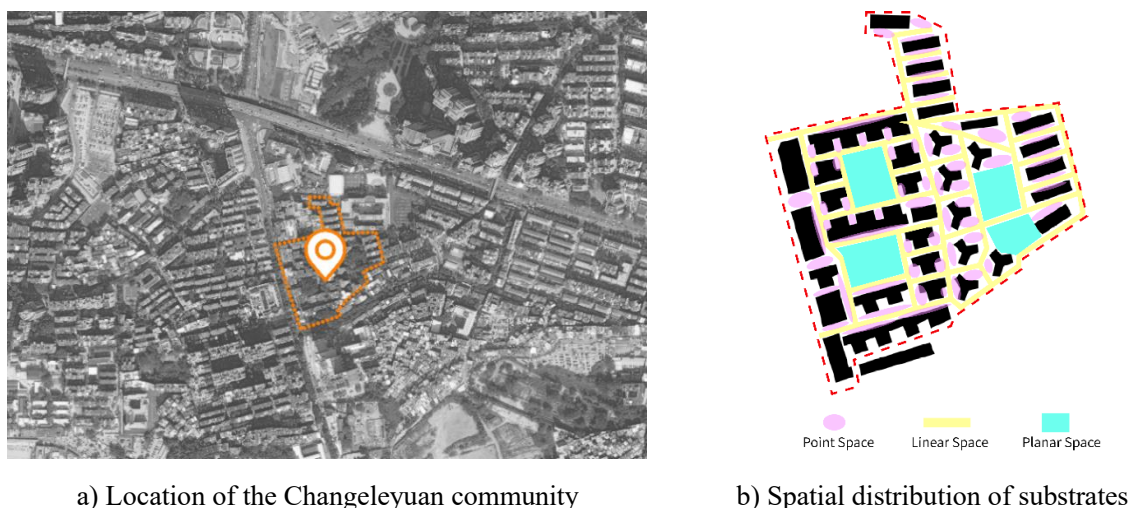


Figure 4- 26 Location and Spatial Distribution Map of Changleyuan Community

(Source: Self-drawn by the author)

4.2.5.2 Spatial Distribution and Spontaneous Behavior

Based on the previous classification of public spaces according to their physical layout, record and analyze the occurrence of residents' spontaneous behaviors within these spaces in Changleyuan community.

1. Base elements of public space

(1) Point-based space

① Scattered node space

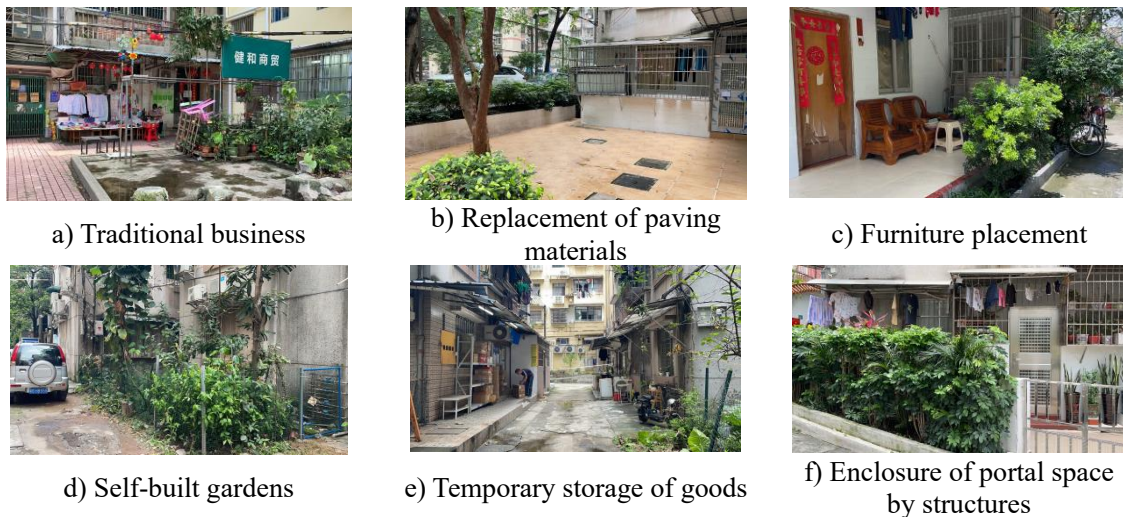


a) Storage of debris b) Parking c) Building micro-gardens
Figure 4- 27 Spontaneous Behavior in Scattered Node Spaces

(Source: Author's own photograph)

There are numerous scattered node spaces in the community, primarily located between residential buildings, at road intersections, and at the ends of roads. Due to insufficient parking spaces in the community, these scattered node spaces are often utilized as temporary parking areas. They may also be used for the renewal of landscape nodes or as dumping grounds for miscellaneous items. While this activates the vitality of the node spaces, it also brings issues such as environmental hygiene and spatial safety (Figure 4-27).

② Portal node space



a) Traditional business b) Replacement of paving materials c) Furniture placement
d) Self-built gardens e) Temporary storage of goods f) Enclosure of portal space by structures

Figure 4- 28 Spontaneous Behavior in Portal Node Spaces

(Source: Author's own photograph)

In order to differentiate portal space from other public spaces, residents often use techniques such as paving and fencing to create distinctions. This type of space between public and private spaces is often utilized by residents for storage, spontaneous gardening, and other functional purposes. Additionally, ground-floor vendors extend their commercial activities to portal spaces, compensating for limited indoor space and emphasizing their business nature to attract customers (Figure 4-28).

(2) Linear-based Space

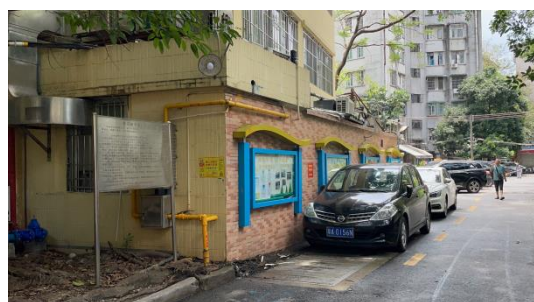
① Community street space

According to the research, the streets in Changleyuan Community have a relatively free

flow, with an average width of 2-4 meters. The curved pedestrian flow of these streets allows residents to spend more time there and easily engage in spontaneous activities. Places such as curved sections of streets and intersections are often used as parking spaces or resting areas. While these activities bring more functionality to the street space, they also create issues related to environmental cleanliness and safety in the community street space (Figure 4-29).



a) Placement of furniture in street spaces



b) Parking in street spaces

Figure 4- 29 Spontaneous Behavior in Community Street Spaces

(Source: Author's own photograph)

(3) Surface-based space

① Centralized plaza space

There are four centralized plaza spaces in Changleyuan community's public areas. Due to the limited and outdated public facilities in these spaces, residents have taken initiatives to modify them according to their needs. These centralized plaza spaces have become important places for residents to interact with neighbors, exchange information, and expand their social networks. They are also crucial in enhancing the vibrancy of the community's public spaces. Residents engage in various activities such as parking, gardening, storing items, placing furniture, and drying laundry in these spaces (Figure 4-30).



a) Resting on fitness equipment



b) Construction of a garden in the square



c) Drying clothes in the plaza space

Figure 4- 30 Spontaneous Behavior in Centralized Plaza Spaces

(Source: Author's own photograph)

② Professional sports ground

The professional sports grounds in Changleyuan community are adjacent to the community's plaza space. After being modified by residents, it has become a public space with higher quality and well-equipped facilities. However, due to the specialized nature of the venue

and the construction of sports fences, this space is primarily used for professional sports activities, and spontaneous behaviors by residents are less common. As a result, the vitality of this space is relatively low during most time periods.

2. Public space interface

① Architectural interface

As the primary enclosure interface of community public spaces, the architectural interfaces bear functions such as commercial activities and information dissemination. Especially, the shops established on some buildings (such as hair salons, convenience stores, etc.) not only meet residents' shopping needs but also provide diverse functionalities to the community buildings, offering residents a variety of choices for activities and neighborhood interactions.

With an increasing number of openings in building facades, commercial activities become more attractive to people, and their connection with the outside world becomes closer. As a result, the vitality of community public spaces also increases. Additionally, architectural interfaces serve as natural information display interfaces, allowing residents to easily post and showcase information (Figure 4-31).



a) Architectural interface as a platform for information presentation



b) Architectural interface for commercial use

Figure 4- 31 Spontaneous Behavior of Architectural Interfaces

(Source: Author's own photograph)

② Specific interface

Specific interface in the community often take the form of community boundary fences and sports field barriers. Residents typically make use of these fences to meet their own needs, such as hanging laundry or storing items (Figure 4-32).



Figure 4- 32 Drying Behavior of Special Interfaces
(Source: Author's own photograph)

③ Sky interface

Due to the open nature of outdoor public spaces in the community, the upper boundary of the community's public spaces is mostly the sky. Based on my observations, in Changleyuan Park community, due to its age and lack of unified renovation, residents have spontaneously built clotheslines across the street spaces to dry their laundry (Figure 4-33).



Figure 4- 33 Drying Behavior at the Sky Interfaces
(Source: Author's own photograph)

4.2.5.3 Space participants and everyday activities

Changleyuan community has a total of 1326 households and a permanent population of 4485 people. The participants in the community public space can be divided into two categories: indigenous residents and tenants, and outsiders. Among them, indigenous residents and tenants can be further divided into children, adolescents, middle-aged adults, and the elderly based on their age. Outsiders can be classified as external merchants or tourists. People from different categories engage in various activities in the public spaces.

1. Indigenous residents and tenants

Changleyuan community has a long history, and the elderly population aged 60 and above accounts for approximately 20% of the total population. The transient population of newcomers is close to half of the permanent resident population, consisting mainly of nearby working professionals and tenant vendors.

① Middle-aged adults, the elderly and children

The indigenous people, mainly middle-aged and elderly, along with children, are the main inhabitants of the community who have been residing here for many years. They actively participate in community public space activities for leisure purposes and play a significant role in shaping and activating these spaces (Figure 4-34). Their everyday activities primarily include sunbathing, outdoor clothes drying, socializing with their own furniture, maintaining self-built micro-gardens, and escorting children to and from school.

Children's presence in public spaces follows a certain pattern. Pre-school children are usually accompanied by their parents to participate in activities or engage in group activities under the supervision of residents in public spaces. They tend to attract people around them, creating a magnetic effect and enhancing the vitality of the space with children at its center. School-going children engage in public space activities from after school to mealtime, and their activity time is relatively short.



Figure 4- 34 Middle-aged and Elderly People Playing Cards in the Public Space
(Source: Author's own photograph)

② Youth and merchants

In addition to the aboriginal population, there are also a number of tenants in the community, mainly young people. The everyday life of this group of people is dominated by commuting to work, and they do not participate much in the activities in the public space of the community, as they go out early and come back late.

There are a large number of merchants within the Changleyuan community, with most of them being traditional businesses run by indigenous people, such as barbershops, grocery stores, restaurants, etc. Commercial spaces are usually mixed with private living spaces, and shopkeepers tend to extend their commercial areas to the portal space. Due to the high quality of these businesses in the community, and the influence of online communication, their services cater not only to permanent residents within the community but also attract residents from other communities and tourists. The positive interaction between these merchants and customers, along with a wide range of business activities, create mini interactive spaces within the community, giving Changleyuan community a vibrant atmosphere of everyday life. However, at the same time, these existing individually-operated portal spaces also present a phenomenon of messy but highly dynamic public spaces (Figure 4-35).



a) Commercial outlets in the community

b) Sugar water shop - a community "net shop"

Figure 4- 35 Various Types of Businesses in the Community

(Source: Author's own photograph)

2. Foreigners

The main outsiders in the Changleyuan community are tourists and residents from nearby communities, who mainly participate in community life due to its commercial activities. Typically, tourists engage in shopping, resting, and taking photos in the community's public spaces. After research, it can be concluded that some tourists rely on online navigation and recommendations to find "Internet-famous restaurants" within the community, where they enjoy their meals and share their experiences on social media. Through online dissemination, these public spaces have not only become living spaces but also new attractions in the city. They provide excellent venue conditions for the continuous development of space vitality (Figure 4-36).



Figure 4- 36 Community Attraction for Urban Tourists
(Source: social media search data)

4.2.5.4 Summary

As an danwei-based old community, the Changleyuan community still maintains its original everyday life in the rapidly developing city, and is rapidly integrating into the city life in new ways. A large number of spontaneous behavioral activities of the public in the community, some of which are incremental encroachment of public space for more living resources, and some of which are improvement, evolution and heterogeneous use of the original spatial design intent, with a view to being able to reuse the space that has lagged behind the development of the times. While these diverse and spontaneous behaviors have led to a portion of the space that is out of order and has safety hazards, they have also increased the vibrancy of the space.

4.3 Summary of Spontaneous Behaviors in Old Community Public Space

The elderly gentlemen taking leisurely walks after meals, the old residents playing cards in groups on the square, the grandmothers watering flowers in front of their homes, the children playing and laughing after school... These ordinary everyday scenes depict a rich picture of community life. The spontaneous renewal phenomena in everyday lives often begin with certain activities or types of spatial usage, accompanied by further privatization and gradual erosion

and differentiation of public spaces. These spontaneous behaviors often result in physical changes to the space, whether positive or negative in nature.

Based on the results of the research, the spontaneous behaviors can be divided into two main categories: the category of minor influences and the category of making changes in material elements, each of which can be continued to be subdivided into several subcategories according to the relationship between the residents' spontaneous behaviors and the community's physical public space (Figure 4-37).

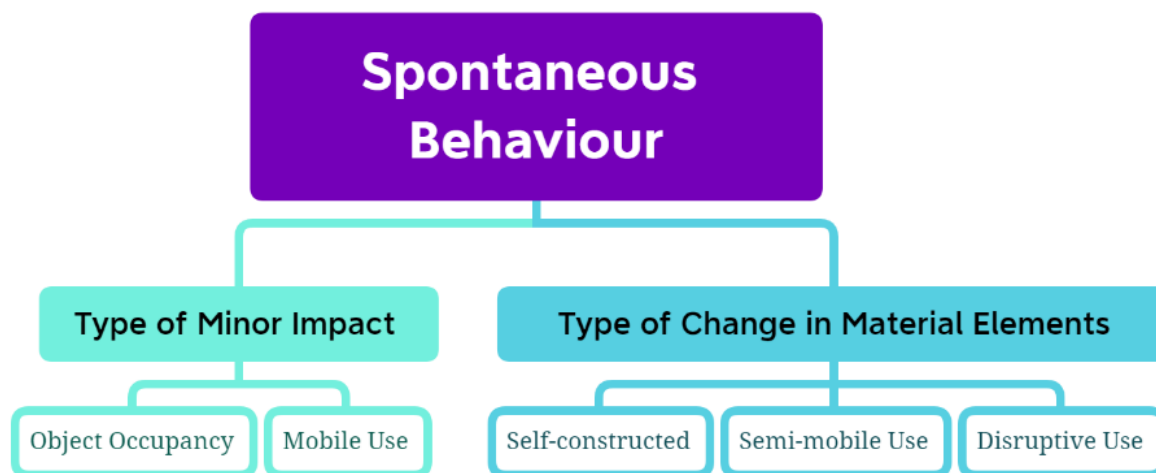


Figure 4- 37 Classification of Spontaneous Behaviors

(Source: Self-drawn by the author)

1. Type of minor impact: This type of spontaneous behavior refers to usage behaviors that have little or no impact on the physical public space and its associated facilities. When these behaviors are concluded, the physical space can be restored to its original state. It can be further categorized into two types: object occupation and transient usage. Here is an example of the categorization in Table 4-6:

Table 4- 6 Characteristics and Manifestations of Minor Impact Spontaneous Behavior

(Source: Compiled by the author)












Categories	Characteristics	Manifestations	Schematic
Object Occupancy	Mostly occupy negative spaces with low vitality for private purposes	Parking on street and around public facilities	
		Use public space structures for drying clothes	
		Place potted plants, furniture and miscellaneous objects at portal nodes, linear landscape spaces, etc.	

Table 4- 6 (Continuation)

Categories	Characteristics	Manifestations	Schematic
Object Occupancy	Mostly occupy negative spaces with low vitality for private purposes	Use of interface frame structures for hanging installations	
		Use of recreational facilities as meeting points	
Mobile Use	The use of space and ancillary facilities by users is often an altered use and performance of the original design intent, often accompanied by movable equipment, and the space is restored to its original form when the activity ends and the equipment is moved out.	Use of recreational facilities for leisure	
		Mobile or regularly moving vendors	
		Temporary occupation of space by couriers, takeaways, etc.	
		Children playing in street space, surface space	
		Commercial outreach to gateway space for tables and chairs	
		Bring your own furniture to supplement public furniture	

2. Type of making changes in material elements: This behavior affects the shape of the physical space and its affiliated public facilities. The physical space can not be restored to its original state by itself after use. It can be further categorized into three types: self-constructed, semi-mobile use and disruptive use, as shown in Table 4-7:

Table 4- 7 Characteristics and Manifestations of Making Changes in Material Elements Behavior

(Source: Compiled by the author)













Categories	Characteristics	Manifestations	Schematic
Self-constructed	Occupying public space and constructing indiscriminately (reconstruction or expansion) for community social activities, commercial activities or personal needs, some of which have potential safety hazards	Pave brick and other amenities at portal spaces	
		Build micro-gardens	
		Build a clothesline in the sky interface	
		Use landscape plants to build drying racks	
		Set parasols and dining tables and chairs in the portal space for business	
		Add floor locks to road space for private car parking	
Semi-mobile Use	Activity of placing fixed or semi-fixed equipment and facilities in a public space, where the equipment and facilities continue to occupy the public space after people have left	Semi-fixed or permanent occupation of node space by fixed vendors	
		Placement of home-breeding cages in portal spaces and plaza spaces at regular intervals and seasons	
		Place unused furniture in public spaces as public recreational facilities	
		Display of promotional information in a fixed architectural interface	
Disruptive Use	Irreversible changes to public space and public facilities due to personal needs	Removal of some services to provide own car parking space	

Table 4- 7 (Continuation)

Categories	Characteristics	Manifestations	Schematic
Disruptive Use	Irreversible changes to public space and public facilities due to personal needs	Damage and modification of the architectural interface for the purpose of commercial promotion	

Through in-depth research on representative old communities, such as Dexin Community, Gonghecun Community, and Changleyuan Community, an investigation was conducted on the physical spaces and everyday activities of the community participants. The relationship between community public spaces and spontaneous phenomena was explored to examine the changes in community vitality brought about by the involvement of spontaneous behaviors in public spaces. By analyzing the current spontaneous phenomena in the public spaces of old communities in Guangzhou, the study summarizes residents' life wisdom and everyday needs, providing a reliable basis for future discussions on strategies for renewing community public spaces.

Chapter 5 Old Community Public Space Renewal Strategies Based on Everyday Urbanism

5.1 Principles of Renewal

5.1.1 Principle of Orderliness of Life

The historical evolution of the city shows that the most essential and ordinary everyday life of human beings is the source of such rule. The development of the city does not follow a rational direction, but the role of everyday life tends to change the path of its growth.

1. Follow the rules of everyday use

All phases of the community renewal are based on the core of everyday life and the real interaction of community residents with the space in their everyday life, in order to solve the problem of renewing the community public space.

2. In line with the everyday habits of the public

The renewal design of public space in old communities should be based on local residents' dietary patterns, living characteristics, travelling styles, work and study, religious beliefs and other basic living habits, so that the community's spatial structure, spatial functions, spatial features and so on are consistent with the above living habits, reflecting the idea that space serves life.

3. Meeting the daily needs of the public

Community spaces serve as one of the most important material carriers for citizens' daily lives. The types, sizes, and quantities of these spaces should prioritize meeting the practical needs of citizens. Additionally, space design should be adaptable to the ever-changing nature of daily life and consider the diverse activity requirements of different individuals. It should accommodate a range of activities, from regular and permanent ones that occur daily to occasional and temporary ones.

5.1.2 Principle of People-oriented

The design of public space renewal in old communities based on everyday urbanism emphasizes the concept of "people-oriented". This means fully considering and meeting people's material and spiritual needs in community development, with the fundamental starting point of promoting the physical and mental well-being of individuals. The goal is to ensure that all members of the city can enjoy equal and free rights, as well as a relaxed, safe, and comfortable living environment.

1. Prioritize human use

The essence of a city lies in its livelihood, and a vibrant public life is the source of urban

vitality. Residents are the mainstay of community life, as they are both creators and direct participants in various activities. Community renewal design based on everyday urbanism should prioritize the effective use of space by people, promoting human-oriented development and highlighting the central role of residents in community public spaces.

2. Focus on authentic human experience

The quality of public space depends on whether people have positive and authentic experiences within it. Good quality public spaces can inspire spontaneous activities and inject more vitality into communities and cities. In specific community renewal practices, from overall spatial forms to minute details, the goal should be to optimize residents' spatial experiences, enhance their level of participation, and enrich their experiential journeys. Efforts should be made to create community public spaces that are characterized by a sense of human warmth, a sense of events, and a sense of playfulness.

3. Expression of the public will

Community renewal designs based on everyday urbanism should not only align with residents' actual usage but also reflect their collective will. They should dare to question and challenge existing systems and authorities. The design of community public spaces should incorporate the idea of social justice, demonstrate a positive critical attitude, and break free from symbolic formalism associated with authority. Only in this way can they truly reflect the spatial aspirations of the general public.

5.1.3 Principle of Commixture

Jane Jacobs analyzed various manifestations of poor urban functionality caused by mechanical zoning and emphasized the importance of diverse mixing in cities in her study of major cities in the United States. She stated that "Cities are composed of countless different parts, and each part exhibits infinite diversity"^[13]. As a part of the city, communities also possess infinite diversity. Community public spaces should strive to be complex and interconnected, with diverse functions that can support the complex and ever-changing needs of community residents.

1. Diverse mix of spaces

Colin Rowe's "Collage City" argues that the continuous fusion of diverse forms not only creates a rich urban order, especially through the collage and intertwining of different historical fragments, but also highlights the essence and beauty of urban spaces, evoking resonance within citizens' hearts ^[52]. In community public spaces, it is important to mix spaces with different functions as much as possible and avoid the accumulation of large-scale single-purpose spaces.

This approach provides a convenient material foundation for the diverse life needs of community residents.

2. Multi-dimensional mixing of space

In community public space, multi-dimensional mixed use not only improves the overall efficiency of the space, but also triggers the core means of community vitality. Multi-dimensional mixing mainly includes the adoption of multi-functional, multi-time and multi-level mixed uses of community public space, which creates the richness of mixing various everyday life behaviors and stimulates the occurrence of more everyday behaviors.°

5.2 Renewal Targets

From the perspective of everyday urbanism, the target audience for the renewal of old community public spaces includes current residents who utilize and interact with these spaces, as well as future citizens who may be attracted to participate in public space activities. The goal is to guide and trigger diverse spontaneous behaviors among residents through the improvement of the quality of public space environments, thereby enhancing the richness of community residents' everyday lives.

The goal of public renewal in old communities based on everyday urbanism is to achieve "dialogism" proposed by the literary scholar Mikhail - the idea that dialogue occurs between groups of people when they become aware that there are many different definitions of the same thing and that everyday life is a good starting point for dialogue. As a member of the dialogue, what designers can do is to intervene in the space by means of technological intervention, and on the basis of combining the characteristics of the space and the needs of the residents, provide corresponding services and facilities, so as to make them become catalysts, and stimulate the residents' willingness to use the space. And through the integration of the limited public resources in the old communities, we can reorganize, interpret and creatively develop them to meet the diversified needs of community residents in their everyday lives, and through the cumulative effect, we can cause a wider range of social repercussions.

5.3 Public Space Renewal Design Methods

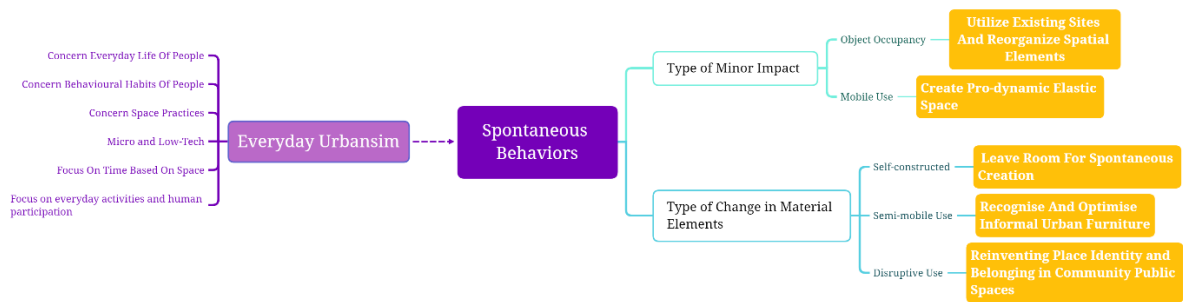


Figure 5- 1 Spatial Renewal Strategy Framework

(Source: Self-drawn by the author)

Based on the research findings, the author has discovered a significant amount of spontaneous behavior in old community public spaces that play a crucial role in shaping the spatial texture and activating vitality in these spaces. As designers, it is important to value the characteristics of residents' spontaneous behavior and incorporate them into the design to ensure that the renovated spaces reflect the liveliness and variability of public spaces.

5.3.1 Object Occupation - Utilizing Existing Sites and Reorganize Spatial Elements.

Through research and observation, it has been observed that residents tend to occupy underutilized passive spaces without significantly altering the physical spatial elements. They occupy these spaces for personal purposes, aiming to fulfill their everyday needs within the limited spatial resources of old communities.

1. Tapping the potential space

Conducting research on the current status of the site, and based on the existing distribution of residents' activities, explore the vitality points and untapped potential spaces within the limited public spaces of the community. Through spatial restoration and the integration of life scenarios based on residents' needs, complete the renewal and optimization of the existing potential spaces (Figure 5-2).

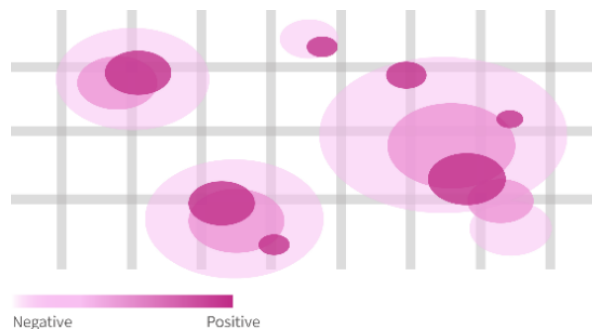


Figure 5- 2 Tapping the Potential Space

(Source: Self-drawn by the author)

2. Organizing space debris, creating a continuous spatial experience

Under the perspective of everyday urbanism, residents make self-conscious use of public space in their communities. However, various reasons such as unrestrained independent construction, a large number of chaotic parking behaviors, and negative space quality have led to the occurrence of public space debris, and the public space that residents can use is therefore limited (Figure 5-3).

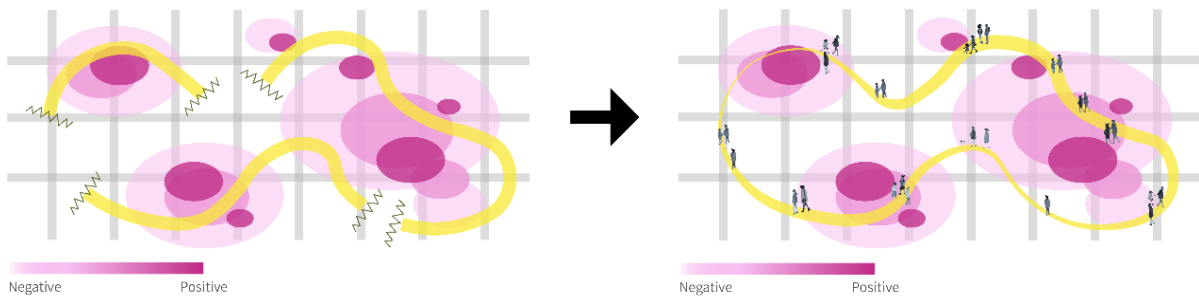


Figure 5- 3 Creating a Continuous Spatial Experience

(Source: Self-drawn by the author)

3. Redistributing site resources

Due to historical development and other reasons, public space in old communities is a scarce resource. Especially in the context of urban construction of stocking development, the endless development of new space should be replaced by redistributing existing site resources (Figure 5-4).

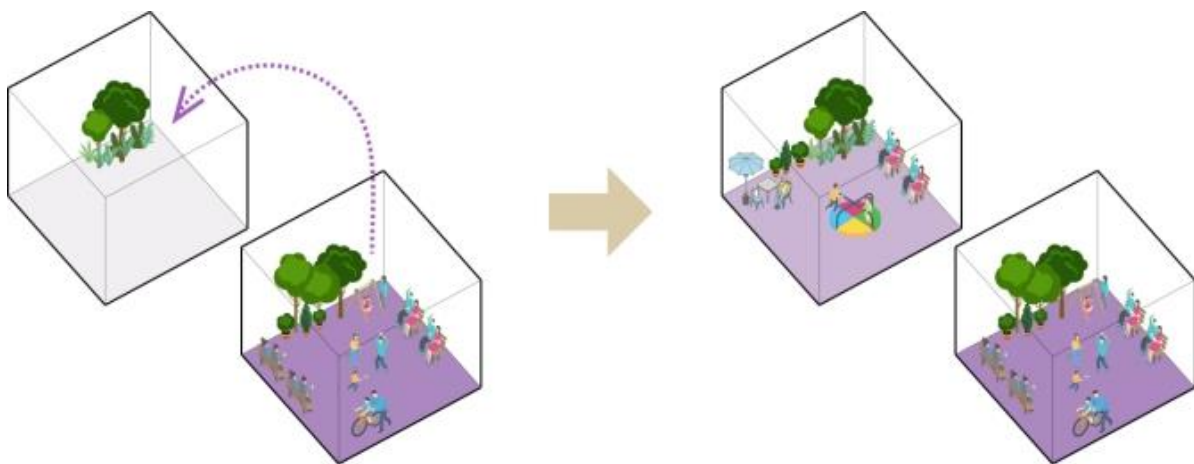


Figure 5- 4 Redistributing Site Resources

(Source: Self-drawn by the author)

5.3.2 Mobile Use - Creating Pro-dynamic Elastic Space

According to the summary of the spontaneous behaviors, the residents will improve the status quo of the public space to satisfy their everyday life needs through mobile use of the space without changing the physical space as much as possible. By observing the residents' flexible use of public space, discovering the details of life that have been neglected in the

original design or the unique needs of the residents in the area. From the perspective of the whole life cycle of the community, creating a dynamic flexible space that is friendly to the people and realize the dynamic fit between space and everyday life needs by taking into account the different functional needs and morphological scales.

1. Flexible adjustment of spatial scale

Elastic regulation of spatial scale is the use of dynamic boundaries within space to promote dynamic adaptation of morphological scale in response to the requirements of spontaneous behaviors (Figure 5-6、Figure 5-6).

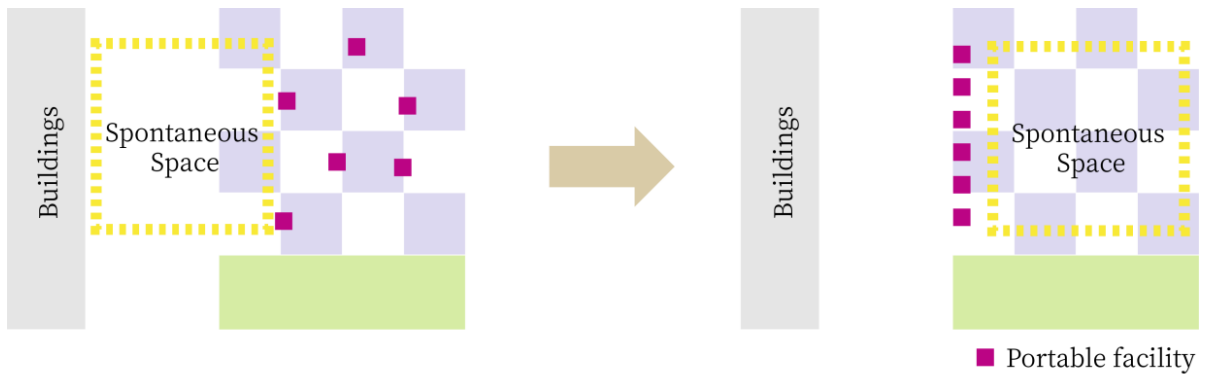


Figure 5- 5 Dynamic Boundaries of Public Space

(Source: Self-drawn by the author)

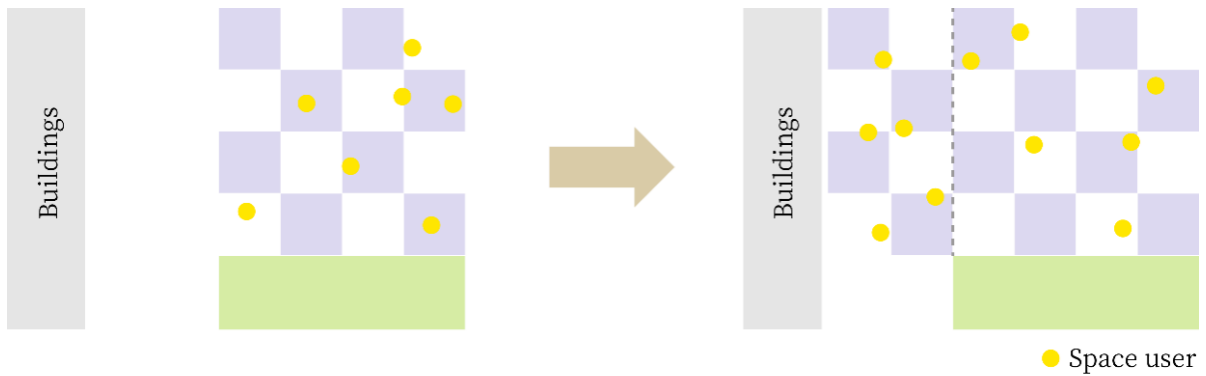


Figure 5- 6 Flexible Adjustment of Spatial Scale

(Source: Self-drawn by the author)

2. Flexible adjustment of space functions

The flexible regulation of spatial functions is to make up for the singularity of community public space functions through the configuration of blank space and composite functions to satisfy the diverse needs of different activities. (Figure 5-7).

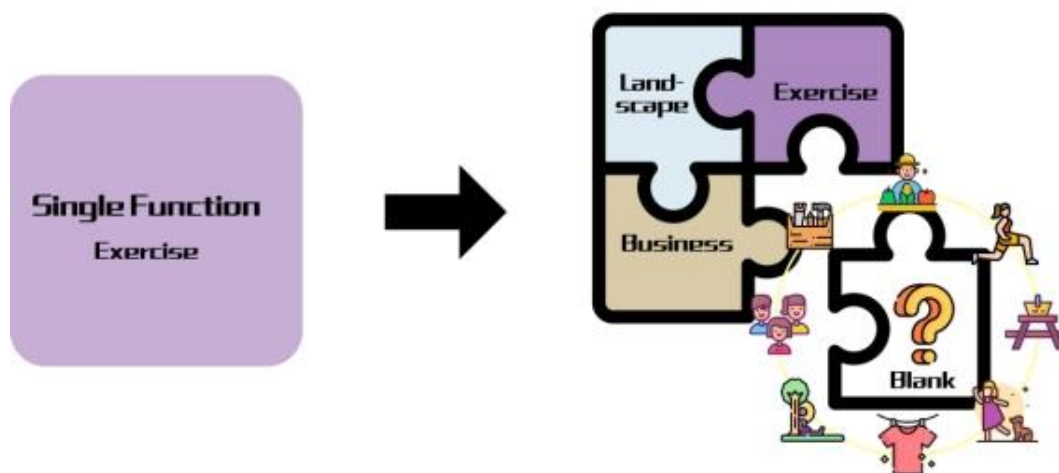


Figure 5- 7 Functional Composite and Blank Space

(Source: Self-drawn by the author)

3. Creating spatio-temporal composite public space

The composite of spatio-temporal functions requires extensive solicitation of residents' demands. Marking the main spatial and functional needs of residents' everyday lives and the corresponding time periods by mapping to establish a time line for space use. Adopting a time-sharing strategy to allow the space to carry diverse daily activities, so as to maximize the use of public space (Figure 5-8).

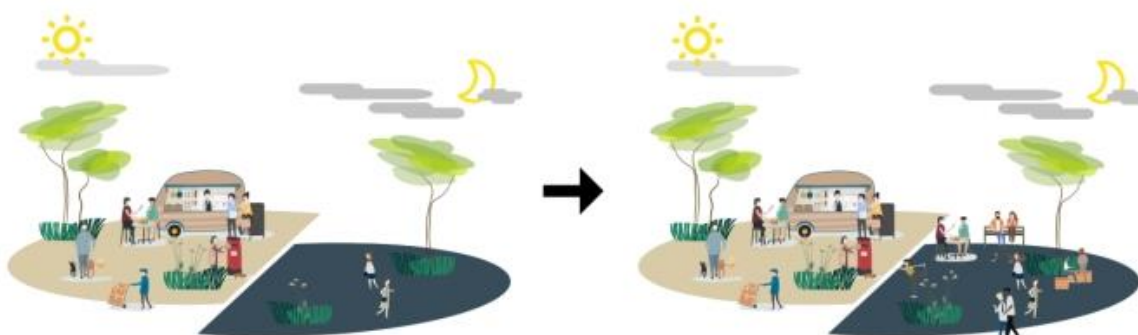


Figure 5- 8 Time-sharing Use of Public Space

(Source: Self-drawn by the author)

4. Recognition of public service facilities

One of the sources of high vitality of community public space under spontaneous renewal is the free and casual use of public service facilities in public space by participants to meet their needs for different purposes such as recreation, sports and fitness, neighbourhood interactions, business activities, and performances. By arranging public facilities with various functions and forms, it promotes the compounding of a single function (Figure 5-9).

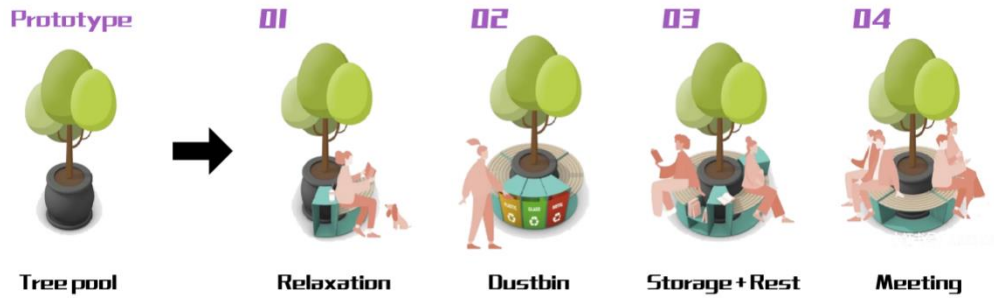


Figure 5- 9 Diversified Use of Public Service Facilities

(Source: Self-drawn by the author)

5.3.3 Self-build - Leaving Room for Spontaneous Creation

In community public space, there are a large number of self-constructed behaviors, which have not only expanded the usable space but also shaped a rich form of public space through diversified ways of construction. Although these ways of construction lack a unified aesthetic, it also proves that people pay more attention to the way of using the space than to the unity of the form and style. In order to cater for the habit of spontaneous creation and the willingness of residents to express themselves, designers should leave room for spontaneous creation.

1. Macro-scale control

By providing a macro-scale control, and to a certain extent allowing the actual user room for modification in the details. In the end, the collaboration between designers and users can form a rich and beautiful everyday life space (Figure 5-10).

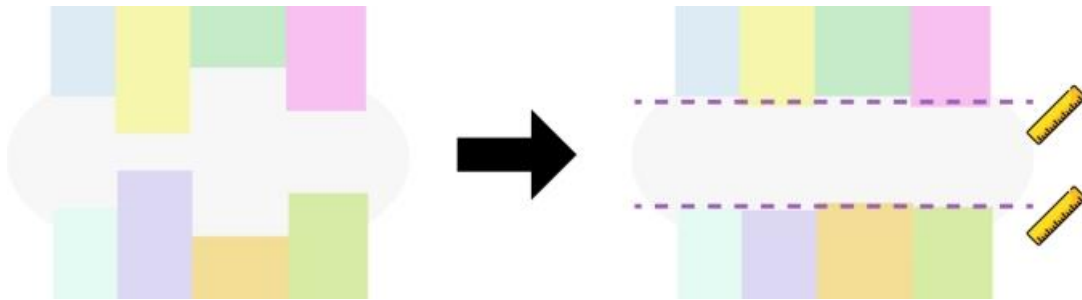


Figure 5- 10 Macro-scale Control of Spontaneous Creation

(Source: Self-drawn by the author)

2. Creating a self-build instruction manual

Residents' spontaneous behavior is often accompanied by unsafe factors because of the lack of professional and technical knowledge. These unsafe factors not only degrade the environmental quality of public space, but also pose safety risks to the physical and mental health of residents. Therefore, a professional self-build guidebook should be formulated to advise residents on the materials and techniques to be used in their spontaneous creation, so that the space can be used on a safe and reasonable basis.

5.3.4 Semi-mobile use - Recognizing and Optimizing Informal Urban Furniture

A large number of leisure facilities (e.g. chess tables, umbrellas, drying racks, potted plants, etc.) brought or placed by residents can be found everywhere in the community public space. Unlike fixed urban furniture with low utilization rate, people are attracted to these old furniture. People use these unused and old furniture to form a small communication field in public space. However, this behaviors also cause some problems such as security risks.



Figure 5- 11 Recycling and Reuse of Old Furniture

(Source: Self-drawn by the author)

In order to overcome the shortages of this behavior, the reuse of old items can be encouraged in the renewal process by replacing functions and unifying colors to bring old furniture back into the limelight in a stylish way (Figure 5-11).

5.3.5 Disruptive Use - Reinventing Place Identity and Belonging of Community Public Space

Residents sometimes cause irreversible changes to public space due to their needs, which has a negative impact on community appearance and spatial quality. The root of the problem is that the residents do not have enough sense of identity and belonging to community public spaces, which leads them to completely encroach on the public spaces for their own interests. Therefore, designers should encourage the public to participate in the process of community renewal, so that they can develop a sense of responsibility and identity, and spontaneously maintain the environmental quality of the community public space, which makes public space

develop in a sustainable way.

1. Encourage public participation

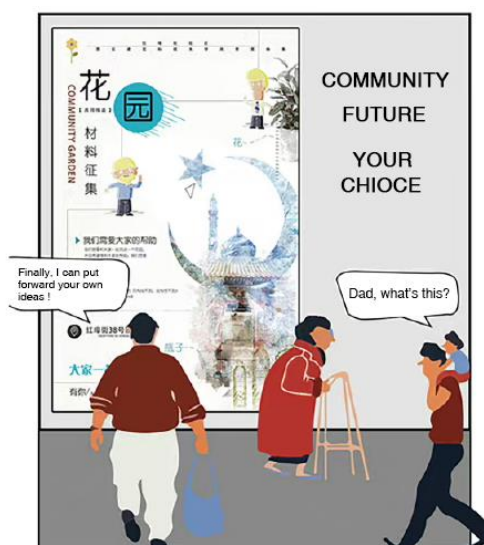


Figure 5- 12 Public Participation

(Source: Self-drawn by the author)

To promote the healthy development of public spaces in old communities, old community public space renewal must not only rely on government regulations and legal property management, but also need effective guidance in planning and design and the active participation of the public in the community. Encourage residents to participate in the process of community renewal, enhance their trust in the community and consolidate their motivation to participate in the public life of the community. At the same time, create a mechanism for dialogue between residents, designers and multiple interest groups. When open dialogue and exchanges take place, diverse forces will be gathered, and the community will show a friendly and open state to the outside world (Figure 5-12).

2. Using space adoption, art intervention and other ways to create sustainable spaces

The survey found that after the community renewal, residents will still use the community public space spontaneously. In order to ensure the sustainable development of public space in the future, it can be incorporated into the community renewal mechanism through multiple methods such as space adoption and art intervention.

5.4 Interactive Design Pattern

In the 1971 London International Symposium on Landscape Architecture, the path design of Disneyland was named the world's best design, and its designer Walter Gropius combined the "bottom-up" and "bottom-up" in the project. The design of the Disney Path was inspired by a vineyard in the countryside of southern France. The owner of this vineyard is a grandmother,

unlike other vineyard owners who bring their grapes to the roadside and sell them by shouting, the grandmother, due to her old age and inability, can only place a box by the roadside of the vineyard. Tourists only need to invest five francs to enter the vineyard and pick a basket of grapes. Paths stepped by tourists are naturally formed in the vineyard, and these paths are customers' selected outcomes. This "giving people the freedom to choose" approach to selling grapes has also resulted in Grandma's grapes always being the first one to sell out. Inspired by this, Gropius asked the park to open six months earlier by sowing grass, and during this six months the grass was trodden to create the paths that became Disney's "Best Paths".

When behavior occurs from one's own will and needs, people are much more motivated and thus more willing to participate in activities. Disney's pathway design references the spontaneous activity pathways of visitors and incorporates the designer's top-down design, presenting the possibility of a two-way design. This paper makes such a design model an interactive design model.

Based on the above research, this thesis proposes an interactive community renewal design pattern which is a two-way design model that combines top-down unidirectional design and bottom-up spontaneous use. Interactive design meets the needs of sustainable and humane design, and is characterized by its step-by-step design philosophy and the interactive cycle of use and design.

Interactive design pattern based on everyday urbanism can be broadly divided into four steps: Firstly, observing everyday life space and spontaneous behaviors of the site; then, flexible and guided initial planning and design of the site on the basis of the results of the observation; Secondly, according to the observation results, a flexible and guiding initial planning and design of the site is carried out; Then, communicate with residents and ask them to comment on the design results; Lastly, Improve the follow-up design of the space based on residents' opinions and evaluation results. (Figure 5-13).

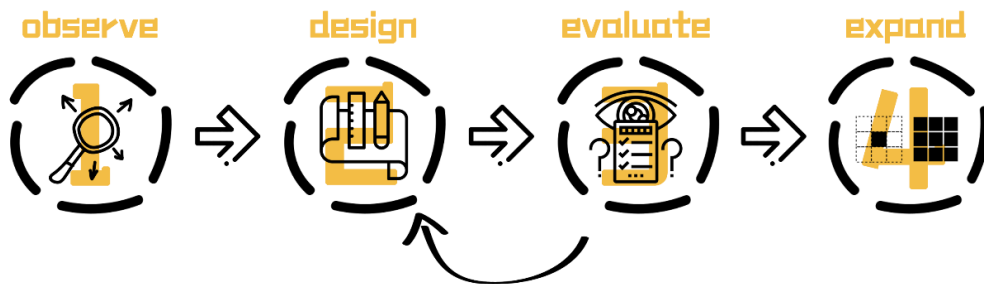


Figure 5- 13 Interactive Design Pattern

(Source: Self-drawn by the author)

In the one-way design pattern, it is a matter of course that design comes before use. However, there are two different driving forces in the evolution of environmental space, and any spatial environment is guided by designers and planners and shaped by the influence of its users. The spiral curve in the figure represents the evolution process of the three-dimensional environment space. (Figure 5-14).

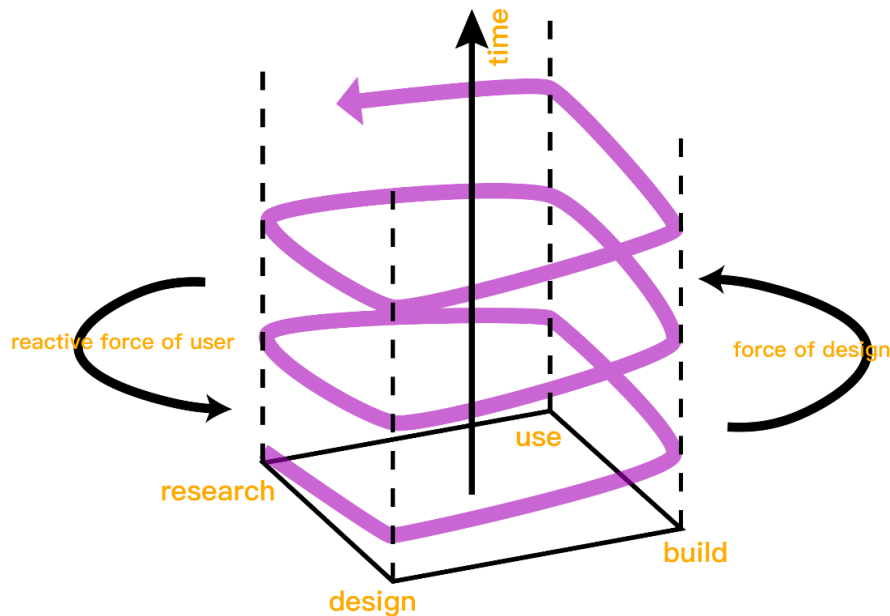


Figure 5- 14 Three-dimensional Evolution of Environmental Space

(Source: Self-drawn by the author)

Under the influence of the design force and the user's reaction, the environmental space is constantly evolving around the time axis. In the case of Disney's path design, use precedes design, which is a breakthrough to inertial thinking and shows the possibility of reverse creative thinking. Interactive design patterns view design and use as an interactive cycle, so that breakthrough design strategies can be found.

5.5 Summary

Currently, community renewal strategies in China mostly involve simplifying community spaces into abstract material entities through scientific and rational analysis. They aim to construct a so-called "material order" in a "bottom-up" approach, while neglecting the authentic experiences and practical significance of people's everyday lives. Through case studies, it can be observed that both top-down and bottom-up renewal mechanisms have their own biases and limitations. Based on the proposal of everyday urbanism, the strategy for renovating public spaces in old communities aims to overcome the limitations of one-sided renewal mechanisms. It seeks to redirect attention back to the everyday lives of community residents, providing beneficial supplementation and guidance to both top-down and bottom-up renewal mechanisms.

This chapter focuses on the renewal strategies and design pattern of old community public spaces based on everyday urbanism, so as to truly meet the everyday life needs of residents.

Chapter 6 Design Application - Renewal of Changleyuan Community Public Space

6.1 Site Analysis

6.1.1 Development and Typicality of Changleyuan Community

Changleyuan Community completed in 1983 which is mainly a residential living area comprising staff quarters of various ownership work units such as Guangzhou Petrochemical Factory, Guangdong Glass Factory and Guangdong Institute of Industry and Commerce Administration, with a total area of 0.11 square kilometres under its jurisdiction. The community is located in Yuancun, Tianhe District, Guangzhou. Tianhe District is the new city centre of Guangzhou, located on the new central axis of the city, with a concentration of transport resources in the district (Figure 6-1). Thanks to the strong economic development of the Tianhe CBD, the whole Tianhe District has developed rapidly in modern times.

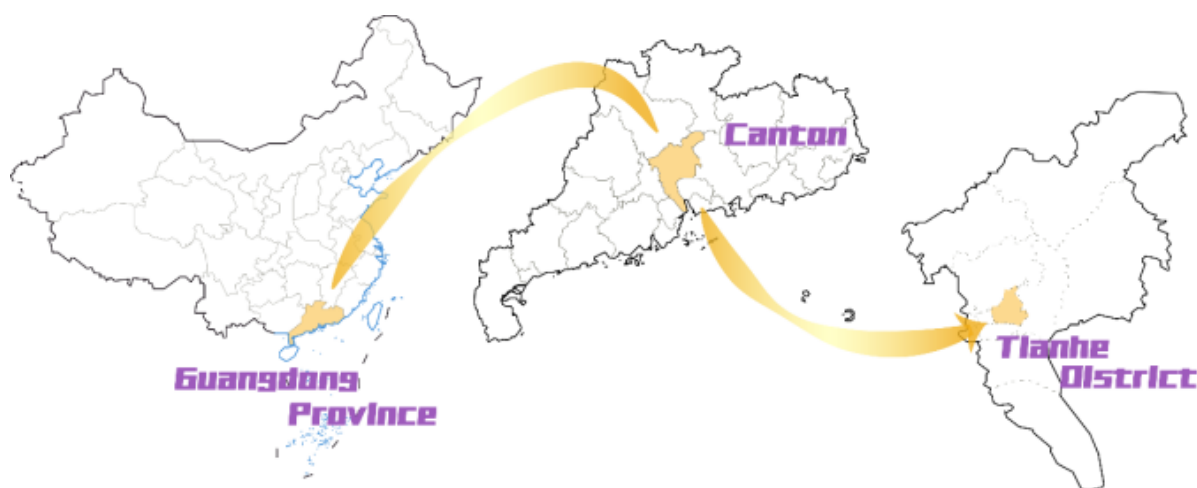


Figure 6- 1 Location of Tianhe District

(Source: Self-drawn by the author)

With an area of 5.37 square kilometres and a total population of about 120,000, Yuancun has 16 communities under its jurisdiction. The Changleyuan community is one of the former danwei-based communities in Yuancun, which has Guangzhou's busiest lines 5 and 21, and is conveniently located just four stops from the CBD, attracting many Guangzhou drifters to come and live here (Figure 6-2).

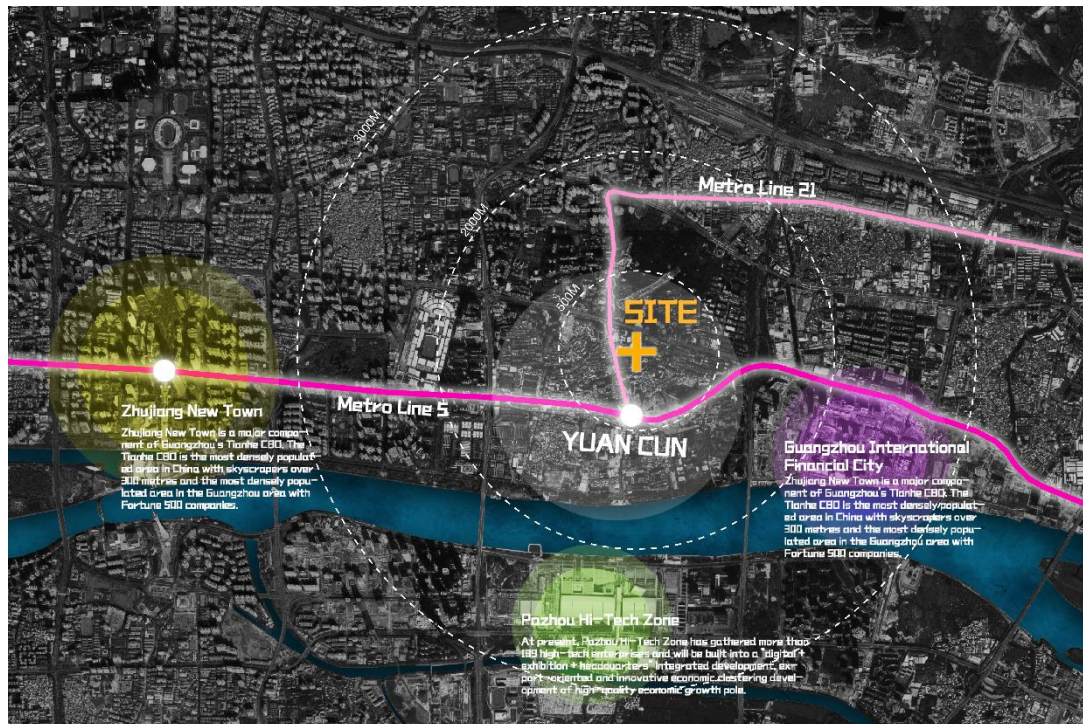


Figure 6- 2 Location of Yuancun

(Source: Self-drawn by the author)

Standing in the Changleyuan community, looking up and looking around are high-rise buildings, this place is like a forgotten corner. The special location of Changleyuan community is representative of the old communities that are still surviving and being surrounded by the fast-growing modern city.

The development of Changleyuan community is based on the development of the Yuancun.

In the first five-year plan of new China, the Central Ministry of Light Industry planned to build a canning factory in Yuancun, which was completed in 1958 and jumped to become the largest canning factory in Asia at that time. More factories followed, the Juan hemp factory, the second cotton spinning factory, the southern flour factory, the glass factory, the radio factory became the industrial centre of Guangzhou. With the completion of many factories, the factories constructed supporting danwei compounds in Yuancun to solve the problem of accommodating the factory staff, and Changleyuan was one of the danwei-based community at that time.

In 2004, the Guangzhou Municipal Government hoped that the Tianhe District Government would complete the land acquisition and relocation plan for Yuancun, so that it could be developed into a residential centre in the future. However, due to the failure to negotiate a compensation agreement, the first opportunity to renewal was missed. 2008 Guangzhou took advantage of the Asian Games to start a large-scale renovation of the entire city, and the Yuancun was also listed as a key project, and repositioned as the "Pearl River New

City CBD Extension Area", coupled with the retreat of the two into the three action was very popular at the time, a large number of factories in the village were closed down and relocated one after another. However, due to the compensation issue, the transformation of Yuancun was again put on hold, and the Changleyuan community also survived as a result.

With Pazhou West Area and Financial City were constructed, Yuancun is surrounded by high-rise buildings, Changleyuan community has become one of the few old communities in the core area of the city. Due to its old facilities and excellent economic location, many "Guangpiao" come here to enjoy convenient transportation at low rent. At the same time, due to historical reasons, Changleyuan community has not been demolished, so many local people still live here.

In order to explain why the Changleyuan community was chosen for a public space regeneration practice based on everyday urbanism, it is necessary to explain it from three perspectives:

Firstly, the specificity of the geographical location of the Changleyuan community is representative of the old communities in Guangzhou that are surrounded by the fast-developing modern urban environment, but are still surviving tenaciously.

Secondly, Changleyuan community is an ideal practice space for everyday urbanism. As a danwei-based old community, it is still inhabited by a large number of aboriginal residents, and possesses the most typical everyday life of Guangzhou's aboriginal population. With the arrival of a large number of foreign residents, the composition of the population within the Changleyuan community is complicated, which is the reason why there exists a everyday life with more multicultural connotations in the Changleyuan community.

In addition, due to historical reasons, Changleyuan community has not carried out a systematic renewal, and the internal facilities are old which can no longer meet the growing needs of the residents in their everyday lives, and there is an urgent need for the renewal of the public space.

Therefore, this thesis chooses to renew the Changleyuan community public space based on everyday urbanism.

6.1.2 Planning Layout

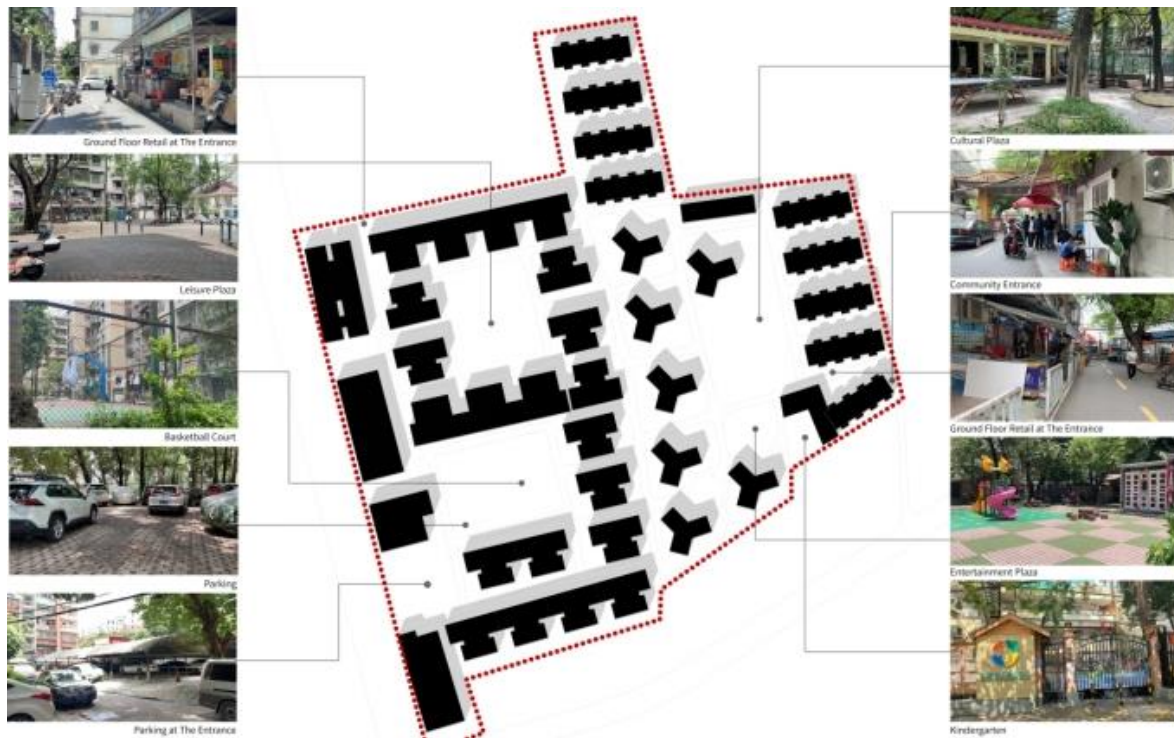


Figure 6- 3 Planning Layout and Status of Changleyuan Community

(Source: Self-drawn by the author)

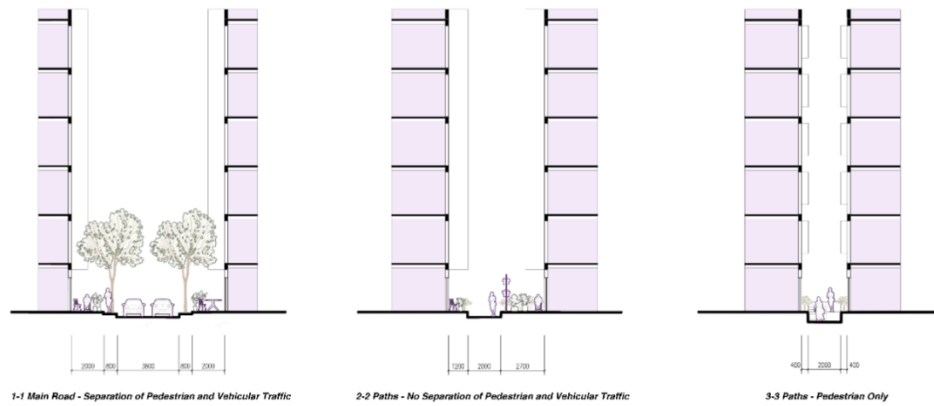
Changleyuan community adopts a hybrid planning and layout form, combining rows and columns and scattered layout forms. The land area of the community is 37,800 square metres with a building area of 95,000 square metres. Inside the community, there are kindergartens, basketball courts, cultural squares, fitness squares and other leisure and recreational facilities (Figure 6-3). Due to its mixed planning layout, the community has a variety of node space. The community also has a complete range of public service facilities, but due to its age, many public service spaces are occupied by other functions.

6.1.3 Traffic Analysis

There are three types of community roads within the community, primary roads for pedestrian and vehicle branch, secondary roads for pedestrian and vehicles, and paths for pedestrians only. The restriction of internal community traffic to car movement is mainly through the reduction of road clear width and the setting of height difference at the site. (Figure 6-4).



a) Community road analysis



b) Profile of main community roads

Figure 6- 4 Traffic Analysis of Changleyuan Community

(Source: Self-drawn by the author)

The main roads are two-lane roads that connect the three entrances and exits of the community, and also link the major public spaces within the community. However, due to the lack of parking space within the community, residents will engage in informal on-street parking on car-accessible roads, leaving the two-lane roads with only one-way access, often resulting in traffic congestion. As for the pavements, due to the lack of width and the occupation of street trees, pedestrians tend to walk on the roadway or on the portal spaces along the roads.

Secondary roads in the community, where pedestrians and vehicles are not segregated, generally have a clear width of three metres, which is also accompanied by the phenomenon of informal parking. The compressed street space to a certain extent also impedes the smoothness of the community's pedestrian paths.

Most of the pedestrian-only paths in the community are occupied by residents with urban furniture, self-built gardens, etc. Since residents will spontaneously leave the main passage

space, the spatial environment of the pedestrian streets has a strong atmosphere of everyday life, and it is a unique and beautiful landscape in the community. These paths not only serve the purpose of passage, but also become one of the main spaces for residents' everyday lives.

6.1.4 Business Analysis



Figure 6- 5 Business Analysis of Changleyuan Community

(Source: Self-drawn by the author)

The total number of businesses in the community is relatively small, and all of them are horizontally distributed in the ground floor space of each residential building, which is connected by the main road in the community. According to the research, the main type of business within the community is life service, such as grocery shops, hairdressers, small supermarkets, recycling stations and so on. In addition, the catering industry is also one of the main types of business which are snack bars and operated for a long time. These snack bars are operated by the neighborhoods in the community, and their consumer groups are mostly residents in and around the community. With the development of the Internet, these restaurants and snack bars have also become a tourist spot in the city, attracting many outsiders from the city to the community. These businesses are mostly operated in their own house, and the architectural interface becomes a medium for communication activities between the owner and the customer. Due to the lack of internal living space, the commercial space mostly occupies the portal node spaces. The presence of commercial space also enriches the type of interface in the public space of the community (Figure 6-5).

6.1.5 Public Space Typology Analysis

The increasing demands of everyday life have led to residents' encroachment on

community public space. Based on the previous theoretical research, the author summarized all types of public space in the community (Figure 6-6).

Firstly, Summarize all the different forms of base space in the community:

1. Point-based space: it can be divided into two categories: scattered node space and portal node space. There are seven forms of scattered node space in the community, mostly located in the pocket space of the concave and convex places of the building and the nodes of the turning point of the road. These scattered node spaces are not highly utilized, and are mostly encroached upon by messy vegetation and debris, which is a potential point for the renewal. There are four spatial forms of portal node spaces. The portal node space in the community has been spontaneously transformed and utilized by residents in various forms, and it is one of the main places where residents' everyday life takes place.

2. Linear-based space: it can be divided into community street space and linear landscape space. There are three forms of community streets in the community. These streets are occupied by residents with temporary behaviors such as parking. Linear landscape space, on the other hand, mostly unfolds along the road, where residents will carry out self-built micro-gardens, drying and other behaviors.

3. Surface-based space: it can be divided into centralized plaza space and professional sports ground. There are two types of centralized plaza space in the community. The centralized plaza space is the main space that carries residents' everyday life. There are three types of centralized plazas in the community, with the eastern plaza having the largest area and the highest frequency of daily use, in which residents engage in social interaction, sports, commerce and other behaviors. The northwestern plaza is more inward-looking and less vibrant, and residents tend to socialize and dry clothes in it. There is a professional sports ground in the community, located in the northern part of the community. Due to the professionalism of the ground and the singularity of the spatial function, the space has low spatial vitality at all times, and the crowd of users is relatively singular, and the spatial vitality of the space is poor despite the high quality of the spatial environment.

Secondly, summarize all spatial forms of the interface in the community:

1. Architectural interface: the architectural interface in the community is relatively single, all of which are the architectural interfaces of residential buildings, with two main functions of residence and business. Residential architectural interfaces are not open to the public, while commercial architectural interfaces are semi-open, and the windows of the architectural interfaces have become the medium of dialogue between the public space and the private space.

2. Specific interface: There are two types of specific interfaces in the community:

According to the observation, it is found that the crowd is mostly concentrated in the centralized plaza space for a long time, and transiently stays in the portal node space, of which the space occupied by commercial functions is the most concentrated group of people. (Figure 6-7).



Figure 6- 7 A Crowded Spot in the Changleyuan Community
(Source: Self-drawn by the author)

6.1.6 Activity Crowd and Demand Analysis

DEMOGRAPHY

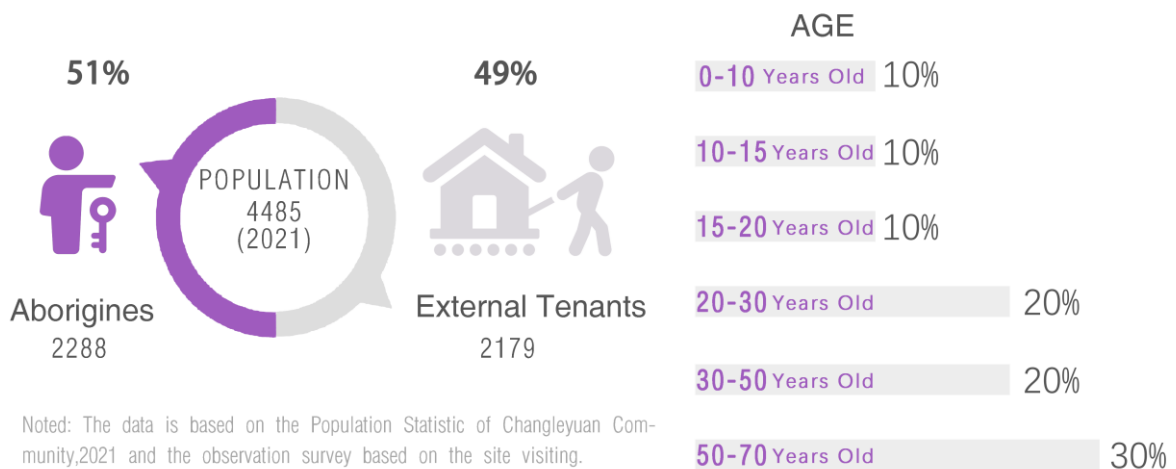


Figure 6- 8 Population Composition of the Changleyuan Community
(Source: Self-drawn by the author)

According to the demographic data of the Yuancun Street Office, the total number of households in the Changleyuan community is 1,326, with a resident population of 4,485, mainly are retired and laid-off workers. The proportion of foreign tenants is about half of the number of permanent residents. Among them, middle-aged and elderly people account for the largest proportion of the population composition, and they are also the main groups participating in the everyday life of community (Figure 6-8).

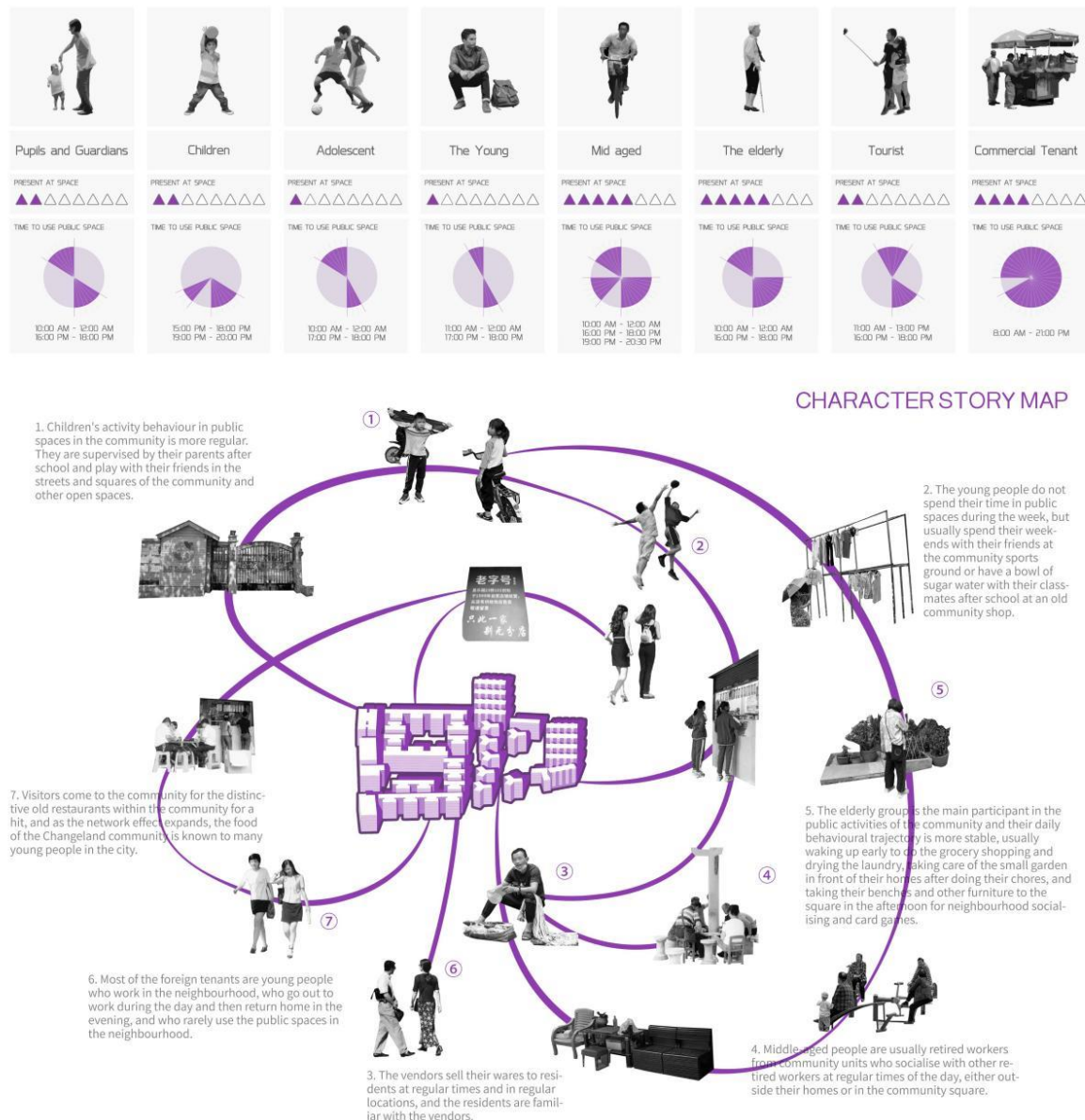


Figure 6- 9 Spatial and Temporal Map of People's Activities

(Source: Self-drawn by the author)

After the research, statistics and summary of the spatio-temporal distribution of the people who use the public space in the community can be concluded (Figure 6-9):

1. Preschool children: Preschool children are more regular in their behavior in the

community public spaces. They play with their friends in the streets, squares and other open spaces after school under the supervision of their parents.

2. Teenagers: Teenagers generally do not participate in community public space activities during the weekdays; they usually spend their weekends with their friends at the community sports ground or with their classmates after school for a bowl of sugar water at the shop.

3. Youth: Most of the young people in the community are office workers, and most of them are foreign tenants. They generally do not participate in the everyday life of the public space in the community, and only occasionally exercise in the community sports ground on weekends.

4. Middle-aged people: Middle-aged people in the community are usually retired workers from work units who socialize with other retired workers at a fixed time of the day, either outside their homes or in the community square.

5. Elderly people: The elderly are the main participants in public activities in the community. Their daily behavior is relatively stable. They usually get up early to buy vegetables, dry clothes, take care of the micro-garden in front of the house after finishing housework, and take benches and other furniture to the square in the afternoon for socializing and playing cards.

6. Tourists: Tourists come to check in for the characteristic old restaurants in the community. With the expansion of the network effect, the delicacies of Changleyuan Community are well known by many young people in the city. Therefore, the community has a certain degree of integration with urban life..

7. Merchants: Merchants sell goods to residents at a fixed time and place, and residents are familiar with them.

6.1.7 Spontaneous Behavior Analysis

The residents of Changleyuan community will carry out some degree of spontaneous transformation of the community public space due to their daily needs. Some of these spontaneous behaviors make the community public space more reasonable and dynamic, while others bring some degree of safety hazards to the public space, but these spontaneous behaviors reflect the basic needs of the community residents in their everyday lives, and are the most important factors that designers should take into consideration when doing renewal design (Figure 6-10).

(Source: Self-drawn by the author)

1. Outdoor drying: Guangzhou has a hot and humid climate, and clothes dried indoors are prone to dampness, so residents like to dry their clothes in open spaces. In order to facilitate the handling of clothes after drying, outdoor drying behavior is prone to take place in the public spaces closer to the residential buildings, such as the linear landscape space and the node space. The act of drying is also common in the surface-based space because of its openness. Due to the nature of hanging clothes for drying, the top interface and specific interface are also often used as a medium for drying.

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headed by middle-aged and elderly people, to love planting potted plants and crops. Since the growth of plants requires the power of nature such as sunlight and rainfall, this behavior mostly occurs in open public spaces. It not only serves as a supplement to the community landscape, but also meets the residents' psychological demand to display the fruits of their labour. At the same time, self-built gardens in the portal space also occupy part of the public space for private use, preventing others from occupying their own portal space for temporary parking and other behaviors.

3. Spontaneous furniture: The public facilities in the community are all placed in a fixed form and are not centripetal. However, when residents are active in the public space of the community, they are mostly gathering social activities, and they need gathering furniture for them to carry out activities. Spontaneous furniture that is easy to move has become a good choice. Residents can move furniture at will according to changes in their own activities and needs. At the same time, they cannot waste the old furniture eliminated at home, allowing them to play their own value in another way.

4. On-street parking: Due to the limited public space resources and no underground parking space in Changleyuan community, the huge parking demand of community residents makes it possible for them to park only on the community streets and in some of the unused node spaces and plaza spaces. This behavior improves the efficiency of street use at night to a certain extent, but it also brings safety and traffic hazards.

5. Spontaneous alteration: Due to the sense of territory, residents will renew the portal node space through spontaneous alteration, marking out the extent of their private domains with paving, storage, and height difference to prevent others from encroaching on and using the space. These diversified spontaneous alteration behaviors also bring about a rich landscape of public space in the community. But this behavior also comes with the possibility of completely encroaching on public space as private space

Comprehensive analysis of the above shows that there are a large number of residents' spontaneous behaviors in the public space of Changleyuan community, which activate the negative space in the public space to a certain extent and redistribute part of the public space resources, but also lead to the chaos of the community public space structure and safety hazards. The experience and needs behind these residents' everyday lives are the design basis for designers to carry out public space renewal. On the basis of residents' everyday life, designers should further rationalize the public space structure, space resource allocation and potential space activation with the support of professional knowledge background.

6.1.8 Collection of Resident Design Ideas

In the process of observation, randomly select community residents in the community public space to ask their thoughts and suggestions on the renewal of community public space, so that the renewal design can better meet the daily needs of residents. During the interviews, most residents only expressed their design ideas in oral form, such as using unused open space, adding space to display self-built gardens, adding laundry drying space, adding walking paths to ensure walking safety, adding flexible and diverse public facilities (Figure 6-11).

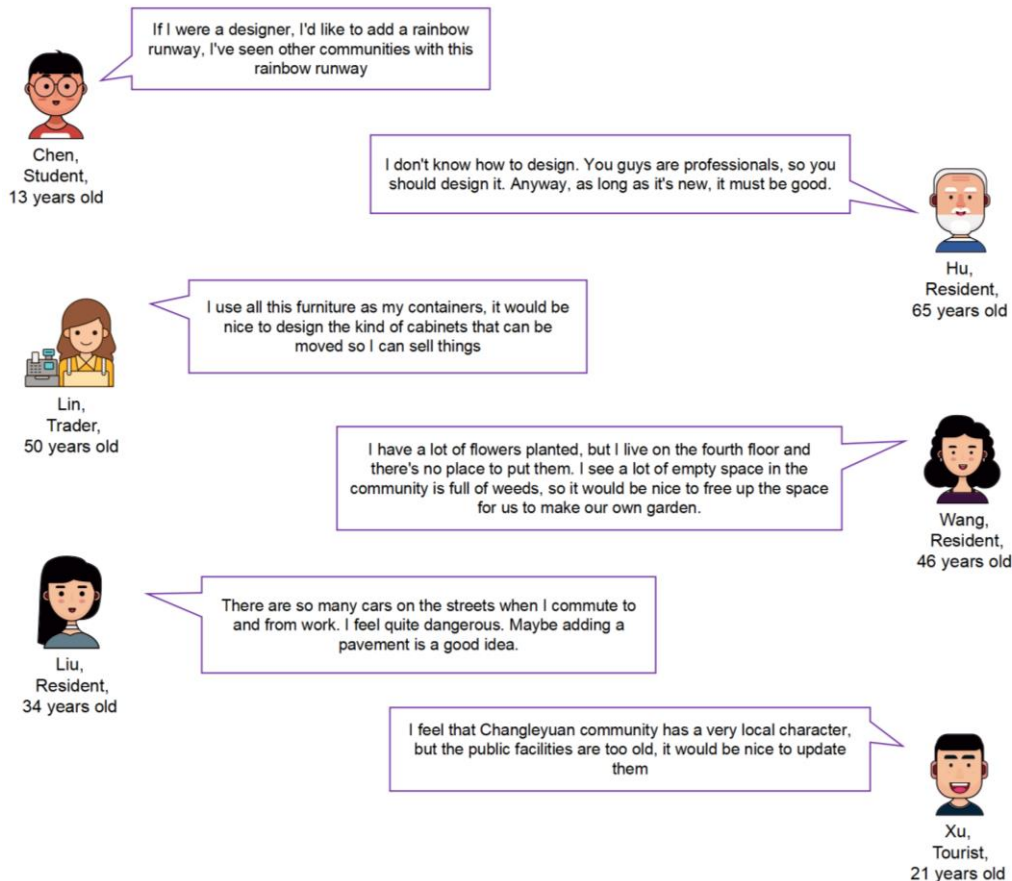


Figure 6- 11 Records of Resident Interviews about Design Ideas

(Source: Self-drawn by the author)

From the interview results, it can be seen that many residents still hope that designers can make a complete design for the community public, looking forward to a modern renewal of the space environment. Most of the residents' design of public space comes from the problems they perceive in their everyday life, such as the unsafety of people and vehicles walking together, and the lack of public facilities. This study will update the community public space with low cost and low technology according to the design ideas and demands of the collected residents, so as to meet the needs of residents' everyday life and increase the possibility of spontaneous behavior occurring.

6.2 Changleyuan Community Public Space Renewal Design

The specific renewal design of Changleyuan community public space come from the space renewal strategy described in the fifth chapter of this paper and the design ideas of the residents collected in the actual investigation and interview. The specific renewal design of the public space of the community comes from the space renewal strategy described in the fifth chapter of this article and the design ideas of the residents collected in the actual investigation and interview. As an public space renewal case of everyday urbanism in the study of Wuhan Hanzheng street by the School of Architecture and Urban-Rural Planning of Huazhong University of Science and Technology and the School of Architecture of Bergen, Norway, in 2007. The designer just re-limits the space that children often play in red, so that children can have a safer play space on the streets full of goods. Through this simple and easy method, the domain and quality of the game space are improved ^[16] This article also hopes to renovate the existing environment of Changleyuan community in a completely low-tech way, so as to better carry residents' everyday life or trigger new spatial behaviors.

Changleyuan community public space renewal design will be divided into three parts : first, to build a public space system with local characteristics ; then, based on the daily needs of residents and the design ideas of residents, various types of public spaces in the community are renovated; finally, implant community public facilities with multiple use possibilities in the community public space, and provide guidelines for the use and re-transformation of public facilities, so that residents can re-design and spontaneously use public facilities according to their own needs in the future. It can provide a safe and stable material medium for residents ' spontaneous behavior.

6.2.1 Design Objectives

From the perspective of everyday urbanism, the immediate goal of public space renewal in old community is to create public spaces that better meet the needs of residents in their everyday lives and trigger more diverse everyday lives. This low tech, small scale and progressive approach to renewal can provide more possibilities and diversity for the future development of the community with limited resources.

The development of the city is dynamic, and the needs of the social population are constantly updated and changed in different historical backgrounds. Therefore, the process of renovating community public space is not permanent and stereotypical, but must progress and constantly adapt to new changes. Designers are unable to continuously design community public space, but residents, as the main users of community public space, are the main operators

of the continuous cyclic renewal of community public space. From the perspective of everyday urbanism, the renewal of public space in old communities can provide the basis for the future cyclical renewal of the Changleyuan community.

Therefore, the following design ideas for the renewal of the community public space are proposed:

1. Make comprehensive use of the existing site resources, dredge the community public space structure and set a stable development direction for the community sub-region;
2. By setting up movable and modular public facilities, the community public space can be used in a variety of ways to improve the efficiency of public resources;
3. Preserve the existing everyday life of the residents in the community in order to highlight the unique cultural heritage and character of the community;
4. Provide community space suitable for people's passage and everyday life.;
5. Initiate a chain reaction among residents to maintain and renew the public space environment;

6.2.2 A Spatial Network Based on Residents' Everyday Life

Based on the picture of everyday life in the existing vitality node of the community public space and the main activities of everyday life in the space (Figure 6-12).



Figure 6- 12 Community Public Space Vitality Node
(Source: Self-drawn by the author)

The design divides the public space of Changleyuan community into three zones, which

are the community living room, the neighborhood living area, and the sports and recreation area (Figure 6-13).



Figure 6- 13 Community Public Space Zoning Improvement Intentions

(Source: Self-drawn by the author)

The differences between these zones make it possible for the everyday life activities of the residents to be functionally complementary and connected to each other. Each area accommodates different functional spaces and blank spaces to allow residents to renew themselves sustainably within the planned space.

6.2.3 Renewal Design of Public Space Based on Everyday Life

Based on the everyday life and needs of residents, this design has low-tech renewal of various types of public space in the community (Figure 6-14).



Figure 6- 14 Master plan for Community Public Space

(Source: Self-drawn by the author)

(1) Surface-based Space

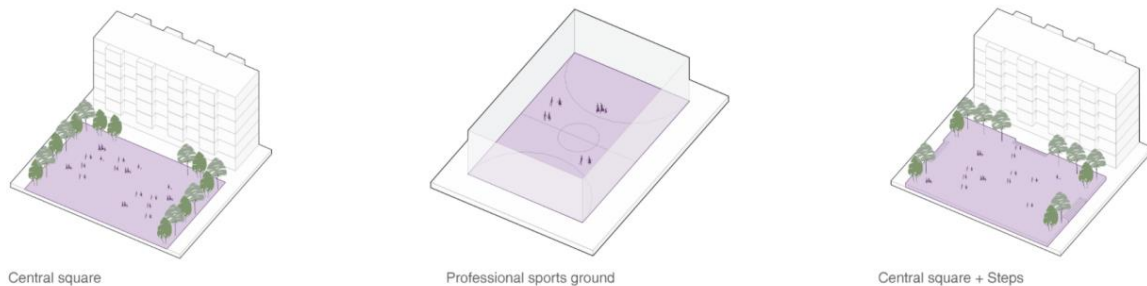


Figure 6- 15 The Existing Surface-based Public Space Forms in the Community

(Source: Self-drawn by the author)

There are three forms of surface-based public spaces in the Changleyuan community (Figure 6-15). These spaces have the most spatial resources and the largest number of users, so making full use of these spaces in the community plays a crucial role in stimulating the possibilities of everyday life. According to the themes of everyday life scenes in different areas, carrying out a composite spatial design.

Re-paving the floor in the community living room square, connecting the floor of the original community living room space with the entertainment square in the south and the street

between the two squares, to create a composite space that faces the community life and displays to the outside world. At the same time, the green land landscape is used to replace the original hard concrete material to soften the boundaries of these three spaces, so that the three spaces can be integrated with each other and complement each other in terms of function and vitality. The pavement of the street visually and tactilely limit the speed of the car, creating a pedestrian-friendly space, so that the residents' daily life can be carried out more safely in the public space. Movable public facilities, such as movable scenic walls and seats, and modular public service facilities, are also implanted in the community living room, making it easy for residents to move and combine them adaptively according to the needs of their daily activities (Figure 6-16).

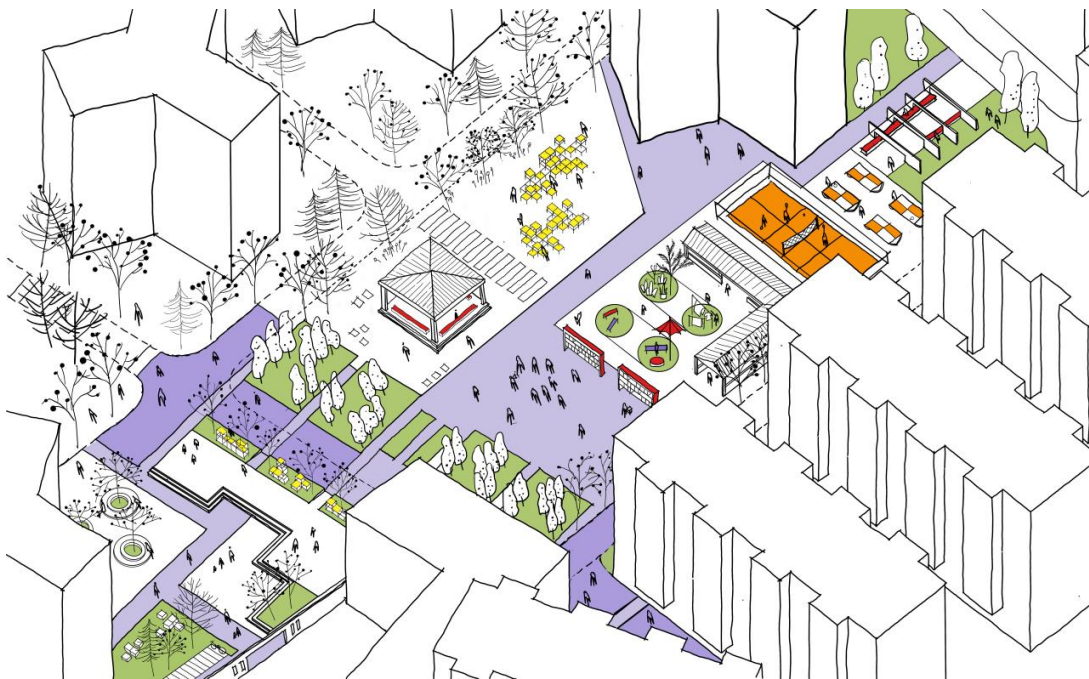


Figure 6- 16 Everyday Life Scene - Community Living Room

(Source: Self-drawn by the author)

The community fitness plaza is a complementary and extended function of the basketball court, through the foldable steps to solve the gap between the plaza space and the basketball court, which not only serves as a resting area for the users, but also becomes a grandstand for children's guardians to watch over the children's activities in their everyday lives. Setting up a plastic running track in the fitness plaza and extending it to the street not only improves the comfort of the residents while exercising, but also suggests that passers-by should pay attention to the activities inside the plaza and reduce their speed to improve the safety of the space. At the same time, flower shelves are set up on the parking space at the boundary of the square, which not only prompts the existence of pedestrian parking space, but also obscures the wind and sun to a certain extent for vehicles (Figure 6-17).

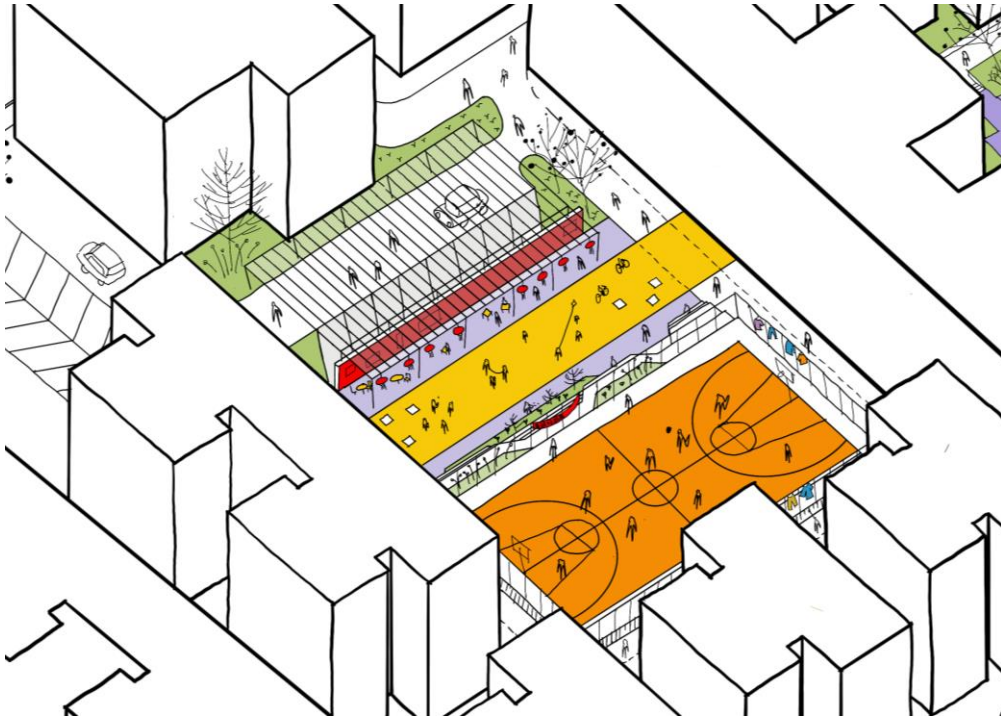


Figure 6- 17 Everyday Life Scene - Community Fitness Plaza

(Source: Self-drawn by the author)

The community neighborhood plaza is mainly used by permanent residents in the community, and there is a height difference between it and the street. On the basis of retaining the plants on the boundary of the original square, the hard paving on the original boundary is replaced with green landscape to alleviate the height difference. At the same time, structures are set up on the green space to provide material support for drying, fitness, planting and other behaviors (Figure 6-18).

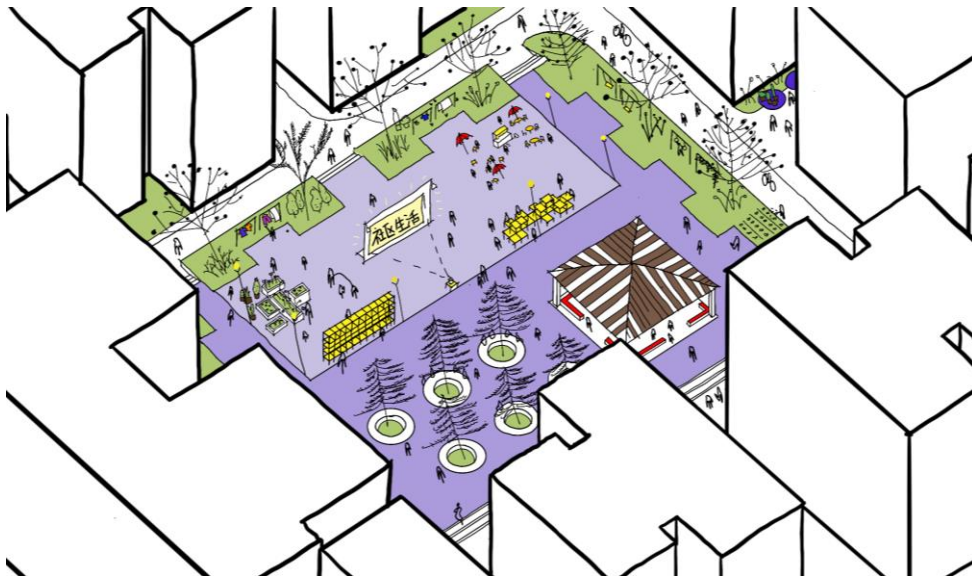


Figure 6- 18 Everyday Life Scene - Community Neighborhood Plaza

(Source: Self-drawn by the author)

(2) Linear-based Space:



Figure 6- 19 The Existing Linear-based Public Space Forms in the Community

(Source: Self-drawn by the author)

There are five forms of linear-based public spaces in the Changleyuan community (Figure 6-19):

1. Linear landscape: The linear landscape space in the community consists of street trees arranged along the street, with gaps between the trees that are often temporarily occupied by residents for parking, storage, and other behaviors. The paving of wood instead of concrete in these spaces can convey the concept of sustainable development and is more visually compatible with the landscape space.

2. Pedestrian - vehicle branch street: Due to the early age of the community, the building spacing is not wide, and the sidewalk scale is only 60 centimeters. The interspersed street trees interrupt the walking path of the originally limited sidewalk, and pedestrians have to walk on the carriageway to obtain a smooth walking experience. To ensure the safety of pedestrians walking on the carriageway, a brightly colored plastic walkway with a width of 60 cm was installed on one side of the edge of the carriageway (Figure 6-20). A shared street strategy is also used to control the time-of-day use of the street to cope with changes in traffic flow throughout the day.

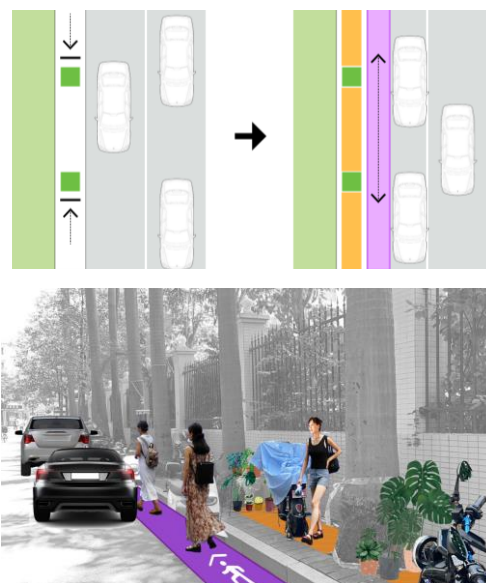
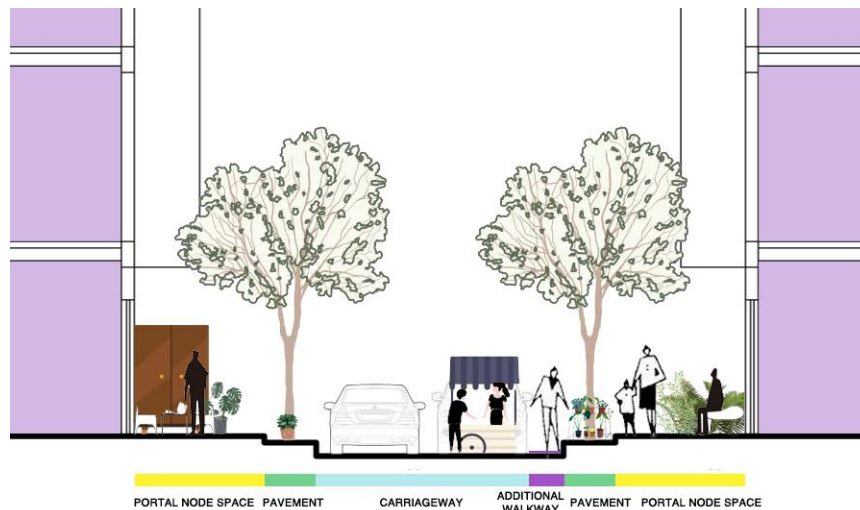
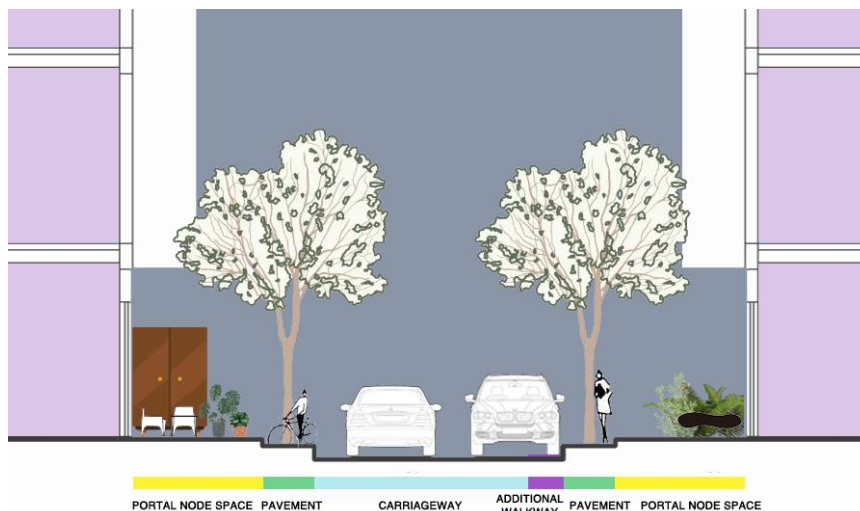


Figure 6- 20 The Paving Transformation of the Street and the Linear Landscape

(Source: Self-drawn by the author)



a) Shared Street Timing Strategy - Daytime



b) Shared Street Timing Strategy - Nights

Figure 6- 21 Shared Street Timing Strategy

(Source: Self-drawn by the author)

After nine o'clock in the day, the demand for the use of the street in the community has increased significantly. It can be stipulated that the vehicle can only be parked next to the newly established footpath when parking in the street, and the footpath space should not be occupied. The spare parking space can be used for commercial, leisure and other functions. After 9 pm, the frequency of community residents using public space is significantly reduced, and vehicles can temporarily occupy the sidewalk for parking, so as to improve the efficiency of street space at night (Figure 6-21).

3. Pedestrian-vehicle sharing street: The streets where people and vehicles do not branch are often accompanied by conflicts between people and vehicles. Informal parking behavior further erodes the limited pedestrian space. Pedestrian space can be divided by setting colorful plastic walkways to prevent the erosion of vehicles, so as to create a continuous walking

experience (Figure 6-22).

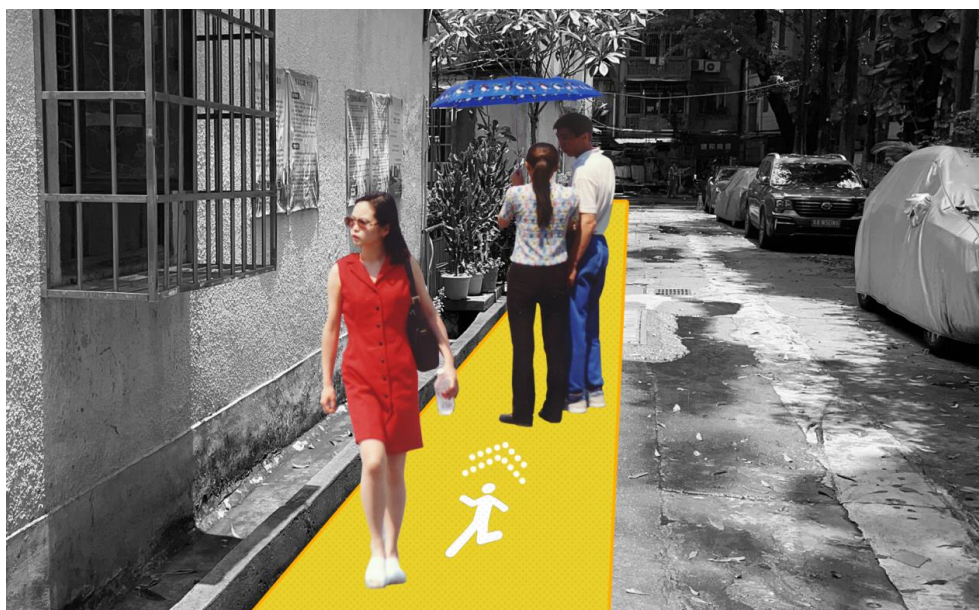


Figure 6- 22 Delineate Walkways to Provide a Continuous Walking Experience
(Source: Self-drawn by the author)

4. Pedestrian-only paths: There are many everyday activities in pedestrian-only paths, such as drying, storage, and self-built micro-gardens. By setting up multi-functional flower shelves, these daily activities can be supported by facilities, while defining the scope of spontaneous behavior. The semi-enclosed flower shelves also utilize the street sky interface and improve the efficiency of street space use (Figure 6-23).



Figure 6- 23 Additional Planters for Paths between Houses
(Source: Self-drawn by the author)

5. Slopes: Since the resident population of the Changleyuan community is mainly middle-

aged and elderly people, slopes are not convenient for the elderly to a certain extent. Barrier-free ramps can be set up to facilitate the passage of the elderly and disabled people.

(3) Point-based Space

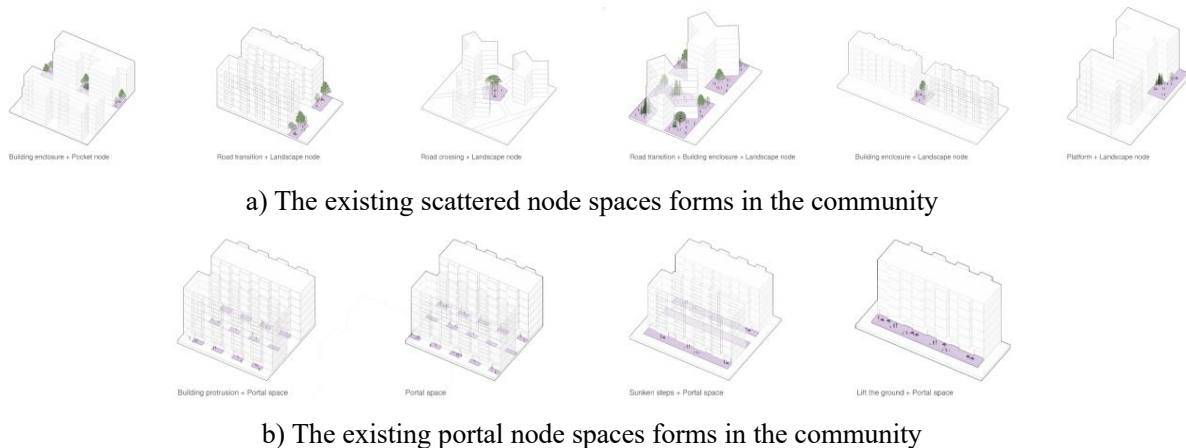


Figure 6- 24 The Existing Point-based Public Space Forms in the Community

(Source: Self-drawn by the author)

There are ten forms of point-based public spaces in the Changleyuan community (Figure 6-24):

1. Scattered node space: Most of the scattered spaces enclosed by the building form and the street have low vitality due to their fragmented nature. It can be connected with the surrounding street space by replacing the paving material, so as to guide the entry and use of the crowd. At the same time, the micro space with special shape is set up without any function definition so that residents can spontaneously carry out activities in it (Figure 6-25).

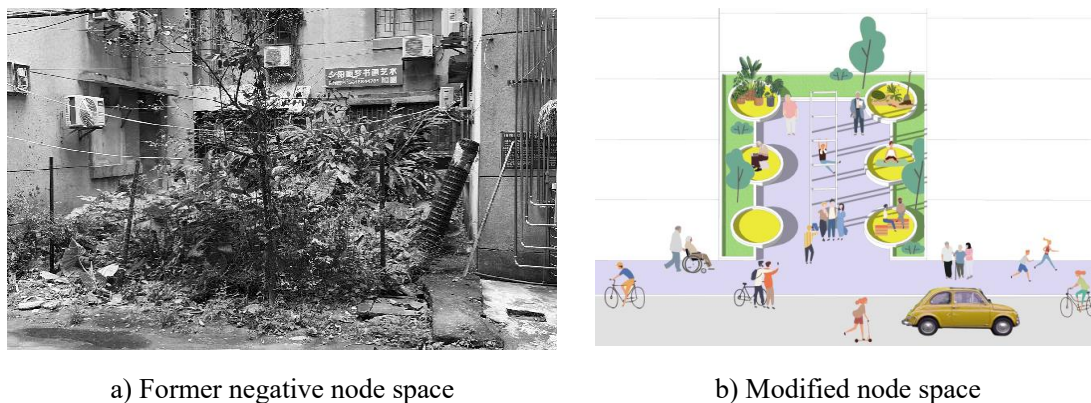


Figure 6- 25 Activating Scattered Node Spaces

(Source: Self-drawn by the author)

2. Portal node space: The nature of the portal node space adjacent to the residents' private living space is in the blurring zone between private and public. Residents can carry out rich spontaneous modification behaviors in this space in order to clarify the boundaries of the private realm and strengthen the privacy of the portal node space, such as laying bricks, storing things,

and enclosing walls. These spontaneous behaviors give the space a strong atmosphere of everyday life, but at the same time these behaviors may also lead to the complete encroachment of the portal node space into the private space. Therefore, by restricting the height of the self-built boundary of the portal space to a maximum of 80 cm above the ground level, this type of space will still have a public attribute in the visual field and become a supplement to the cultural landscape of the community (Figure 6-26).



Figure 6- 26 Control the Extent of Self-build Behavior in Portal Node Spaces
(Source: Self-drawn by the author)

(4) Interface Space

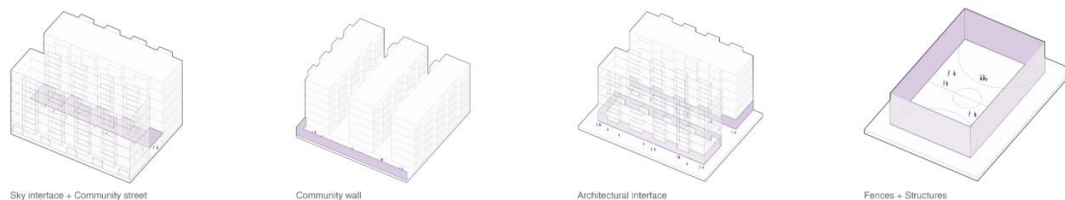


Figure 6- 27 The Existing Public Interface Space Forms in the Community
(Source: Self-drawn by the author)

There are four forms of public interface spaces in the Changleyuan community (Figure 6-27):

1. Architectural interface: The architectural interface of Changleyuan community is residential building façade. Due to the community's long history, this space is relatively old. By organizing residents to participate in the wall painting, the cultural history of the community can be depicted on the architectural interface to activate the space.

2. Specific interface: There are not many types of specific interfaces existing in the community. The sports ground fence has been occupied and used by residents in their everyday

life with behaviors such as drying clothes; the community wall, as the other main form, has not yet been fully utilized. It can organize residents to paint the old wall surface, and place public facilities close to the wall for residents to use.



Figure 6- 28 Organize Residents to Participate in Interface Renewal

(Source: Self-drawn by the author)

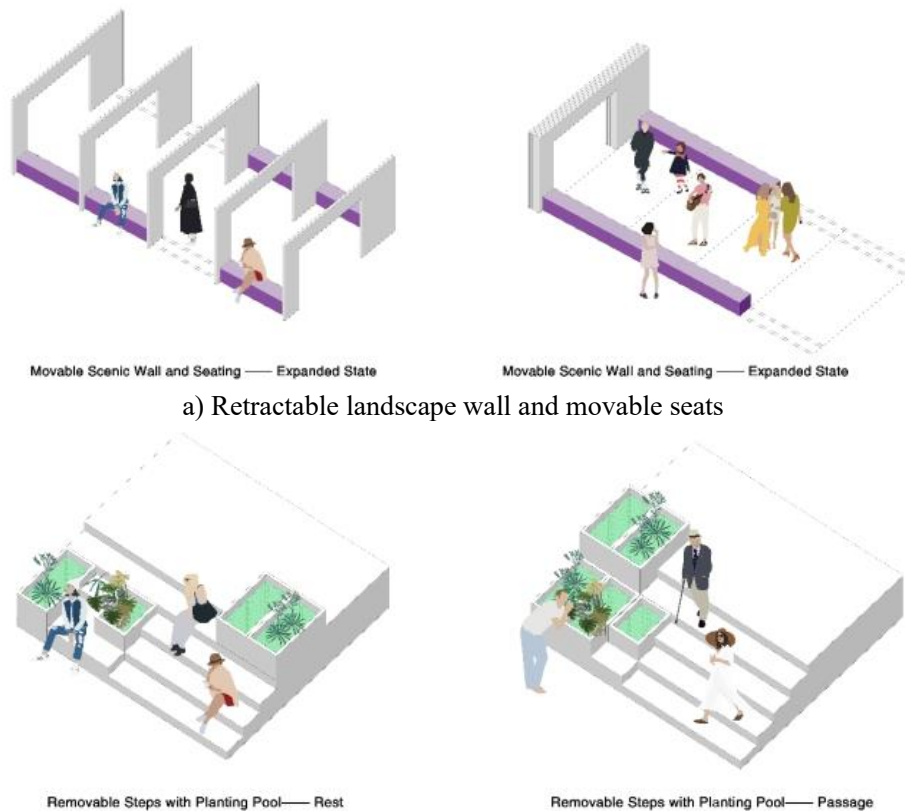
3. Sky interface: Residents often spontaneously build clotheslines to dry their clothes in the sky interface of the pathways between residential buildings. To increase the safety of this behavior, semi-enclosed flower shelf could be placed in the pathways with hollow frames that allow residents to hang their clothes to dry safely and conveniently.

6.2.4 Public Facilities Design that Trigger Spontaneous Behavior

In the Croft Alley milk crate experiment project, the studio members improved the spatial vitality of the street by placing milk crates with multiple usage possibilities in the street for people to use spontaneously.

Based on the preliminary research and the daily needs of residents, this design has set up movable and multifunctional community public facilities in the community to trigger the occurrence of spontaneous behaviors. In the meanwhile, providing residents with material support and design guidelines for diversified everyday life behaviors, so as to improve the vitality of the public space in the community through the spontaneous design and use of residents in the future.

(1) Guidelines for the spontaneous use of movable public facilities



b) Collapsible stands
Figure 6- 29 Guidelines for the Spontaneous Use of Movable Public Facilities

(Source: Self-drawn by the author)

This design sets retractable landscape walls and foldable seats in the community living room and sports fitness plaza, so that residents can move public facilities according to the size of the space required for daily activities. For example, landscape walls can be used in the unfolded state when there are no daily collective activities. It can be used as a medium for publicity and display in this state; when there is a need for group activities, the landscape wall can be contracted to create a complete open space.

The collapsible stand is mainly located at the height difference between the fitness plaza and the basketball court. It can be expanded as a rest space for children's supervisors and children during outdoor activities. When group activities are held on the basketball court, the planting unit on the stand can be moved in order to ensure the unimpeded passage (Figure 6-29).

(2) Guidelines for the spontaneous design of modular urban furniture

The design sets modular movable urban furniture in the community square space, scattered node spaces and community walls. The designer provides professional guidance on the modulus and construction methods of urban furniture to ensure the safety of subsequent spontaneous use

(Figure 6-30). These urban furniture can be combined to provide services for different activities, such as being tables and chairs for residents to gather and play cards, or being a temporary display space (Figure 6-31).

By reclaiming waste materials such as wood, cloth, film from community residents as the enclosure surface of modular furniture, the skeleton of modular furniture is made of light-weight and highly variable wood to provide stable support.

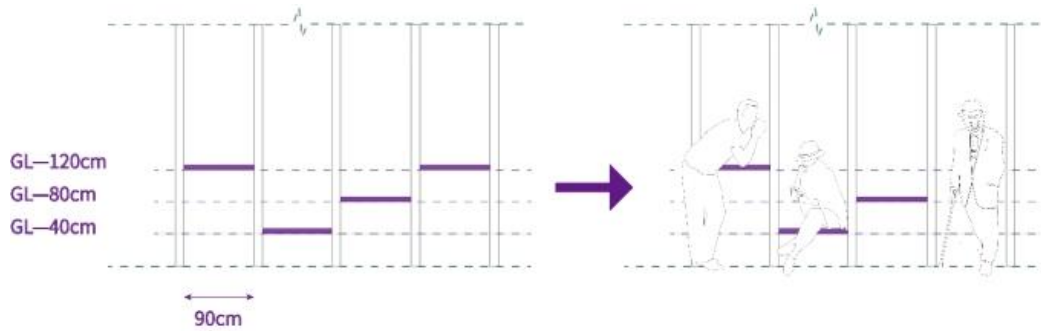


Figure 6- 30 Modulus Setting of Modular Urban Furniture

(Source: Self-drawn by the author)

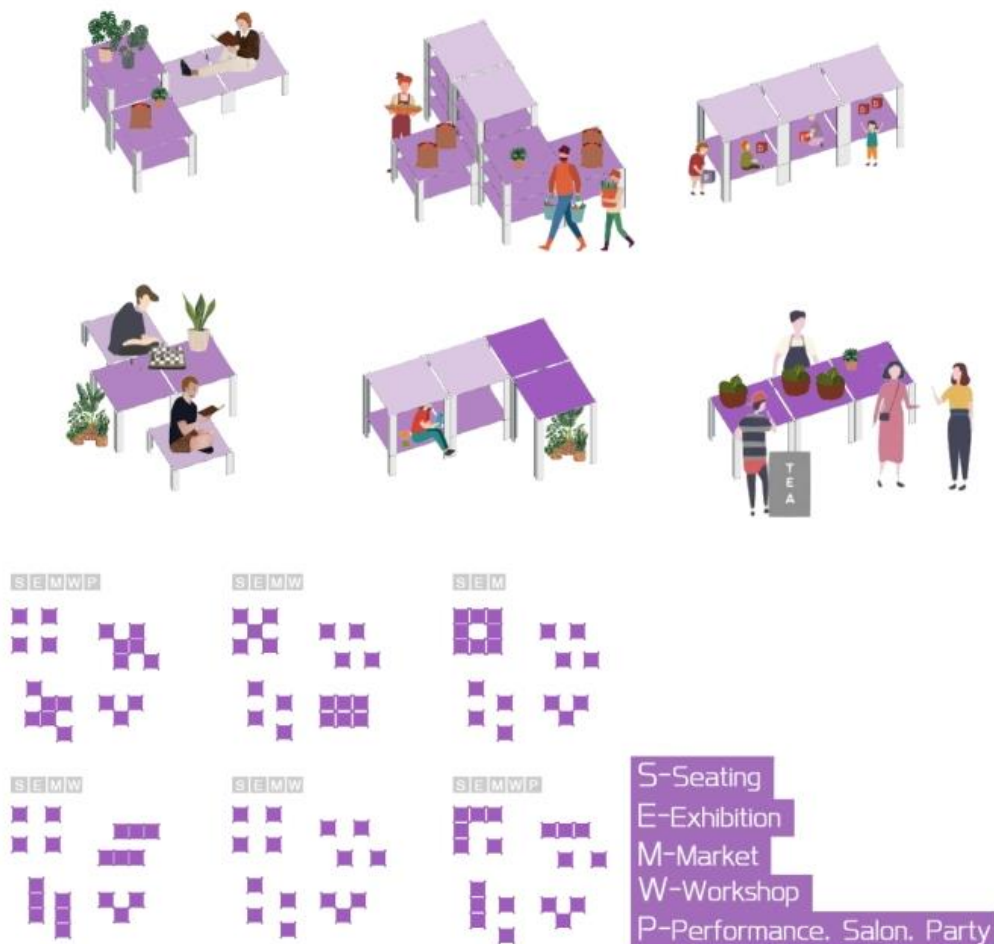


Figure 6- 31 Guidelines for the Spontaneous Design of Modular Urban Furniture

(Source: Self-drawn by the author)

(3) Guidelines for recycling and reusing old furniture

According to the results of preliminary research and interviews with residents, the reason why residents like to use old furniture is that these old furniture carry the memories of residents' lives, and they are reluctant to discard them.

At the same time, these old furniture allow residents to improve their quality of life at the lowest cost. In the process of community renewal, residents can be invited to join in the process by donating old furniture. According to the types of old furniture used by residents in the community, the designer provides guidelines for the recombination and reuse of old furniture for residents to use for old objects renewal (Figure 6-32).

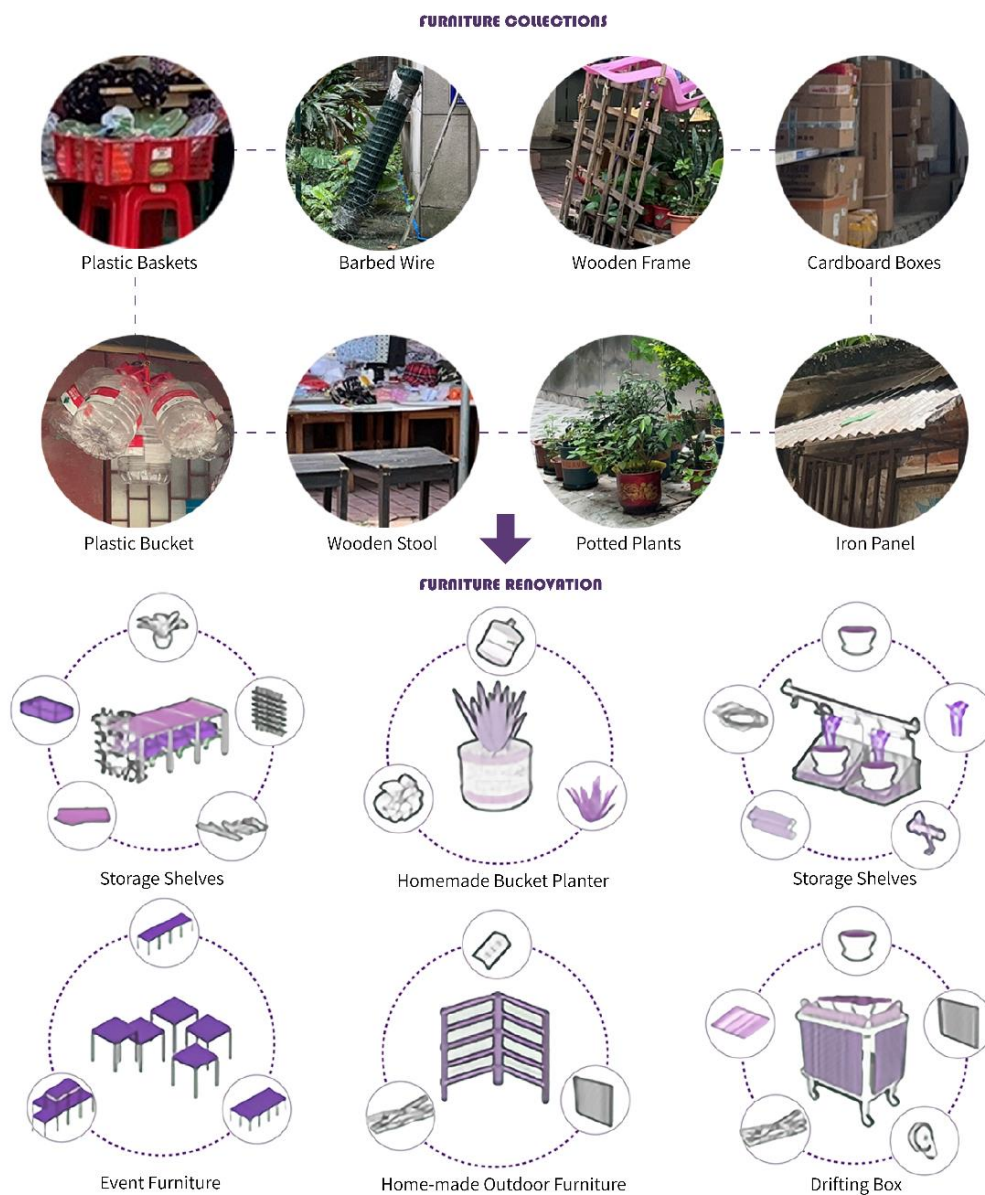


Figure 6- 32 Guidelines for Recycling and Reusing Old Furniture

(Source: Self-drawn by the author)

(4) Guidelines for functional composite flower shelves

Functional composite flower shelves can be placed on the paths in the community. The structure of the flower shelf can provide material support for spontaneous behaviors such as outdoor drying and self-built micro-gardens, so as to prevent residents from drying their clothes to the wires that may cause danger. The flower shelves used spontaneously by residents will become a supplement to the unique style of the community (Figure 6-33).

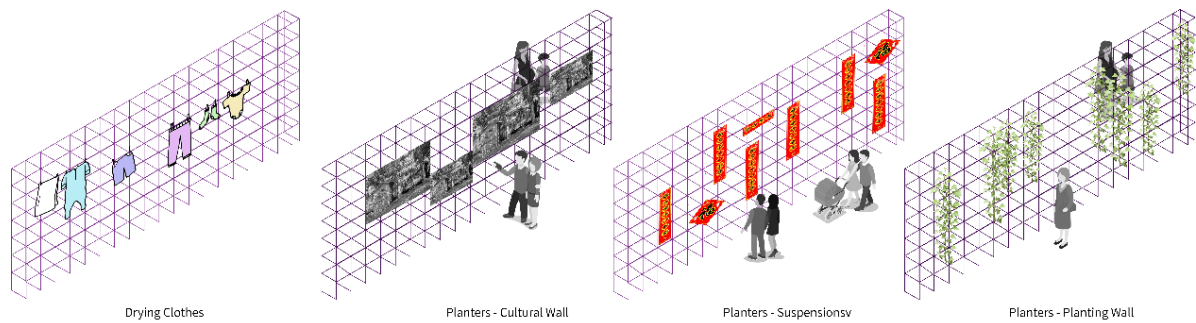


Figure 6- 33 Guidelines for Functional Composite Flower Shelves

(Source: Self-drawn by the author)

6.3 Interviews with Residents Evaluating the Design

After putting forward the specific design scheme of Changleyuan community public space, the author returned to the community and actively conducted interviews with residents, hoping to collect and understand residents' views and opinions on the design scheme. The core of this research method is to listen to the ideas through direct interaction with residents, so as to better grasp the needs and expectations of the community, and ensure that the design scheme can truly meet the needs of residents.

According to the interview results, the interviewed residents generally expressed their support and love for this design scheme, and expressed their hope that it could be implemented in Changleyuan community in the future. Residents' positive response to the design reflects their eagerness to develop and renew the community (Figure 6-34).

These affirmative feedbacks have laid a solid foundation for the promotion and successful implementation of the project. At the same time, it also shows that the design scheme is recognized and welcomed by the community residents.

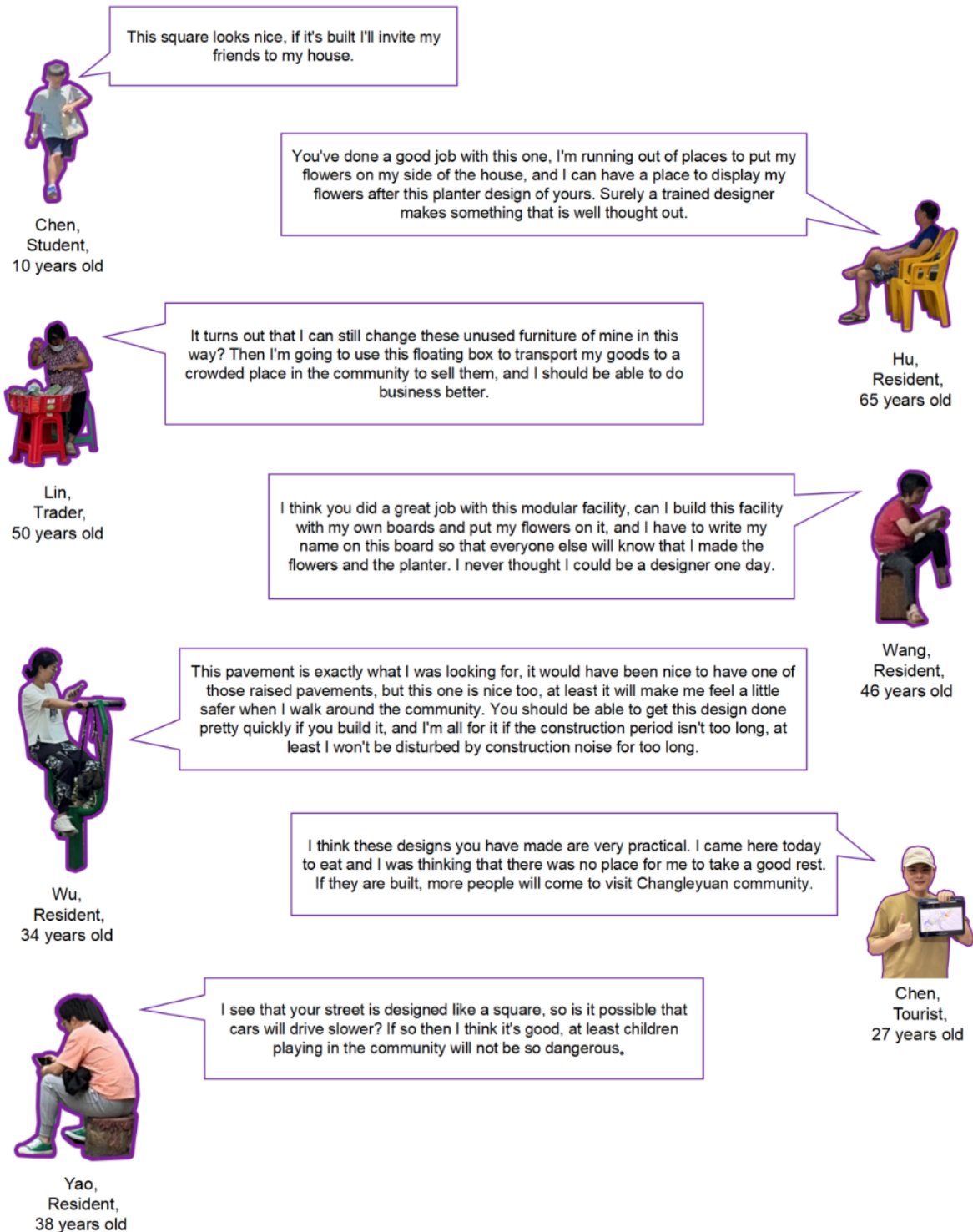


Figure 6- 34 Resident Interview Records
(Source: Self-drawn by the author)

6.4 Summary

Based on the results of this study, this chapter proposes principles and specific strategies for the renewal of Changleyuan community public space, which will help to improve its physical environment, enhance the quality of life of residents while preserving the normal

conduct of their everyday lives, and promote social equity.

In the process of design, the design pays active attention to the daily habits of the residents, intervenes in the site in a small-scale, low-tech regeneration way, and applies the five types of regeneration measures in a comprehensive way to specific scenarios. The design can be divided into two parts: firstly, by observing and researching the use of public space in the Changleyuan community, the development and theme of the community is positioned in different areas according to the picture of everyday life in the community. Secondly, according to the positioning of different areas, the existing physical space of various forms in the community will be renovated, so as to provide material conditions for the residents to carry out various everyday lives while solving the existing conflicts.

The results of the design provide guidelines for the future sustainable development of public space in old communities, expanding static planning blueprints into sustainable public participation initiatives. Residents are able to actively or passively replenish the resources of the community public space through fundraising for old furniture and public construction, increasing the residents' sense of responsibility for maintaining the community public space. In this way, the community public space can be sustainably and benignly used in the future.

Summary and Outlook

Based on everyday urbanism, this article proposes a renewal design methodology for the renewal of old community public space by actually investigating the everyday lives and spontaneous behaviors of the residents in Dexin Community, Gongheacun Community and Changleyuan Community in Guangzhou. The following three conclusions are drawn:

1. According to the investigation, five kinds of spontaneous behaviors exist in the old community public space in Guangzhou: object occupation, mobile use, self-build, semi-mobile use and disruptive use.

2. According to the characteristics of five spontaneous behaviors, five types of public space renewal design methods are proposed: Utilizing existing sites and reorganize spatial elements, creating pro-dynamic elastic space, leaving room for spontaneous creation, recognizing and optimizing informal urban furniture, and reinventing place identity and belonging of community.

3. The specific renewal design of the Changleyuan community public space was carried out: Firstly, according to the scenes of community everyday life, the public space of the community is partitioned and positioned to create a space network based on the everyday life of residents; Secondly, according to physical space forms, classify community public spaces and carry out low-cost, low-tech renewal design for each type of space based on everyday life and design ideas of residents. Finally, public facilities that can trigger residents' spontaneous behaviors are placed in the public space, such as movable public facilities, modular urban furniture, remade old furniture, to provide diverse choices for residents to use according to their needs. And communicate with residents after the design is completed to ensure that it truly meets the everyday life needs of residents.

The current urban design in China lacks attention to the everyday life and spontaneous behavior of residents. Based on this deficiency, this article proposes the following two innovations:

1. Propose observation methods of everyday life

The old community public space can be observed in the way of Mapping. The observation content can be divided into three parts: space scene observation, user behavior observation and public facility usage observation.

2. Propose an interactive design pattern for the renewal of old community public space

The interactive design pattern is a two-way combined design pattern. Firstly, observe the everyday life space and spontaneous behavior of the residents in the community. Secondly,

according to the observation and collecting of residents' design ideas, the initial design is proposed. Then, collect residents' evaluation and opinions on the design scheme and adjust the scheme according to the opinions. After the initial implementation of the design, observe the community public space and collect the evaluations of the residents again. Finally, improve the follow-up design of public space according to the observation and evaluation results.

Based on the theory of everyday urbanism, the author puts forward a design method for the renewal of old community public spaces based on the everyday life of residents. Although efforts have been made in various aspects, there are still many deficiencies in the research due to the limitations of cognitive ability and scientific research level, which need to be improved in the later work.

1. Although the theory of everyday urbanism has appeared for more than 20 years, it is still a developing urban renewal theory that has not been fully verified by practice, and still has great development potential. Therefore, the research of old community public space in Guangzhou from the perspective of everyday urbanism theory has a certain narrowness and uncertainty, which needs to be further applied in practice.

2. Because this method is based on the phenomenon of spontaneous renewal of residents in community public space, the public space renewal method based on everyday urbanism also has certain limitations. The reasons for these spontaneous phenomena are complex, and their external manifestations are also complicated. In this research, the explanation of its phenomena and causes can only be qualitatively analyzed, and there is a lack of quantitative data analysis support. Therefore, the methodology also has some imperfections.

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