



华南理工大学
South China University of Technology



Politecnico
di Torino

专业学位硕士学位论文

Research on Urban Renewal Strategies from
the Perspective of Tactical Urbanism

——A Case Study of Zhuangyuanfang District
in Guangzhou

作者姓名 刘振豪

学位类别 建筑学硕士

指导教师 导师组

所在学院 建筑学院

论文提交日期 2023年7月

**Research on Urban Renewal Strategies from the
Perspective of Tactical Urbanism——
A Case Study of Zhuangyuanfang District in Guangzhou**

A Dissertation Submitted for the Degree of Master

Candidate: Liu Zhenhao

Supervisor: SCUT-POLITO co-supervisors,

ARCHITECTURE

South China University of Technology

Guangzhou, China

摘要

新常态背景下，曾经的宏大的叙事话语形式，对于人的日常生活体验和需求常常忽略。传统的自上而下的规划设计难以解决现阶段所面临的许多社会问题。中国城市发展从以前的增量规划逐渐走向存量更新。城市存量空间的更新需引进新型的方式方法，而近年兴起的战术都市主义是微小尺度更新的典型代表。基于此，本文引入战术都市主义的视角，通过研究战术都市主义的发展历程，分析其理论基础与方法特点。探究发现战术都市主义的低成本、灵活、灵活适应等特点和优势。了解并论证战术都市主义在城市更新中对规划进行补充、促进社区参与赋权、提供新方法等作用。

其次结合文献和案例研究，对世界各地复杂的战术都市主义项目进行归纳分析，对其做法、尺度等方面进行分析，提炼核心要素以及核心价值，总结战术都市主义行动特点。并选取国内外共三个典型案例，分别从发展、实施与政策以及结果和后续影响三个层面进行分析。根据战术城市化的特点和潜在效益，结合广州城市更新现状，讨论广州的战术城市化的一般应用前景，适应性的提出规划-调查-设计-实施-监督、评价与管理的战术都市主义流程。

最后，在实证研究中，以广州状元坊街区为例，通过对其现状充分地调研，发现公共空间不足、交通混乱、业态过时和文化遗失等问题。进而引入战术都市主义，构建更新机制，提出状元坊所适应的战术，并从街道、节点、建筑三个层面探讨在状元坊街区的具体的战术干预和实践方法。

总体而言，本研究以战术都市的视角作为切入点，提出了创新的城市更新方法。其高度的灵活性和适应性，使其成为传统规划方法的理想补充。文章主要遵循了“理论研究-案例研究-方法论-应用”的推导逻辑，并通过战术性的思维来展望广州未来的城市更新，也为推进我国城市存量空间更新提供一定的思路参照。

关键词：战术都市主义，城市更新，存量更新，状元坊街区

Abstract

In the context of the "new normal," the grand narrative discourse often overlooks the everyday experiences and needs of individuals. Traditional top-down planning and design is difficult to solve many social problems faced at this stage. Chinese urban development has transitioned from incremental planning to inventory renewal. The renewal of existing urban spaces necessitates the introduction of innovative methods, with tactical urbanism emerging as a typical representative of small-scale updates. This paper adopts a perspective of tactical urbanism to explore its development history, theoretical foundations, and methodological characteristics. The paper investigates the low-cost, flexible, and adaptive nature of tactical urbanism, highlighting its advantages in complementary to the strategy, promoting community participation, and offering new methods in urban renewal.

Furthermore, combining literature and case studies, various complex tactical urbanism projects worldwide are analyzed and summarized in terms of their approaches, scales, core elements, and values. Three representative international and domestic cases are selected for in-depth analysis, covering their development, implementation, policies, outcomes, and subsequent impacts. Drawing on the characteristics and potential benefits of tactical urbanism, in combination with the current status of urban renewal in Guangzhou, the paper discusses the general application prospects of Tactical urbanism in Guangzhou, proposing a tactical urbanism process involving planning, investigation, design, implementation, monitoring, evaluation, and management.

Finally, taking the Zhuangyuanfang district in Guangzhou as a example, the research conducts empirical investigations, identifying issues such as insufficient public spaces, chaotic traffic, outdated industry model, and cultural loss. Introducing tactical urbanism, the research establishes renewal mechanism and approach relevant tactics suitable for the Zhuangyuanfang district. Moreover, specific tactical interventions and implementation methods at the street, node, and architecture levels in Zhuangyuanfang are explored.

Overall, this study adopts the perspective of tactical urbanism as an innovative approach to urban renewal. Its high flexibility and adaptability make it an ideal complement to traditional planning methods. The research follows the logical progression of "theoretical research- case study - methodology -application" and employs tactical theory to envision the future of urban renewal in Guangzhou, providing some guidance for advancing the renewal of existing urban spaces in China.

Keywords: Tactical Urbanism, Urban Renewal, Inventory Renewal ,Zhuangyuanfang district

LIST OF FIGURES

Figure 1-1	Framework	5
Figure 2-1	Four trends emerging in USA.....	7
Figure 2-2	Various tactical urbanism implementation manuals.....	9
Figure 2-3	Participants of tactical urbanism	11
Figure 2-4	Benefits of tactical urbanism	12
Figure 2-5	Development of Western Cities	16
Figure 2-6	Development of Chinese Cities.....	17
Figure 2-7	Tactical implementation at Santana	23
Figure 3-1	The tactical urbanism spectrum	25
Figure 3-2	The Practice of Tactical urbanism	31
Figure 3-3	Tactics at different scales	33
Figure 3-4	Implement of (Re)thinking the street.....	36
Figure 3-5	Poster	37
Figure 3-6	Feedback collection	38
Figure 3-7	Renewal in Estonoesunsolar	40
Figure 3-8	Yuyuan Public Market and uyuan Department Store	44
Figure 3-9	Stages of Urban Renewal Development on Yuyuan Road	45
Figure 3-10	Tactical invention in Yuyuan Road.....	46
Figure 3-11	Multi-parties participation	48
Figure 4-1	Tactics in China.....	54
Figure 4-2	Tactical urbanism process	58
Figure 4-3	Planning Process for Tactical urbanism	60
Figure 4-4	Investigations at different scales.....	61
Figure 4-5	The Case for Progressive Design	63
Figure 4-6	Material palette for Tactical urbanism	64
Figure 5-1	Location of Zhuangyuanfang district	74
Figure 5-2	Zhuangyuanfang as a typical commercial area in the old city	75
Figure 5-3	Map of Pearl River shoreline changes	76
Figure 5-4	Qing Dynasty Street Level Distribution Map	76
Figure 5-5	Guangzhou Historical and Cultural City Protection Planning and Development	79
Figure 5-6	Zhuangyuanfang district renewal and preservation plan.....	81
Figure 5-7	Street traffic conditions	82
Figure 5-8	Street System	83
Figure 5-9	Street scale	84
Figure 5-10	Survey of the landscape	85

Figure 5-11	Age of buildings	86
Figure 5-12	Examples of building types	88
Figure 5-13	Map of Building Types	89
Figure 5-14	Typical Bamboo House in Qing Dynasty	90
Figure 5-15	Survey of Industry	91
Figure 5-16	Industry Distribution Map	92
Figure 5-17	Open space in the Zhuangyuanfang district	92
Figure 5-18	Demographic and Educational Survey	93
Figure 5-19	Activities in district	94
Figure 5-20	Word frequency statistics for Zhuangyuanfang	95
Figure 5-21	Urban renewal questionnaire in Zhuangyuanfang	96
Figure 5-22	Sample questionnaire	96
Figure 5-23	Selected results of the questionnaire	96
Figure 5-24	Opinions of different groups	98
Figure 5-25	Site plan	103
Figure 5-26	Top-down tactical experiments	104
Figure 5-27	Bottom-up tactical implementation	106
Figure 5-28	Multi-participated in tactical urbanism	107
Figure 5-29	Application of tactics	108
Figure 5-30	Road repair	108
Figure 5-31	Depave	109
Figure 5-32	Open/Play Streets	109
Figure 5-33	Street Fairs	110
Figure 5-34	Pop-up	110
Figure 5-35	Reclaimed Setbacks	111
Figure 5-36	Guerilla gardening	111
Figure 5-37	Parklet	112
Figure 5-38	Knowledge Exchange	113
Figure 5-39	Co-trading	113
Figure 5-40	Map of demolished buildings	114
Figure 5-41	Map of supplementary facilities	115
Figure 5-42	Scenarios of supplementary facilities	116
Figure 5-43	Street Walking Organization	117
Figure 5-44	Status of Daxing Road Intersection	118
Figure 5-45	Tactical intervention (ground painting)	118
Figure 5-46	Examples of Transportation Modifications	119
Figure 5-47	Tactical intervention	121

Figure 5-48	Types of nodes	122
Figure 5-49	Field examples of nodes	123
Figure 5-50	Tactical intervention scenarios	125
Figure 5-51	More Possibilities for nodes	126
Figure 5-52	Alternatives to the Plaza	126
Figure 5-53	Distribution of publicly ownership	128
Figure 5-54	Pilot building	129
Figure 5-55	Renewal mechanism	130
Figure 5-56	Cluttered building façade	131
Figure 5-57	Façade Enhancement	131
Figure 5-58	Plan of Pilot building	132
Figure 5-59	1-1 Section	133

CONTENTS

摘要	II
Abstract	II
LIST OF FIGURES	III
CHAPTER1: INTRODUCTION	1
1.1. Research background	1
1.1.1. China's Urban Renewal Turns to micro Scale	1
1.1.2. Tactical urbanism on the rise globally	1
1.2. Research questions	2
1.3. Significance	2
1.3.1. Theoretical significance	2
1.3.2. Practical significance	3
1.4. Research content and framework	4
1.4.1. Research content	4
1.4.2. Research framework	5
1.5. Research method	5
CHAPTER2: THEORETICAL RESEARCH	7
2.1. Tactical urbanism	7
2.1.1. Proposal of tactical urbanism	7
2.1.2. Development of tactical urbanism	8
2.1.3. Definition and characteristic	9
2.2. Urban Renewal	13
2.2.1. Disadvantages of traditional planning	13
2.2.2. Development of urban renewal	15
2.2.3. Towards Tactical Urbanism	17
2.3. The Role of Tactical Urbanism in Urban Renewal	19
2.3.1. Complementary to the strategy	19
2.3.2. Providing new ideas and working methods	20
2.3.3. Promoting community participation and empowerment	21
2.3.4. Testing innovative ideas and Establishing momentum	22
2.3.5. Summary of the chapter	24
CHAPTER3: CASE STUDY	25
3.1. Tactics in Tactical Urbanism	25
3.2. (Re)thinking the street in Santana	33
3.2.1. Introduction	33
3.2.2. Development	34
3.2.3. Implementation and policy	35

3.2.4. Outcomes and subsequent impacts	38
3.3. Estonoesunsolar in zaragoza	39
3.3.1. Introduction	39
3.3.2. Development	39
3.3.3. Implementation and policy	40
3.3.4. Outcomes and subsequent impacts	42
3.4. Yuyuan Road in Shanghai	42
3.4.1. Introduction	42
3.4.2. Development	43
3.4.3. Implementation and policy	45
3.4.4. Outcomes and subsequent impacts	48
3.5. Summary of the chapter	49
CHAPTER4: URBAN RENEWAL MODEL	52
4.1. Tactical urbanism in different countries	52
4.1.1. Tactical urbanism abroad	52
4.1.2. Tactical Urbanism in China	54
4.2. Urban Renewal in Guangzhou	55
4.2.1. Urban Renewal Trends in Guangzhou	55
4.2.2. Major Problems and Obstacles Facing Urban Renewal in Guangzhou	55
4.2.3. Tactical Urbanism as a New Approach to Guangzhou	56
4.3. Tactical Urbanism Process	57
4.3.1. Plan	59
4.3.2. Investigate	61
4.3.3. Design	62
4.3.4. Implementation	67
4.3.5. Monitoring, evaluation, and management	67
4.3.6. Outcomes and subsequent impacts	69
4.4. Summary of the chapter	70
CHAPTER5: DESIGN APPLICATION	72
5.1. Plan	72
5.2. Investigate	73
5.2.1. Introduction	73
5.2.2. History and Culture	75
5.2.3. Upper Planning Analysis	78
5.2.4. Analysis of current situation	81
5.2.5. Neighborhood Public Opinions	94
5.2.6. Summary of issues	98

5.3. Design	100
5.3.1. Design Intentions	100
5.3.2. Tactical urbanism renewal mechanism	104
5.3.3. Appropriate Tactics in Zhuangyuanfang	107
5.3.4. Tactical intervention in the street	113
5.3.5. Tactical intervention at the node	121
5.3.6. Tactical intervention in architecture	126
5.4. Summary of the chapter	133
CONCLUSION	134
REFERENCES	136
ACKNOWLEDGEMENTS	140

CHAPTER1: INTRODUCTION

1.1. Research background

1.1.1. China's Urban Renewal Turns to micro Scale

Urban renewal is a major task facing urbanization at a certain stage of its development. Urban renewal involves the optimization and adjustment of environmental, economic and social aspects and requires a long-term, arduous and complex realization process. Urban renewal in China has gone from focusing on improving the physical environment in the early days to gradually solving basic livelihood problems. Through a long and arduous process, comprehensive adjustments in environmental, economic and social aspects have been carried out. Now, urban renewal, as a major task when urbanization development reaches a certain stage, is increasingly emphasizing people-oriented and committed to high-quality development.

With the development of China's urbanization entering the middle and late stages, inventory enhancement has gradually replaced large-scale incremental development as the main form of urban space development in China. The "Proposal of the Central Committee of the Communist Party of China on the Formulation of the Fourteenth Five-Year Plan for National Economic and Social Development and the Visionary Goals for the 23rd Five-Year Plan" explicitly points out that "the implementation of urban renewal actions" and "the promotion of new urbanization centered on human beings" have pointed out the direction of China's urban work in the "14th Five-Year Plan" period. ^[1]Urban renewal is closely related to improving the quality of cities and people's living standards. At present, urban construction is more inclined to grandiose narrative discourse, and the daily life experience and needs of people are often neglected. The once rough incremental urban development has passed. In the context of meeting the current society's higher requirements for both material and spiritual needs, it has become particularly important to improve the quality of urban life. Government-led urban construction has gradually shifted from large-scale planning and design (strategic level) to small-scale design with flexible space (tactical level)^[2].

1.1.2. Tactical urbanism on the rise globally

The term Tactical urbanism itself became popular in the early 2010s. It was coined by Mike Lydon and Anthony Garcia in their book *Tactical Urbanism: Short-term Action for Long-Term Change*. The book popularized the idea of using small-scale interventions to catalyze urban transformation. Since then, Tactical urbanism has gained momentum globally,

with many projects and initiatives in cities on every continent. Tactical urbanism has embraced a wide range of interventions, including pop-up parks, open streets initiatives, bike lanes, public art installations, outdoor markets, and a series of community-led street design projects.

Their common feature is that they are primarily used to optimize smaller scale and short-term projects in urban spaces, using tiny interventions to bring about significant changes to sites on a physical level as well as on a social level.^[3] The movement is also ripe for influencing urban planning and policy. Municipalities, urban planners and government agencies are increasingly recognizing the value of tactical urbanism in informing their decision-making processes. They are utilizing the adoption of more agile, participatory and innovative solutions to facilitate long-term change. Many cities have established formal programs or frameworks to support tactical interventions, even incorporating them into long-term planning strategies.

1.2. Research questions

Urban renewal has attracted much attention around the world as many cities face numerous challenges related to aging infrastructure, economic decline and loss of community vitality. Traditional top-down approaches to urban renewal often face obstacles due to limited resources, lack of community involvement and extended project timelines. However, the emergence of tactical urbanism offers an alternative perspective that emphasizes short-term, low-cost interventions that can trigger positive change within communities.

This paper focuses on research issues related to bringing the tactical urbanism perspective to urban renewal. It also selects the Zhuangyuanfang district in Guangzhou as a research object, identifies practical problems through specific cases, and proposes strategies and practical methods for urban renewal under the theoretical framework of tactical urbanism. The main research questions of this paper are as follows:

1. What are the inherent values and benefits of tactical urbanism for urban development?
2. What are the purposes and objectives of tactical urbanism in the context of urban renewal?
3. How to apply and implement the urban renewal strategy from the perspective of tactical urbanism in Guangzhou?

1.3. Significance

1.3.1. Theoretical significance

Under the background of new normal, the research focus of China's urban planning has

gradually shifted from incremental planning to inventory planning. Tactical urbanism theory, as an urban design theory that has emerged in western countries in recent years, has an important inspiration for the study of China's inventory era in terms of its ideas. Able to complement our once large-scale and even mega-scale planning, tactical urbanism acts more flexibly than traditional urban planning, improving our urban environment through short-term, low-cost interventions. It also emphasizes the joint efforts of individuals, communities, governments, and various social organizations to bring about changes in cities that will improve urban quality.

Tactical urbanism is an approach that is less oriented towards predetermined outcomes and more focused on process and action. Tactical urbanism with its special mode of thinking introduces mechanisms such as implementation and monitoring feedback to expand the new field of urban design. Inspiring design thinking, designing a space can also provide opportunities for people to transform it while using it at the same time, providing new insights into urban design, which is a dynamic and continuous process. For designers and the government, the mechanism of multi-party participation and the specialization of individual roles also builds up more possibilities to stimulate the vitality of urban renewal and to realize the participation of residents and spatial justice.

Today's urban development is gradually shifting from incremental planning to stock renewal. The design concepts, values, methods and methods behind it are yet to be updated. Tactical urbanism, which has emerged around the world, has certain inspiration and guiding significance for urban renewal in the stock era of our country. It can supplement my country's previous large-scale and even super-large-scale planning. Compared with traditional urban planning, tactical urbanism actions are more flexible and can improve our urban environment through short-term, low-cost intervention methods. At the same time, it emphasizes the joint efforts of individuals, communities, governments and various social organizations to promote changes in the city, thereby improving the quality of the city.

1.3.2. Practical significance

Tactical urbanism triggers long-term changes in public spaces through limited and low-cost intervention measures. On one hand, tactical urbanism emphasizes thorough research prior to taking action to ensure the accuracy and relevance of the renewal practices. It employs low-cost spatial experimentation methods, making efficient use of limited financial resources to achieve significant urban transformations through small-scale interventions. On the other hand, the distinctive monitoring, evaluation, and management processes of tactical

urbanism allow for comprehensive feedback and the collection of project opinions. These low-cost practical activities also serve as experimental grounds for long-term planning by the government, facilitating subsequent evaluations for future measures. Clear project outcomes enable rational decisions regarding the continuity of projects while attracting long-term engagement from community members and mobilizing residents and social forces. Through tactical urbanism activities, residents' subjective agency is enhanced, fostering close collaboration among residents, designers, various organizations, and the government. This multi-faceted approach stimulates urban vitality and promotes a virtuous cycle of urban renewal, enhancing the sustainability of the renewal process.

1.4. Research content and framework

1.4.1. Research content

The first chapter is an introduction to the background of the study, defining the core concepts, providing an overview of established studies, clarifying the purpose, significance, content and methodology of the study, and paving the way for the subsequent research. Chapter 2 is the theoretical research section, which firstly studies the development and evolution of tactical urbanism, the definition and the development of related theories, and summarizes the current research direction and focus of related fields. Secondly, it describes the difficulties and challenges facing urban development and urban renewal in China today, and explores the possible applications of tactical urbanism. Finally, the role of tactical urbanism in urban renewal is examined, demonstrating that tactical urbanism complements planning, empowers community participation, and provides new ideas in urban renewal. Chapter 3 is the case study section, which summarizes the complexity of tactical urbanism projects, analyzes their practices, scales, and participants, refines the core elements and core values, and summarizes the characteristics of tactical urbanism actions. Secondly, three typical cases at home and abroad-(Re)thinking the street in Santana, Estonoesunsolar in zaragoza, and Yuyuan Road in Shanghai-are selected to be analyzed in terms of three dimensions: development, implementation and policy, as well as results and subsequent impacts. Typical features of tactical urbanism in practice are described - the mechanisms and phases of public participation in the design and the implementation process. Chapter 4 is the renewal modeling section, which examines the development and application of tactical urbanism in various countries and explores the feasibility of tactical urbanism in Guangzhou. Finally, the five stages of tactical urbanism practice are proposed in conjunction with the analysis in Chapter Three. In Chapter 5, based on the research on the current situation of

Guangzhou's Zhuangyuanfang district, problems are summarized and development goals are proposed. Tactical urbanism perspective is introduced to construct a renewal mechanism and propose strategies and action programs for urban renewal.

1.4.2. Research framework

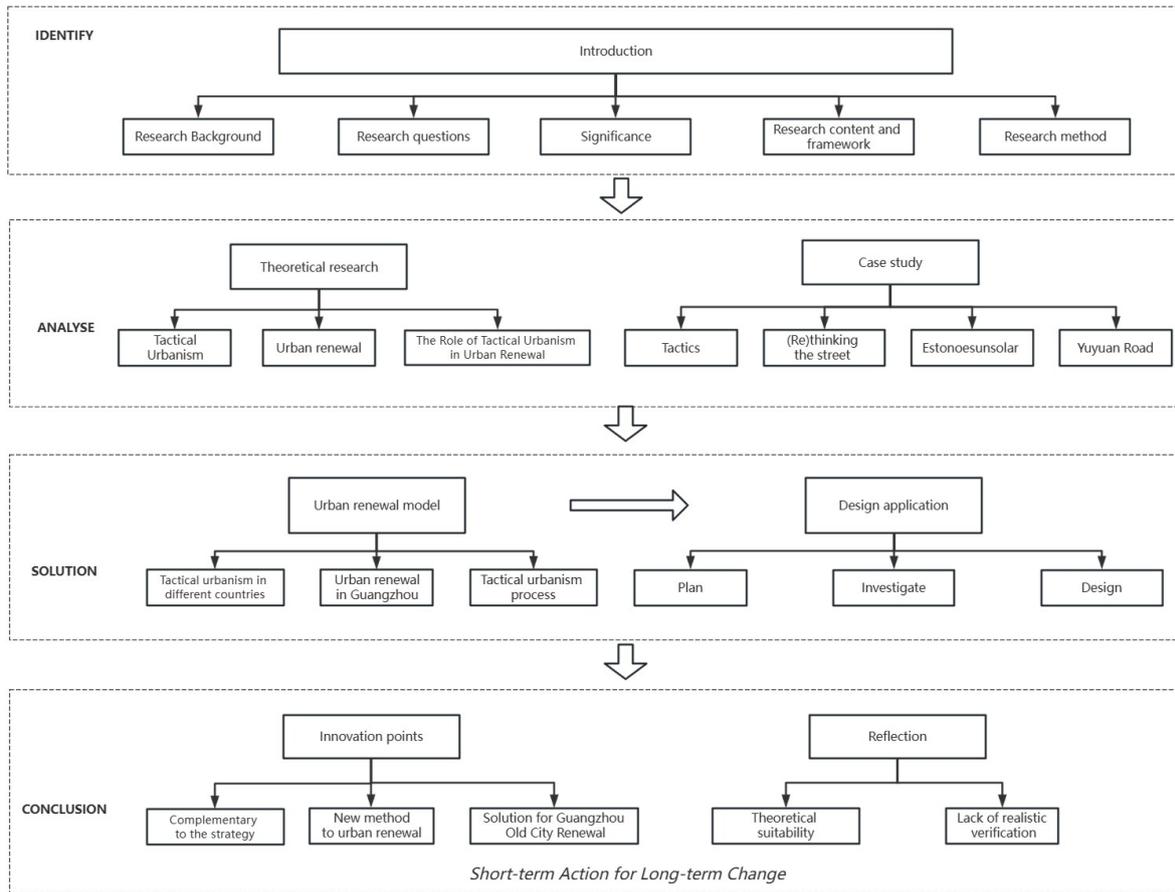


Figure 1-1 Framework (Source: author)

1.5. Research method

(1) Literature research: literature collection method is applied in the theoretical research part, on the one hand, literature and books about tactical urbanism, which are mainly in foreign languages, with less domestic literature. On the other hand, the content related to urban renewal, including domestic and foreign related journal articles and books. According to the purpose of the research, we organize and analyze the research related to Tactical urbanism and Urban Renewal, and construct the theoretical framework of Urban Renewal under the perspective of Tactical urbanism.

(2) Field study: Conducting field surveys in various areas to obtain original images and data materials. Using photography, mapping, interviews, observation and other methods, the

functions, economic elements, human behavior, neighborhood texture, external space, landscape and architectural conditions of the Zhuangyuanfang district are comprehensively recorded and examined in order to achieve an objective knowledge of the Zhuangyuanfang district.

(3) Case study: through the analysis of excellent tactical urbanism cases abroad and similar experimental practices in China, the implementation method of tactical urbanism and the characteristics of tactical urbanism activities are explored.

CHAPTER2: THEORETICAL RESEARCH

2.1. Tactical urbanism

2.1.1. Proposal of tactical urbanism

Tactical urbanism, as a new trend of renewal practice, can be traced back to Lefebvre's theory of "The Right to the City." In the 1960s, the transformation of Western industrial countries from industrial to urban societies was generally confronted with the problem of the commodification of space in the process of capitalist development, and the eruption of social class conflicts. In the 1960s, the western industrial countries were transforming from industrial to urban societies, and were generally facing problems such as the commodification of space and the eruption of class conflicts in the process of capitalist development. Lefebvre pointed out that behind these contradictions there is an implied problem of fairness, and that guaranteeing the exercise of citizens' right to the city is an effective way of realizing the fair distribution of urban space and the equitable distribution of urban space, and that Tactical urbanism was developed under such a trend of thought^[4].

Tactical urbanism was formally named and popularized in American cities at the beginning of the 21st century, with four trends emerging in North American cities—people moving back to the city, the Great Recession, the rapid rise of the Internet, and the growing disconnect between government and citizens.(Figure 2-1)

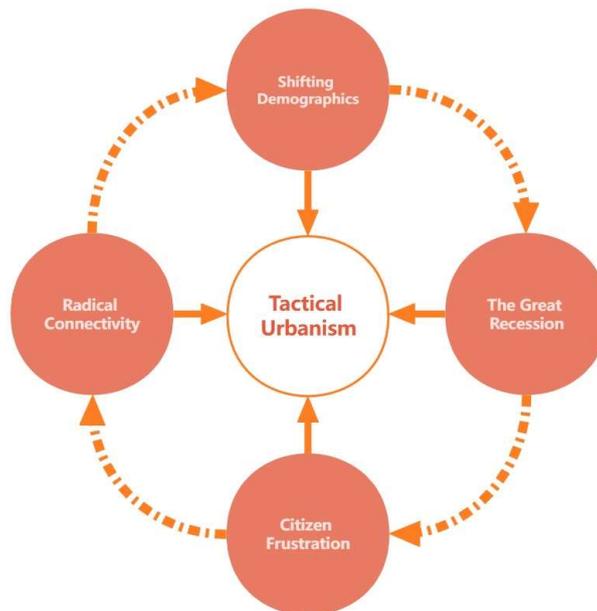


Figure 2-1 Four trends emerging in USA, (Source: Reference [3])

It paved the way for the emergence of tactical urbanism as a movement that combines

the rights and responsibilities of citizens with the construction of cities.

In the wake of the 2008 financial crisis, cities in particular have been forced to use fewer resources in abundance, and residents are increasingly empowered to build municipal infrastructure on their own without government permission or support. The development of the Internet has also made the dissemination of tactical urbanism easier, providing avenues for fundraising and facilitating the organization of active public participation in renewal practices. For example, citizen-initiated tactical implementations are able to use rapid dissemination through the Internet. Such an approach enables other cities to learn from it and trigger further action. There are illegal and legal actions in tactical urbanization, although initially small-scale interventions as illegal activities. The government and municipal agencies have begun to give a name and power to these activities by enacting long term plans as well as regulations and permits to incentivize people to participate in tactical urbanism.

Tactical urbanism can better respond to the legacy of urban overreach. Issues of facility and resource renewal have prompted consideration of smaller-scale, incremental inputs and more efficient ways of dealing with unused space. Tactical urbanism began as self-organized public space renewal practices such as guerilla urbanism and pop-up urbanism, "city repair", "D.I.Y. urbanism", which are organized by urban planners and collectively called "tactical urbanism" after a certain scale of development".^[5]

Finally the concept of Tactical urbanism was formalized in 2011 by Mike Lydon and Anthony Garcia in *Tactical Urbanism: Short-Term Action for Long-Term Change*.

2.1.2. Development of tactical urbanism

Following the concept, Street Plans (a design firm that uses Tactical Urbanism as their primary design philosophy to advance human-centered transportation, public realm, and urban design projects to create more inclusive and resilient neighborhoods) continued to publish Tactical urbanism to introduce the practice. The firm continued to publish Tactical urbanism as an introduction to the practice, and this series of publications has since become an important guidebook for the practice of Tactical urbanism. They define Tactical urbanism as a government, investor, non-profit and/or citizen-led approach to neighborhood building that focuses on microspaces in the urban inventory, using short-term, low-cost and resilient interventions with more flexible, participatory and innovative solutions designed to promote long-term change. Currently Tactical urbanism is mainly used to optimize smaller scale and short-term projects in urban spaces, using tiny interventions to bring about significant changes in the physical as well as the social aspects of the site.^[6]

Governments or organizations have published Tactical urbanism implementation manuals (Figure 2-2) that discuss the benefits of Tactical urbanism, when and where to adopt Tactical urbanism, and the tools and methods used. The entire Tactical urbanism process is described, including the project timeline, materials used, and budget, reflecting the short-term and low-cost nature of Tactical urbanism. Some monitoring and evaluation methods are proposed in order to recover feedback for the iterative development of the project.



Figure 2-2 Various tactical urbanism implementation manuals (Source: <https://street-plans.com/>)

Today, tactical urbanism continues to evolve and adapt to different urban contexts. It has moved beyond ad hoc interventions to encompass broader issues of urban governance, policy reform and community empowerment. Governments, municipalities and organizations around the world are increasingly embracing tactical urbanism as a viable tool for addressing urban challenges, engaging communities and fostering innovation in urban planning and design.

2.1.3. Definition and characteristic

(1) Definitions and characteristics

Tactical urbanism, founded by Mike Lydon and Anthony Garcia is an approach that builds and activates communities through short-term, low-cost and scalable interventions and policies. It utilizes an open and iterative development process, efficient use of resources, and the creative potential unleashed by social interaction. Tactical urbanism can be demonstrated in a variety of forms, such as park sidewalks, plaza sidewalks, mobile vendors, flash stores, crosswalk art, guerrilla gardening, and more. It can be small-scale beautification projects or expanded to major city-led revitalization efforts.

French philosopher Michel de Certeau discusses strategy and the meaning of presentation in his book "*L'invention du quotidien, tome 1: Arts de faire*". Tactics are different from the top-down approach of strategy. They are more spontaneous among citizens,

responding to and transforming the urban environment in a bottom-up manner. Today, as the significance of tactical urbanism gradually expands, in many developing countries, tactics can supplement strategy to some extent.^[7]

But many developing countries today have tactical thinking and can work more strategically. In other words, the government has the ability to resolve the contradictions and tensions between the government's top-down and citizen's bottom-up through the use of "tactical urbanism" tools. It can give full play to the capabilities of social organizations, companies, and individuals to change the urban environment.^[3]

According to the description of Tactical Urbanism: Short-Term Action , Long-Term Change, Tactical urbanism possesses the following five characteristics:

- (1) A careful, phased approach to driving change;
- (2) Local solutions to local planning challenges and problems;
- (3) Short-term projects with realistic and achievable expectations;
- (4) Low risk with potentially high returns;
- (5) Aiming to develop social capital amongst residents and enhance multi-stakeholder governance.^[8]

Stakeholders involved in tactical urbanism include governments, businesses, nonprofits, planners, artists, designers, architects, sociologists, citizens, etc. (Figure 2-3). Usually, many tactical urbanism practices are accompanied by the participation of multiple parties. Different groups and different people use their abilities and exercise their rights to build cities.



Figure 2-3 Participants of tactical urbanism (Source: from[8],further by author)

Tactical urbanism gives communities the opportunity to come together, take urban improvements into their own hands, and create long-term change. The Tactical Urban Planner's Materials and Design Guide, Version 1.0 identifies seven benefits of this approach.^[9]Inspire action and expedite project implementation.(Figure 2-4)

Tactical urbanism can inspire action and promote the participation of residents and non-interest organizations. Through the creation of platforms that encourage people to communicate with each other, public participation can be broadened. Acupuncture to understand the needs and problems of local residents and collect feedback and data can facilitate collaboration between different stakeholders. Low-cost interventions are also used to experiment with long-term plans, and small iterations are developed to impact the wider city.^[10]

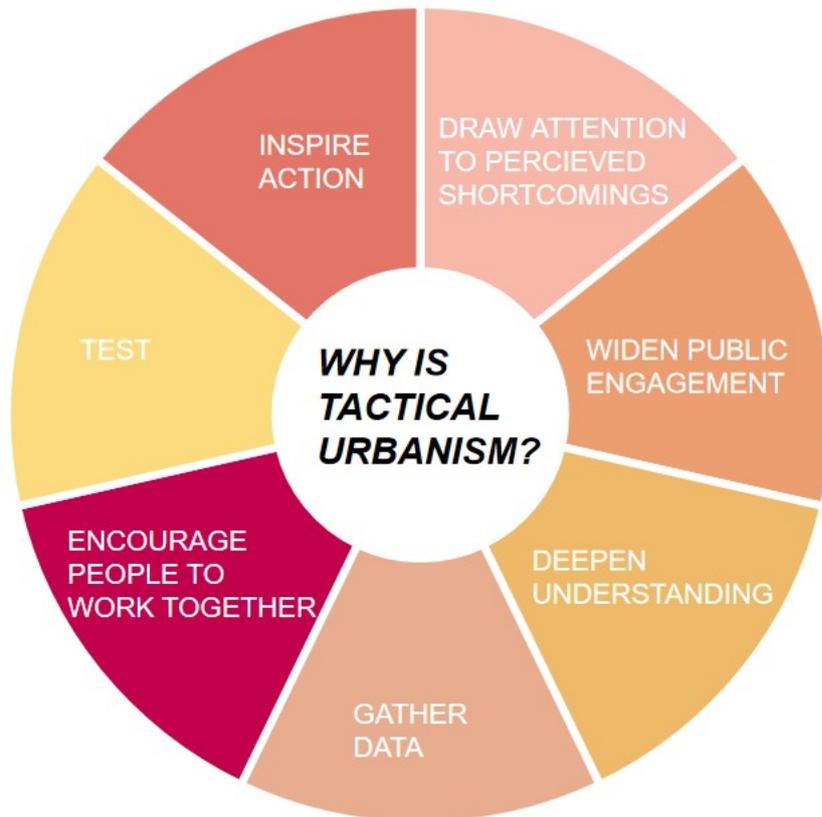


Figure 2-4 Benefits of tactical urbanism (Source: From [11], further by the author)

Tactical Urbanism vs. Temporary Urbanism

In terms of temporal characteristics, tactical urbanism is distinguished from temporary urbanism by its focus on achieving long-term goals, not just short-term projects.^[12] The goal of tactical urbanism is to promote permanent change through short-term, phased planning. The Street Plans Collaborative's Tactical Urbanist's Guide to Materials & Design categorizes tactical urbanism projects into three types based on the duration of the project. Projects are categorized into 3 types, namely demonstration projects (1 day to 1 month duration), pilot projects (1 month to 1 year duration), and medium-term design plans (1 year to 5 years duration). Government-led tactical urbanism projects tend to be demonstration projects for community participation and can provide more opportunities for practice.

Tactical Urbanism vs. DIY Urbanism

The main expression of DIY urbanism is the spontaneous activities of citizens and organizations to transform the urban environment. Ordinary citizens and artists utilize cheap or recycled materials to decorate or replace functions in urban spaces. Some researchers believe that the introduction of the DIY concept into urban interfaces began during the U.S. financial crisis in 2008 and then affected the world.^[13] However, DIY urbanism's interventions in urban environments can actually be traced back much further. Emily Talen believes that the

use of DIY in urban design can be traced back to the city beautification movement in the United States. Participants believed that such activities could eliminate social ills to form a more harmonious society and improve people's quality of life.^[14]

Tactical urbanism actions are likely to be DIY. But not all DIY urbanism is a tactical urbanism activity. Some public art initiatives, for example, are creative activities by a group of people whose main purpose is scene creation and do not involve causing long-term change, and therefore cannot be categorized as tactical urbanism. DIY urbanism is something that can reflect the will of individuals as well as organizations. But at the same time, governments, merchants, and non-profit organizations can also implement tactical urbanism and change the city through their actions.^[3]

Tactical Urbanism vs. Pop-Up Urbanism

Tactical urbanism and pop-up urbanism share similarities in their temporary nature and the activation of underutilized urban spaces. However, they differ in their approaches and broader goals. Tactical urbanism tends to focus first and foremost on a wider range of interventions than just pop-up events and facilities. It includes a variety of tactics such as street closures, parklets or traffic calming interventions.^[15] Pop-up urbanism, on the other hand, is often centered around temporary retail or cultural events, such as flash mobs, food markets, or art exhibitions. The scope of pop-up urbanism is usually more limited to specific activities rather than a comprehensive urban transformation.^[16]

Secondly tactical urbanism aims to trigger long-term change and inform future planning and design decisions. Although temporary, tactical interventions can often be a catalyst for more lasting transformation or policy reform. In contrast, pop-up urbanism typically focuses on providing temporary experiences or meeting immediate needs. Its primary purpose is to activate spaces for a specific period of time without necessarily driving long-term urban change.

2.2. Urban Renewal

2.2.1. Disadvantages of traditional planning

Once upon a time, when China was developing rapidly and cities were expanding in an outward-looking manner, traditional planning methods focused on large-scale, large-volume strategic spatial planning, and the planning method was mainly top-down, with the government making the overall decisions. Super-sized shopping complexes, sports centers with a capacity of 10,000 people, and theme parks with all kinds of facilities are all "models"

for the pursuit of grand volumes and strategic scales in this era. Although widely used and established, strategic scale planning is not without its drawbacks. Some of the main disadvantages of traditional planning methods include: lack of flexibility: the city is a complex system, in constant change and development, integrated urban variability and planning process, we will find that many times before the implementation of the plan, the reality of the situation has already changed. Traditional planning methods tend to be rigid and inflexible, with long planning cycles and cumbersome bureaucratic procedures. This can hinder the ability to effectively respond to dynamic and changing urban challenges. It can also lead to plans that are outdated and unable to adapt to changing circumstances or emerging opportunities before they are implemented.^[2]

Limited innovation and creativity: Traditional planning approaches often rely on established guidelines, regulations and best practices, which can stifle innovation and creative solutions. These approaches may not effectively incorporate emerging trends, technologies or alternative approaches into urban design and development. As a result, opportunities to address complex urban issues with a fresh perspective may be missed.

Lack of Community Engagement: Traditional planning approaches have historically marginalized community engagement, with limited opportunities for meaningful participation and collaboration. This can lead to a disconnect between planners' decisions and the actual needs and aspirations of local residents. Excluding communities from the planning process can create a sense of mistrust, which can lead to resistance or lack of support for planning initiatives.

Slow implementation: Traditional planning methods often involve lengthy processes, including extensive research, consultation and bureaucratic procedures. This can lead to delays in the implementation of plan projects and initiatives, which may further exacerbate urban challenges or miss time-sensitive opportunities. Slow implementation can also lead to public disillusionment and frustration.

Limited resources: Traditional planning approaches often require significant financial and human resources to conduct comprehensive studies, develop detailed plans and implement large-scale projects. For many developing countries, the large amount of money required for traditional planning methods is a major problem for governments. This large human as well as financial resource requirement limits their ability to effectively address complex urban issues or to seek alternative approaches.

Equity issues: Traditional planning approaches often fail to address or even raise issues of equity and social justice. In particular, the previous stage of crude urban renewal was

mainly promoted by large-scale demolition and construction, which led to many social legacy problems. The large amount of land expropriation and housing demolition and relocation caused the disintegration of the community, resulting in social inequality and social conflicts, which poses a great threat to the harmony and stability of China's society. At the same time, many urban renewal activities in the past were to a large extent value-oriented in terms of spatial profitability, which may have further undermined the original social structure and led to an unequal distribution of resources, amenities and opportunities within cities.

It is worth noting that while traditional planning approaches have their drawbacks, they have also contributed to the development and organization of many successful cities. However, in recent years many experts and scholars, including citizens, have recognized these limitations and have begun to explore alternative approaches, such as tactical urbanism and participatory planning, which aim to address some of these shortcomings and create more inclusive and adaptive urban environments. It can be done through micro-renewal. Renewal can lead to big changes. Fragmented renewal and transformation of urban spaces can revitalize cities and communities, allowing the inner quality of the city to be enhanced and people to live better in the city.^[17]

2.2.2. Development of urban renewal

The development of urban renewal in Western countries can be traced back to World War II, and the development of urban renewal in the West is relatively early, roughly experiencing the elimination of "slums", welfare-colored community renewal, market-oriented redevelopment of old cities, and comprehensive community revitalization.^[18] Each phase has a unique context of historical development, target participants, renewal pathways, and renewal outcomes. The phases are represented in the United States, the United Kingdom, and other European countries, although they differ in how they are represented and when they are advanced.(Figure 2-5)

SCUT-POLITO Co-Run Program Master Thesis

Stages	Stage 1	Stage 2	Stage 3	Stage 4
The age	1920-1960	1960-1980	1980-1990	1990- Present
Typical Policies and Plans	Britain. Greenwood Act (1930) America. United States Housing Act (1937)	America. Model Cities program (1965) Britain. Local Government Grants Act (1969) Canada. Neighborhood Improvement Program (1973) French. Neighborhood Social Development (1981)	America. Model Cities program (1965) Britain. Local Government Grants Act (1969) Canada. Neighborhood Improvement Program (1973) French. Neighborhood Social Development (1981)	Britain. Region Challenge (1991) Britain. Comprehensive Regeneration Budget (1995) UN. Structural Funds (1999)
Characteristic	The "Bulldozer" Mode of Redevelopment	Neighborhood Reconstruction Under State Welfare	Redevelopment of The Old City for Real Estate Development	The environmental, Economic and Social Multi-Dimensional Community regeneration
Objects	Slums and recession areas	Selected Slums in Old Town	Old Town area	Recession Areas and Non-recession area with Poor Planning
Scale	Local block	Block, Neighborhood	Block to District	Neighborhood, District
Participant	Central government-led	The central government and local government cooperation, Less community and private sector involvement	Government and private sector cooperation, the will of the community residents is neglected	Government, private, sector, community and triangular cooperation
Financial resources	Public sector investment(major); Private investment(minor)	The central government(major); local government(minor)	Private companies and individual investors(major); Government start-up capital(minor)	Public sector subsidies, significant private sector and individual investment
Management	Government-led; Top-down	Government-led; Top-down	Market-led; Top down	Triangular cooperation; Bottom up and Top-down

Figure 2-5 Development of Western Cities (Source: Reference [13])

China's urban and rural planning system was born in the period of planned economy, and the starting point of its historical evolution was highlighted as the "extension" of "economic planning", and the early urban planning and renewal activities were characterized by government domination. Since the reform and opening up, market forces and social forces have been increasing, and China's urban renewal has begun to show a new trend of multiple participation and joint governance by the government, enterprises and society.^[19] According to China's urbanization process and changes in macro policies of urban construction, China's urban renewal is divided into four important development stages accordingly.^[20]

CHAPTER2: THEORETICAL RESEARCH

Stages	Stage 1	Stage 2	Stage 3	Stage 4
The age	1945-1977	1978-1989	1990-2011	2012-Present
Typical Policies and Plans	"Transforming consumer cities into production cities", "Socialist industrialization construction"	"Opinions on strengthening urban construction work", "Urban Planning Regulations"	"Control the scale of large cities, prioritize the development of small towns"	National New Urbanization Plan (2014-2020)
Characteristic	Improve basic sanitation and living conditions	Addressing Housing Stress and Repaying Infrastructure Debt	Urban Renewal under the Market Mechanism	People-oriented high-quality development
Participant	Central government-led	Central government-led	Government, Private investor	Government, private, sector, community and triangular cooperation
Financial resources	The central government	The central government; local government	Private companies and individual investors; Government	Public sector subsidies, significant private sector and individual investment
Management	Government-led; Top-down	Government-led; Top-down	Market-led; Top down	Triangular cooperation; Bottom up and Top-down

Figure 2-6 Development of Chinese Cities (Source: reference [15])

Throughout the 70 years of development of China's urban renewal, it has experienced a period from the early days of the country's founding when nothing was left to be done to solve the problems of the basic living environment and conditions of urban residents; to the reform and opening up with the establishment of the market economic system, carrying out large-scale functional restructuring of the old city and the transformation of the old residential areas; to the renewal of the old districts during the period of rapid urbanization, the development of the cultural creativity of the old industrial zones, and the protective renewal of the historical areas; Today, during the two sessions of 2021, urban renewal has been explicitly included in the national construction priorities of the "14th Five-Year Plan" period, and is closely related to the improvement of urban quality and people's well-being and living standards. The once grandiose forms of narrative discourse are often neglectful of people's daily life experiences and needs.^[21] People have higher requirements for material and spiritual needs, improving the quality of urban life has become particularly important, and it is obvious that the rough expansion of urban incremental planning is no longer suitable for the needs of the current society.^[22] It is gradually entering a period of transition that emphasizes people-centred and high-quality development, with an emphasis on integrated urban governance and the development of communities themselves.

2.2.3. Towards Tactical Urbanism

Throughout the development of urban renewal at home and abroad, an efficient

management mechanism is the key to the successful implementation of urban renewal projects. At one time urban renewal often seemed to be a top-down process that suppressed the individual spirit with uniform and impersonal renewal practices. Le Corbusier advocated a 'paternalistic' model of plan-led urban planning, while urban theorist Jane Jacobs argued that 'a healthy city is organic, spontaneous, and not neatly organized'. ". The so-called "dichotomy" between these two philosophies is a cliché. But recent urban renewal developments have demonstrated that these two approaches coexist harmoniously. In fact, this dichotomy misses an important point: that the actors and processes of both top-down and bottom-up approaches can work in synergy with each other to strategically shape the urban landscape and empower communities. In addition, it ignores the limitations of each: top-down development models can eliminate local identity, while urban planning models that rely exclusively on the community level have difficulty in creating synergies and efficiently solving problems such as building transportation infrastructure, improving public space connectivity, and combating climate change. In the early stages of urban development, it is common for municipalities and government agencies to set up specialized urban renewal departments or agencies to oversee the planning, coordination and implementation of renewal programs. These agencies ensure that projects comply with legal and regulatory frameworks, work with stakeholders, manage funds and resources effectively, and monitor the progress and results of the renewal process. Clearly defined governance mechanisms contribute to transparency, accountability and seamless integration of the various stakeholders involved in urban renewal.

Participants in urban renewal should be a wide range of parties, including relevant departments, enterprises, and community residents. In both Western countries and China, urban renewal has always been focused on improving the living conditions and quality of life of residents.^[23] Governments should represent the interests of all people and play the role of coordinator on an equal and fair footing so that all people in all positions can maximize their impact.^[24]

Urban renewal is a collaborative effort that requires different participants to work together to achieve a common goal. Participants in urban renewal projects include government agencies and municipalities, private developers and investors, community-based organizations and residents, as well as non-governmental organizations (NGOs) and civil society. Government agencies and municipalities provide the regulatory framework, funding and policy guidance. Private developers and investors bring expertise, resources and financial support to implement renewal projects. Community-based organizations (CBOs) and residents

play a vital role in shaping the vision, providing local knowledge, and ensuring that the project meets the needs and aspirations of the community. Non-governmental organizations and civic groups provide expertise, advocacy and support for socially responsible and sustainable urban renewal. The active participation and collaboration of these various players enhances the inclusiveness and effectiveness of urban renewal initiatives.^[25]

Domestic and international trends in the scale of urban renewal are gradually shifting from large-scale strategic planning to small-scale spatial interventions in the urban inventory. As large-scale strategic planning initiatives usually require significant time, resources and coordination among various stakeholders. Urban renewal projects also need to be customized to the unique context, characteristics and challenges of each community or urban inventory space.^[26] As urban challenges rapidly evolve, cities are increasingly adopting an incremental approach to urban renewal. This approach allows for more flexible and adaptive strategies that focus on small-scale interventions that can be phased in over time. It allows cities to meet immediate needs and make tangible progress, while continually adapting programs to changing circumstances.

The shift towards small-scale interventions for urban renewal reflects the recognition that urban challenges are multifaceted, context-specific and require multiple approaches. By combining large-scale strategic planning with small-scale spatial interventions in the urban inventory, cities can achieve a more holistic, inclusive and responsive approach to urban renewal that meets the changing needs and aspirations of communities.

Traditional planning and design are no longer able to address the social issues faced in the new normal, and new types of approaches and methods need to be introduced for urban inventory space renewal. The emergence of tactical urbanism promotes a focus on small-scale interventions, and the diversity of its participants and flexible mechanisms inspire more residents, artists, private investors, and other groups to participate in urban renewal. By implementing small-scale interventions, such as pop-up parks, street art installations, or temporary markets, cities can test ideas, gather feedback, and create a sense of place before implementing large-scale projects. Its emphasis on low-cost, temporary and community-driven initiatives can rapidly transform urban spaces into vibrant, people-centered environments.

2.3. The Role of Tactical Urbanism in Urban Renewal

2.3.1. Complementary to the strategy

Urban renewal is gradually becoming a national construction priority in China, and is

closely related to improving the quality of cities and people's well-being and standard of living. In the past, strategic development governments often set up a long-term vision with broad appeal, but often ignored the daily life experiences and needs of people. Today, however, people have higher demands for material and spiritual needs, and improving the quality of urban life has become particularly important. Obviously, the once expansive urban planning is no longer suitable for the needs of today's society. Government-led urbanism has gradually shifted from large-scale planning and design (strategic level) to small-scale design with flexible spaces (tactical level).

Tactical urbanism focuses on small-scale, temporary interventions that are implemented quickly. This approach complements traditional planning methods that often involve lengthy processes and large financial investments. By starting with small-scale, low-cost interventions, tactical urbanism allows for rapid testing and learning, ensuring that urban planning decisions are based on real-world experience and community feedback. As the Madison Square renovation project demonstrates, from the construction of temporary materials, to citizen feedback requesting further pedestrianization, to further construction of the project, a complete "build-test-learn" process is in place.^[27]

Tactical urbanism is highly flexible and adaptable, making it an ideal complement to traditional planning methods.^[28] It allows planners to respond quickly to emerging needs and changing circumstances in urban areas. The ad hoc nature of tactical urbanism interventions allows for adjustments and refinements based on community input, ensuring that planning decisions are responsive to the changing needs and desires of the community.

At the same time tactical urbanism can inform long-term planning, and insights gained from tactical urbanism interventions can inform long-term planning strategies. By observing how temporary interventions affect the use and perception of public space, planners can gather valuable data and feedback to inform future design and policy decisions. Lessons learned from tactical urbanism can influence zoning regulations, transportation planning, and urban design guidelines, resulting in smarter, more effective long-term planning outcomes.

In summary, tactical urbanism complements traditional urban planning methods by providing a flexible design approach that focuses on the transformation of tiny spaces. By incorporating tactical urbanism into the planning process, cities and communities can benefit from a more responsive, participatory, and iterative approach to shaping their urban environments.

2.3.2. Providing new ideas and working methods

As a trend of urban renewal, tactical urbanism represents the latest development in Western society's rethinking of traditional rational planning. Tactical urbanism promotes civic empowerment, starting with the most vulnerable categories: children, the elderly, women and the disabled. It emphasizes the joint efforts of individuals, communities, governments and various social organizations to induce long-term changes in cities by means of short-term, low-cost and small-scale interventions, thus improving the quality of cities.^[29] Compared to traditional urban planning, Tactical urbanism action is more flexible, an approach that is not oriented to predetermined results, but more focused on process and action. Tactical Urbanism's special mindset introduces mechanisms such as implementation and monitoring feedback that expand the field of urban design. While designing a space, transformation and use are carried out at the same time. This dynamic and ongoing process provides new insights into urban design.

Tactical urbanism plans are inherently opportunistic. By pinpointing problems and making rapid changes. The ability to make the most of every urban opportunity, adapting and utilizing many of the city's abandoned sites or buildings to energize urban spaces. At the same time, the urban designer is no longer the traditional "creator", but more a participant in this activity. The participation of communities and residents also provides new ideas for urban design.^[30]For planning agencies, Tactical urbanism facilitates interim solutions, allowing traditional planning agencies that have been accustomed to "planning" rather than "experimenting" to benefit from tactical urbanism initiatives. The important 'implementation', 'monitoring, evaluation, and management' aspects of the tactical urbanism process will generate new thinking about urban design theory.

For urban spaces, the ability of tactical urbanism activities to evolve and merge demonstrates the potential that may contribute to the broader impact of tactical action on urban design and spatial planning.

2.3.3. Promoting community participation and empowerment

Tactical urbanism is a powerful tool for community participation and empowerment, providing residents with the opportunity to actively participate in shaping their neighborhoods and cities. Promoting participatory processes, Tactical urbanism encourages participatory processes by involving community members in the planning, design and implementation of temporary interventions. It recognizes that residents have valuable knowledge and insights about their neighborhoods and that their participation is critical to creating successful and inclusive urban spaces. By engaging community members, tactical urbanism fosters a sense of

ownership and empowerment, allowing residents to become active contributors to improving their own neighborhoods. Co-creating spaces, Tactical urbanism promotes the co-creation of public spaces, allowing residents to participate directly in shaping their environments. Social connections are made through workshops, community meetings, and collaborative design sessions where community members can share their ideas, preferences, and desires for their neighborhood. This collaborative approach ensures that the final interventions reflect the unique needs and desires of the community, resulting in spaces that are more inclusive, relevant, and responsive to the local context. The results Whether it is a flash mob park, a street party or a community garden, these interventions provide spaces for people to come together, foster a sense of belonging and strengthen social ties within the community. By creating shared experiences, they help to build the social fabric of the community and promote social cohesion and community resilience. Empowering Local Initiatives, Tactical urbanism empowers local initiatives and grassroots movements by providing a platform for them to express their ideas and aspirations. It empowers individuals and community groups to take action and make visible, even if small-scale, changes to their surroundings. Tactical urbanism interventions can be initiated by anyone motivated to improve their community, regardless of their professional background or formal authority. This empowerment encourages residents to become active agents of change and instills a sense of responsibility for the well-being of the community. Ultimately successful tactical urbanization projects can serve as catalysts for broader advocacy efforts and policy influence. Tangible results from tactical urbanization can demonstrate the potential of innovative ideas and approaches to influence city policy, zoning regulations, and long-term planning decisions. When community members witness the positive impacts of temporary interventions, they become more motivated to advocate for lasting change and influence policymakers.^[31]

In sum, tactical urbanization promotes community participation and empowerment by facilitating participatory processes, co-creating spaces, building social connections, enhancing local initiatives and influencing policy decisions, engaging residents in shaping their urban environments and creating a sense of pride and ownership among community members.

2.3.4. Testing innovative ideas and Establishing momentum

Tactical urbanism provides a testing ground for innovative ideas and concepts.^[32] As Mike Lydon notes in *Tactical urbanism: short-term action for long-time change*, tactical urbanism can allow urban planners, architects, and community members to experiment with different approaches and solutions on a smaller scale before making larger, long-term

investments. By implementing temporary interventions, such as temporary parks, bike lanes, or pedestrian plazas, communities can observe how these changes affect the use and perception of public space. In one project in Brazil - (Re)thinking the street in Santana - the road was adapted through the use of affordable materials such as paint, flower pots and moveable furniture. To reduce the speed of vehicles, this temporary intervention was used to quickly test the impact of vehicle speed reductions. After receiving positive feedback, the next step was to implement it on a large scale and with permanent materials.^[33]

By piloting interventions and gathering community feedback, tactical urbanization helps to refine strategies, identify successful initiatives and build a strong case for future investments and policy changes. These small-scale successes can generate momentum and support for broader urban revitalization efforts. (Figure 2-7)



Figure 2-7 Tactical implementation at Santana (Source: reference [22])

Tactical urbanism often relies on low-cost, temporary materials and interventions that are easy to implement and remove. This is particularly beneficial for communities with limited resources or those seeking to initiate change quickly. Tactical urbanism allows for rapid prototyping and experimentation without the need for large financial investments. Tactical urbanism initiatives can generate momentum and inspire further action. By transforming underutilized areas into vibrant, people-centered places, they demonstrate the potential for long-term change and encourage policymakers to consider more lasting solutions. When communities witness the positive impacts of temporary interventions, they are more motivated to advocate for lasting change in their neighborhoods. Tactical urbanism projects

can trigger a domino effect, sparking a series of community-led initiatives and collaborations that ultimately contribute to the revitalization and transformation of urban areas.

In short, tactical urbanization is a valuable tool for testing innovative ideas, and building momentum for urban change. By providing a platform for experimentation and community engagement, it can build momentum and demonstrate the potential for long-term transformation to create more vibrant, inclusive and liveable cities.

2.3.5. Summary of the chapter

Firstly, it studies the development and evolution of tactical urbanism, and identifies the concepts and characteristics of tactical urbanism and Temporary urbanism, DIY urbanism and pop-up urbanism, and summarizes the definitions and the characteristics of related theories. Secondly, through the study of urban development in China and the West, the problems of urban development and urban renewal in China today, such as the rigidity of policies, the difficulties of implementation, and the lack of public participation, are elaborated. Urban renewal is gradually moving towards tactical urbanism based on traditional planning methods. By introducing flexibility, innovation, community participation and small-scale interventions, urban renewal can be better adapted to urban challenges and create more inclusive and adaptive environments for cities.

And then, exploring the potential application of tactical urbanism, a representative of micro-scale urban renewal approaches. As a complement to the strategy, it offers new ideas and ways of working, promotes community engagement and empowerment, and provides a platform for testing innovative ideas and building momentum. Through the implementation of tactical urbanism, more responsive, participatory and iterative urban environment shaping can be achieved, thereby creating more dynamic, inclusive and livable cities.

CHAPTER3: CASE STUDY

3.1. Tactics in Tactical Urbanism

The definition of tactical urbanism is an open and operational one, based on a reinterpretation of various collective practices aimed at producing shared, short-term, low-cost and highly replicable urban transformations. It is worth emphasizing that this reinterpretation pays particular attention to the process rather than its outcome, as it intends to reveal the real and effective capacity of these practices not only to produce spatial transformations but also to cause disruptions to traditional processes, tools and regulations used in urban planning (thus bringing about minimal but significant changes in all of them). In this context, we can define as tactics all low-cost, low-tech actions and changes that originate from bottom-up processes that can be quickly and easily replicated and scaled up, and that are consciously designed and developed to instigate change through a process of interaction with approved urban planning and governmental systems (which can be either primarily adversarial or primarily collaborative, depending on the situation and context) for long-term change.(Figure 3-1)



Figure 3-1 The tactical urbanism spectrum (Source: author)

Cities are always changing. In the past, strategic planning has focused primarily on the achievement of ambitious urban goals. However, these ambitious goals involved a wide variety of people and required a great deal of money and time. Often these plans were difficult to implement in place when social benefits counted for time that was difficult to reflect.

Nowadays, urban renewal has entered a new phase, people have higher demands for material and spiritual needs, and improving the quality of urban life has become crucial. Compared to incremental planning, which focuses on "quantity" but ignores "effect", tactical

urbanism pays more attention to the city's inventory, explores the potential of secondary development of public space, and focuses on flexible adjustments to the city's needs. This approach focuses more on adaptability and innovation, improving the urban environment through small-scale, flexible, low-cost interventions to meet changing needs. The goal of tactical urbanism is to make cities more vibrant and attractive by reinventing and repurposing existing resources to enhance their functionality and sustainability.^[34]

The task of Tactical urbanism is for all sectors of society to consult and plan together, and to revitalize, optimize, and explore the potential of public space in order to meet the needs of the people's well-being. Tactical urbanism also focuses on the experimental effects and long-term benefits of various interventions, as opposed to projects built in one go. As Tactical urbanism continues to evolve, bottom-up and community-minded practices are taking root across the globe. This paper seeks to understand and capture a snapshot of this emerging global movement by counting and analyzing tactical urbanism practices across the globe, including developed countries such as North America and Australia, as well as developing countries such as Latin America. It examines what strategies and technologies are being used to transform cities in these cases, and what roles are being played by the players involved.

Tactical urbanism abroad is practiced in a rich variety of forms, including but not limited to: Build a better block, Bike parking, Road repair, Depave, Complete streets, Play Streets, Open Streets, Street Fairs, Pop-up retail, Parklet, Pop-up cafe, Food carts/trucks, Mobile vendors, Park Mobile, Pop up - town hall, Site Pre-Vitalization, Guerilla gardening, Reclaimed Setbacks, Pavement to plazas, Park-Making, Camps, Chair bombing, Ad Busting, Visual catalysts, Weed bombing, Co-trading, Knowledge Exchange.^[35]

It is possible to categorize the diverse and []complex tactical urbanism projects described above into six types: Functional improvement, Temporary utilization, Pop-up , Reclaimed underutilized space, Public art, and Mix-sharing (Figure 3-2). These different types of tactical urbanism offer a range of ways to temporarily or permanently transform urban spaces, encouraging community engagement, creativity, and revitalization.

Type	Tactics	Approach	Example	Image
Functional improvement	Build a better block	First mobilize residents, merchants, artists and other groups. Second, by setting up bicycle paths, temporary shops, street furniture, and planting plants, we will activate public spaces and vacant shops and promote community exchange	Geelong Better Block	
	Bike parking	Increase bicycle parking spaces and racks at intersections, transportation facilities, or next to shops.	Valet event parking	
	Road repair	Road repair makes streets safer for pedestrians and cyclists through simple and low-cost physical changes.	(RE)PENSAN DOA RUA EM SANTANA	
	Depave	Remove unnecessary paving, remove impervious pavement and parking lot paving, and replace it with community green spaces and gardens to naturally reduce stormwater runoff pollution	Depave in the Fargo Forest Garden	
	Complete streets	Ensure safe travel by those walking, cycling, driving automobiles, riding public transportation, or delivering goods through design measures such as traffic calming, dedicated pedestrian areas, and community greenways	Bondi Junction Complete Streets Project	

Temporary utilization	Play Streets	Temporarily close some streets where motor vehicles travel, to make safe spaces for people of all ages to be social and active.	Play streets in New York	
	Open Streets	Temporarily close streets to motor vehicles to provide safe spaces for walking, bicycling, skating and social activities; promote local economic development.	Wisconsin's Ride The Drive	
	Street Fairs	Street Fairs bring together a wide variety of organizations and institutions from the local community and allow them the opportunity to showcase their products and services.	A street fair in New York	
	Pop-up retail	Pop-up retail are used to temporarily activate vacant retail space or building lots. Most often, this is done to promote products or retail concepts.	Pop-Up retail in Sydney	
	Parklet	Temporarily occupy special spaces for cars such as parking spaces, lay turf, set up tables, chairs, and green plants to divide the space and increase the life vitality of the street.	Parking day by IZMO	

Pop-up	Pop-up cafe	By promoting outdoor public seating in the parking lane (during the warm months) and to promote local businesses.	A Pop-up cafe in New York	
	Food carts/trucks	Use trailers and RVs to sell snacks and food, which can be conveniently moved.	Food carts line the central square in Seaside, FL.	
	Mobile vendors	Street vendors through offer needed commercial services, activate public spaces while reaping economic benefits.	Mobile stand by Brooklyn newspaper vendor	
	Park Mobile	Transport the movable green devices to suitable places for installation, increase community green space, activate streets and improve the larger urban landscape in small and fluid ways.	A park mobile located outside of SPUR's urban center	
	Pop up - town hall	Use movable and detachable space devices to transform neglected spaces into temporary gathering places for citizens to hold important discussions.	The BMW Guggenheim Lab	

Reclaimed underutilized space	Site Pre-Vitalization	Repurpose previously inactive, underutilized land for temporary programs such as public markets, art exhibitions, etc., providing low-cost community building and economic opportunities.	Hercules Market	
	Guerilla gardening	Gardening activities in public or private spaces, such as converting vacant land into vegetable plots, planting plants etc.	International Sunflower Guerrilla Gardening Day in Brussels	
	Reclaimed Setbacks	To create a more engaging street scape by activating the space between the structure and the sidewalk.	Food not Lawns in Eugene, Oregon	
	Pavement to plazas	By using temporary, inexpensive materials to re-assign excessive motor vehicle space for the use of pedestrians and/or bicyclists. To reclaim underutilized asphalt as public space.	Putnam Triangle	
	Park- Making	Transform unused land and parking lots into city parks.	Biscayne Boulevard's medians	
	Camps	Temporary occupancy of space through the use of various styles of camps prompts a permanent change in the space.	post-earthquake relief camp in Port-Au-Prince	

Public art	Chair bombing	Recycle discarded materials, make street furniture such as public seating, and place the public spaces that need it most, thereby activating the public realm.	Chairs adjacent to Brooklyn's Blue Bottle Coffee	
	Ad Busting	Remove billboards blocking buildings to reduce visual pollution in the public realm,	Ad Busting in São Paulo	
	Visual catalysts	By painting blank walls and installing artwork in unused spaces, the visual quality of public spaces is improved, making the environment more interesting and attractive.	Doorways in Glenroy	
	Weed bombing	Weed bombing is the act of converting overgrown weeds into works of street art. And draw attention to the dilapidated community.	A weed bomb north of downtown Miami.	
Mix-sharing	Co-trading	Co-trading, also known as micro-mixing. By mixing multiple businesses in a single retail space, it reduces the cost of opening a store for small owners and makes the space more interesting.	Winn Lane	
	Knowledge Exchange	The Fremantle Outdoor Reading Room takes The library outside creates a positive atmosphere and fosters the exchange of knowledge in the community	Fremantle Outdoor Reading Room	

Figure 3-2 The Practice of Tactical urbanism (Source: reference [36] [25], further by author)

Tactical urbanism is a flexible and adaptable approach to urban design and planning that can be applied at all scales. Improving the livability of our towns and cities often begins at the neighborhood, street, block, building or micro-scale. This is where social capital and creativity are most easily catalyzed. Tactical urbanism allows for different interventions at

different scales. This paper categorizes as well as examines the scales at which tactical urbanism practices have been collected.(Figure 3-3)

Micro-scale: at the micro-scale, tactical urbanism focuses on small, localized interventions aimed at improving specific elements or spaces within the city. This may include activities such as guerrilla gardening, public art or pop-up parklets. These interventions are usually small in scale, but have the potential to have a direct impact and improve the quality of a particular site or element, such as a neglected corner, open space or streetscape element.

Building scale: tactical urbanism at the building scale involves interventions that target individual buildings or structures within the urban fabric. This may include adaptive reuse projects, creative façade improvements, or retrofitting of underutilized spaces within a building, such as turning a basement into a community space with a mix of functions to activate the space. These interventions are intended to revitalize individual buildings and contribute to the overall vitality of the neighborhood.

Block Scale: At the block scale, Tactical urbanism focuses on interventions that target specific city blocks or groups of buildings. These interventions aim to transform entire neighborhoods by reimagining their use, improving connectivity, and enhancing overall function and aesthetics. Examples of block-scale tactical urbanism include temporary pedestrian zones in blocks, the implementation of pop-up markets, or the introduction of public art installations. These interventions aim to create a cohesive and engaging experience within the blocks and contribute to the revitalization of the surrounding area.

Street Scale: street-scale tactical urbanism involves interventions that target individual streets or street segments within a city. These interventions are designed to improve the streetscape, enhance walkability, and create a more humane environment.^[37] Examples of street-scale tactical urbanization include temporary bike lanes, parklets, sidewalk widening, pedestrian plazas, or street closures for community events. These interventions prioritize the needs of pedestrians, cyclists and public space activation, transforming streets into vibrant and welcoming public spaces.^[38]

Neighborhood Scale: at the neighborhood scale, tactical urbanism aims to meet the needs and desires of a particular neighborhood or community. It involves collaborative initiatives aimed at improving the overall quality of life and sense of place in a community. This may include projects such as community gardens, street festivals, community cleanups, or transforming vacant lots into temporary community spaces.^[39] Tactical urbanism on a neighborhood scale allows residents to take control of their surroundings, enhance social

cohesion, and contribute to the long-term improvement of their neighborhoods.

	Micro	Building	Block	Street	Neighbourhood
Build a better block		√	√	√	
Bike parking	√		√		
Road repair			√	√	√
Depave	√			√	
Complete streets		√		√	
Play Streets				√	√
Open Streets				√	√
Street Fairs				√	√
Pop-up retail		√	√		
Parklet	√			√	
Pop-up cafe		√	√		
Food carts/trucks	√			√	
Mobile vendors	√			√	
Park Mobile	√			√	
Pop up - town hall		√			√
Site Pre-Vitalization			√		√
Guerilla gardening			√	√	√
Reclaimed Setbacks	√		√	√	
Pavement to plazas			√	√	
Park- Making			√	√	√
Camps			√		√
Chair bombing	√				√
Ad Busting	√	√			
Visual catalysts	√	√	√		
Weed bombing	√		√		
Co-trading	√	√	√		
Knowledge Exchange	√				

Figure 3-3 Tactics at different scales (Source: author)

3.2. (Re)thinking the street in Santana

3.2.1. Introduction

In recent years, our cities have needed to redistribute and re-signify automobile space. Congestion, air pollution and large numbers of traffic victims are the most prevalent negative impacts of this mode of transportation, which has also affected urban development in recent decades. In 2016 alone, 854 people were killed in São Paulo traffic, 40% of whom were pedestrians.^[40] Less mentioned, but also relevant, is the impact this paradigm is having in reducing the vitality of streets and the social isolation aspects they propagate and exacerbate. The breakthrough in this paradigm is to redesign our streets in a way that is compatible with the walking speed of pedestrians.

In this context, in September 2017 the ITDP was transforming the streets in the Santana

neighborhood of São Paulo North to improve their functionality. And using techniques such as road repair, temporary interventions, and more consideration for the safety of pedestrians passing by.^[22] By utilizing materials such as paint, easels, cones, plants, ropes and other low-cost and easily removable elements, an atmosphere of immediate use is created. This use of temporary interventions as a way to test, adapt or even accelerate the transformation of certain public spaces until their permanent implementation is feasible has been used in cities such as New York, Mexico City and Buenos Aires and is spreading internationally.

The Santana area has a history of high hit-and-run rates, and as a result, one boundary was designated as a speed reduction zone (Zone 40) in 2014. Although the reduction of regulated speeds is welcome widely, it is known that it is usually not enough to ensure the effective reduction of speeds practiced by drivers of motor vehicles. For this reason, it is necessary to intervene in the design of streets to make them safer for pedestrians, for example through traffic regulation elements.

By allowing citizens to experience and observe the transformation of streets in real time, this activity proves that in a short period of time and with little investment, it is possible to promote transformations that motivate drivers to reduce their speeds, increase pedestrian safety and provide new experiences in urban spaces.

3.2.2. Development

Santana's Tactical urbanism practice is part of a group of initiatives focused on road design and traffic safety conducted by international organizations in São Paulo. The initiative was proposed by ITDP Brazil, with funding from the Citi Foundation and in partnership with BIGRS, NACTO-GDCI, WRI Brazil and Vital Strategies. The Santana Tucuruvi Regional Municipality and the Municipal Secretariat of Traffic and Transportation are supporting the intervention.

One of the main initiatives being developed by this group of organizations is the Urban Redevelopment and Road Safety Project for the Reduced Speed Area of Miguel Paulista, a neighborhood in the eastern part of the city. In São Paulo, the area with reduced speeds is known as Zone 40." The 40 Zone Program was implemented in 2013 and consists of the designation of 12 urban perimeters with a maximum regulated speed of 40 kilometers per hour and one perimeter with a speed of 30 kilometers per hour. The measure aims to improve the safety of pedestrians and cyclists seeking to coexist peacefully on the most vulnerable parts of the road system, and to reduce the number of collisions and crashes.

In November 2016, São Miguel Paulista received a temporary urban intervention. The

one-day intervention simulated a new road design proposed for Praça Getúlio Vargas Filho - which currently serves as a roundabout intersection, allowing the existing pedestrian circulation to continue safely and reducing conflicts with motorized vehicles - and the organization of São Paulo's 11th Architecture Biennale invited the Brazilian ITDP to replicate the experience of another area of the city, demonstrating how the collaborative process contributed to the development of the area.

3.2.3. Implementation and policy

(1) Implementation

The tactical urbanist practice of this project was carried out in four phases: drawing and pre-marking the new track geometry; painting; landscaping and arranging the furniture; and dismantling and cleaning.

First the marking of the new geometry was carried out in the early hours of the morning, two days before the intervention, in order to avoid major disruptions to the flow of vehicles. In collaboration with the planning and operations team of CET-SP, the work area was separated by cones and a vehicle accompanied the work. The geometry was drawn with the help of ropes and later demarcated with small sprays. A few days before the intervention, a bush located in the central flower bed of Dr. César Street, which exposed pedestrians to the risk of crossings, was removed by the regional government. In addition, warning signs were installed on four surrounding streets. When it came to the painting stage, which was started at dawn on the day of the intervention, it was again supported by the CET-SP team. Previously delineated geometric shapes were used as guides and delineated with greater precision and visibility using chalk, tape and cones. Meanwhile, a painting mixture consisting of building lime, dye and water was prepared. About 15 collaborators including FIAM-FAAM organizers and students participated in the painting and assembly. Landscaping and arranging furniture was done while the paint was drying. The space of two parking spaces was used as a centerpiece of the intervention, where umbrellas, beach chairs and information panels about traffic safety and viário design were arranged. Individual panels were distributed in other areas of the region to help spread the theme. Two interactive panels were installed on Rua Leite de Moraes, interviews were conducted and people in the neighborhood were talked to. The final stage of dismantling as well as cleaning, at the end of the day, the furniture was collected, planted and donated to the population and the regional municipality of Santana Tucuvi. The paint was removed in two steps, brushing and spraying with water, and completely faded in about a week. (Figure 3-4)



Figure 3-4 A:Temporary intervention at night B:paintwork C: Participation group
(Source:reference[22])

(3) Mechanisms for public participation

The ITDP sought to explore the possibility of redesigning the road to respond to the identified problems after the phase of information collection and diagnosis of intervention points. The road redesign project implemented in Santana Interim used measures to promote public participation from information collection to plan development and project implementation, with some intervention points decided by residents.

1. Initiation and organization of activities by public interest organizations

The action was first presented in a lecture held during the monthly meeting of the Business Association of São Paulo North, which took place on July 25th with about 70 participants. The concepts of tactical urbanism and temporary urban interventions were presented, clarifying how they can be utilized to improve pedestrian safety. The initiative was well received and participants were invited to attend a creative workshop in August.

During the month of August, flyers inviting interventions and ideas workshops were distributed to passersby and traders in the region. (Figure 3-5) Merchants established in the immediate environment of the intervention received a visit from the organizing team a few days before the event to inform and clarify questions about the initiative.



Figure 3-5 Poster (Source: ITDP Brasil)

2. Creative Workshop with Citizens

In collaboration with the regional government team, a number of schools in the region were contacted to participate in a creative workshop held on August 24th. Students from two schools, one private and one public attended. The workshop took place in two sessions, one in the morning and one in the evening, and proposed a reflection on the surroundings of the area where the tactical urbanism practice was planned. They were held at the headquarters of the Regional Municipality of SantanaTucuruvi and were attended by 89 participants. Students from the private school Colégio Santana and the public school ETEC de Artes (EscolaTécnicade Artes) made up the majority. The main work of the creative workshop consisted of thinking about the surroundings, collecting and organizing the problems of travelling for the public. The first step was to count the modes of transportation and point out on a map the main places they frequented. We also collected statistics on street scale, accessibility, safety, etc., and listened to people's willingness to make improvements to their neighborhoods.

3. Online media

The project's communication on interventions and idea workshops was mainly through the communication channels of the organizations involved and the web. In addition, a 5-minute video was produced and presented at the 11th São Paulo Architecture Biennale.

Through magazines, the online media publicized and solicited opinions on the project from its inception to implementation to feedback.

3.2.4. Outcomes and subsequent impacts

Data collection is an essential element for the success of road redesign interventions, whether temporary or permanent. Only with the information data collected can the consequences of the intervention on the safety of road users and the use of public space, the flow of local commerce, the satisfaction of the surrounding population, etc., be properly assessed. On the basis of the survey, subsequent possible adjustments to the project, the phase of permanent implementation or the determination of the appropriate type of use of the new public space are determined. The longer the duration of the intervention, the greater the amount and reliability of the data collected; ideally, the intervention should include working days so that the effects observed are more consistent with the most typical days in most cases.

In the case of Santana, the entire intervention was conducted on a Saturday (except for the mini-roundabout intersection, which was previously simulated for a few hours on a Wednesday). Data were collected in three ways and with different objectives. First, simple traffic counts were performed to help define the intervention sites, as well as data on collisions and road accidents (already mentioned in the diagnostic section). Subsequently, new counts, observations and infrastructure analyses were performed before and during the intervention day through the selected intervention sites. Finally, interviews with traders and the public were conducted on the day of the event. A huge percentage of the public approved of the design, more pedestrians were willing to slow down and kinda skate in the buffer zone of the road, and the speed of vehicles turning decreased accordingly.



Figure 3-6 Feedback collection (Source: ITDP, further drawing by author)

Santana's experience shows that it is possible to transform streets into safer, more attractive spaces for pedestrians in a short period of time and at a lower cost. Over a period of about five months, the ITDP began with a broad proposal of activities, with specific interventions in the territory, including moments of previous interaction with the people. This initiative can serve as an inspiration for the transformation of other Brazilian cities and indeed

other regions. The high number of traffic victims in our cities has unjustified social and economic costs. Collisions and hit-and-runs, which we often call "accidents", are in reality events that can be prevented through traffic safety measures, and the design of safer streets is one of the measures that can bring short-term results.

3.3. Estoneesunsolar in zaragoza

3.3.1. Introduction

The project "Estoneesunsolar" is located in the historical center of Zaragoza. Located between Barcelona and Madrid, Zaragoza was hit hard by the global recession, which led to soaring unemployment and plummeting real estate values. The deteriorating city has led to the emergence of abandoned vacant lots. The deep social unrest that has been simmering under the surface for some time now has finally erupted. Tens of thousands of protesters took to the streets demanding more jobs, more help, and a better democracy.

In turn, a group of architects, citizens, and non-governmental organizations began to envision solutions through public space. The program went from solving the problems of some long-time activists to cleaning up many empty spaces in the center of Zaragoza and improving the physical environment of the city. The program then quickly became a success, and the organizations involved saw an opportunity to take the project further and began to open up some of the newly cleared plots to the public. This led to a series of proposals that met the objectives, allowing temporary use of the sites and providing a range of interim uses. Since the start of the initiative, 33 sites throughout the city have been intervened in, restoring and rehabilitating more than 42,000 square meters.^[41]

3.3.2. Development

Phase 1 (2009.01- 2009.07):Estoneesunsolar began early on as an employment program to address the numerous complaints about abandoned lots that the municipal housing office was facing. Subsequently, over a six-month period, a total of 61 workers were hired to clean them up. Fences and walls separating the lots from the public space were removed, and through this action the network of urban public spaces was incorporated into the unfinished vacant lots. This initiative succeeded in connecting these abandoned lots to the city.

Phase 2 (2009.07-2009.12): In Zaragoza, 14 sites were subjected to tactical interventions that utilized cheaper and lighter materials to transform abandoned sites. The urban gardens, children's playgrounds and surrounding street bowling alleys that have been created by the transformation provide public and open urban spaces for citizens.



Figure 3-7 A: An urban garden on St. Blas Street, consisting of a series of wooden pallet platforms, identifies green spaces planted with lavender, rosemary and different types of plants as an arboretum.

B: The plazas of the Torero neighborhood, with a meandering route between the trees already planted, created three squares and placed a series of urban furniture and children's areas.

(Source; <https://www.archdaily.mx/mx/02-349303/esto-no-es-un-solar-reconvirtiendoparcels-vacias-en-espacio-publico-parte-ii>)

Phase 3 (2010): The City Council extended the program area beyond the Historic District to include 14 more sites throughout the city of Zaragoza, not just the Old Town. With a larger budget, interventions included the construction of new squares with permanent elements such as infrastructure and lighting systems. Conversion of unused public spaces into multi-purpose facilities and event spaces such as multi-purpose basketball courts.

Phase 4 (2012-2013): The proposal will continue in the second half of 2012 and extend into 2013. It includes ditch restoration work, replacement of fencing, cleaning of walls and change of land use from sports use to public plaza.

3.3.3. Implementation and policy

(1) Management

Since 2004, surveys targeting parts of the old city of Zaragoza have identified serious problems with the configuration of public space. Concerns have been raised about the standard of living in the city and about non-building sites that affect the aesthetics of the urban landscape and the poor health and sanitary conditions. After registering more than 200 non-building sites in the Old Town, it was found that these sites are mainly located in the San Pablo and La Magdalena areas, which are characterized by social tensions. The researchers studied the gradual deterioration of these abandoned areas and the transfer of conflicts to

public space. Residents' associations sought solutions from the municipal government and proposed the temporary occupation of non-building sites in the old town in order to achieve 100% utilization. This goal was assembled in the "estoneesunsolor" program, which gathered proposals from architects, civic associations and schools, and senior care centers. The program is supported by the City Council institutions and managed by the Salazar Vivienda Corporation. The plan gives importance to blank spaces, considering that they can create situations and events, with a variety of subjects and complex relationships converging on each open space. The program began in 2009 in 14 plots in the Old City and was extended to the entire city in 2010.

Zaragoza Vivienda, an institution of the City of Zaragoza, launched the strategy in 2009, and in 2010 they created a special office called "This is not an empty space". This office is responsible for developing the strategy, handling the implementation on site, and managing and maintaining it. The group was supported by the architects of the proposal, the civic association, the school and the elderly care center. The technical office team consisted of architects, technical architects and cost managers. The implementation of the interventions was carried out by a team of 40 people involved in the reintegration and unemployment program, who learned the necessary techniques under the guidance of the technical architect. The management, construction, maintenance and dismantling of the interventions are the responsibility of the technical offices and work teams, respecting a fixed budget and independent of other municipal services. These interventions enjoy a special status, although they can be considered part of the public domain. When the renovation plan is located on private property, where the owner of the plot has plans for further utilization, the office needs to be responsible for dismantling the interventions for the benefit of the owner.

(2) Citizen Participation

Citizen engagement has been widely adopted in the strategy to promote the involvement of local residents in decision making and to stimulate more solutions than refinements to the design of interventions. The public response to the strategy was also very positive, with many organizations and resident councils supporting the strategy. Media attention increased public interest in the project, and the municipality increased its financial support and planned more interventions and numbers of participants. The technical office organized multi-stakeholder meetings to understand citizen needs and develop a plan. This was also done through children's participation in a design competition, with the winning design being developed and implemented by the Technical Office. This civic engagement has strengthened citizens' connection to urban spaces and reduced vandalism and maintenance needs.

3.3.4. Outcomes and subsequent impacts

The "estoneesunsolor" strategy has led to a general improvement in the use of public space in the city of Zaragoza. Public areas have been created in the city center and activities to meet the needs of residents have been successfully planned. Despite the overall positive impact of the strategy, not all interventions have been entirely successful. Some of the experimental public urban gardens encountered maintenance problems and had to be transformed into easy-to-maintain interventions, in contrast to the relatively well-maintained urban gardens under the responsibility of some specialized institutions. So residents criticized the lack of interventions and the rapid deterioration." estoneesunsolor "Influence residents' perception of the city and enhance the role of public administration. The social message is conveyed through the transformation of private land into useful public land. This strategy breaks with traditional thinking and creates a new relationship between the city and its citizens through public support for the city.

Through design, different places will be revitalized with more possibilities. For example, children's playgrounds and concerts, public art and dance. estoneesunsolar demonstrates these "alternative possibilities" by transforming urban public spaces through low-cost, temporary measures. These transformed public spaces have become powerful tools for civic engagement and social cohesion.

3.4. Yuyuan Road in Shanghai

3.4.1. Introduction

The construction of Yuyuan Road in Shanghai began in 1860 and was completed in 1918, with a total length of 2.7 kilometers. As a historical district that carries the memories of generations, Yuyuan Road has witnessed the footsteps of countless heroes, heroines and literati over the past 100 years, and has become a gathering place for western gentlemen and foreign buyers at that time. However, with the development of the times, Yuyuan Road has faced many problems similar to those of other historic districts in China, such as a large number of unauthorized building structures, tight living space, overloaded housing, and difficulty in balancing commercial and residential functions.

During the boom of opening stores in the 1990s, the residents and merchants of Yuyuan Road remodeled their houses on their own, resulting in Yuyuan Road gradually becoming "small, chaotic and scattered", with frequent illegal constructions, leading to the disconnection between the commercial area and the residential area, and the lack of landscaped greenery and public activity space.^[42]In order to preserve the historical lineage of Yuyuan Road, the government put it on the agenda and began to renew and improve the area after the 2010

World Expo became an opportunity to do so. To date, Yuyuan Road has created an aesthetic atmosphere full of fashionable and creative fusion, and has hosted events such as the Urban Flower and Bird Market and the Coffee Culture Festival.

Through these efforts, Yuyuan Road has gradually restored its order and beauty today, becoming a community driven by creative industries, attracting the participation of multiple subjects such as surrounding residents and artists, promoting the development of block autonomy, and making Yuyuan Road an orderly and beautiful place that combines history and modernity.

3.4.2. Development

Phase 1 (2015.8-2017.9) Sporadic experimentation:

In 2009, the Expansion Office (short for Hongqiao and Zhongshan Park Area Functional Expansion Office) made it clear that "the Yuyuan Road Historical Style Street Renovation Program is not only a goal of the Changning District Government, but also a key target of the Hongqiao Office". However, due to the complex property rights relationship, the coordination of many stakeholders and other reasons. It was not until 2015 that the Changning District Government facilitated the establishment of a joint venture company between Creater Industry Company Limited and Jihua Group, a district state-owned enterprise that owns nearly 40% of the stores on Yuyuan Road, through a bidding process, which established a "government-guided-enterprise-operated" approach to the renewal of Yuyuan Road. At the end of August 2015, the Changning District Government completed the renewal and reconstruction of three space nodes and four green plots on Yuyuan Road, including the Children's Library, Workers' Cultural Palace, Creater Space and Xinlian Square. The direction of Yuyuan Road's transformation towards fashion, creativity and other industries is basically clear.

Phase 2 (2017.9-2019) Generation of combined energy:

When an area in a city grows to a certain point, it will produce a combined effect receiving greater attention.

The opening of the Yuyuan Department Store in December 2018 and the opening of the Yuyuan Public Bazaar in February 2019, as well as the many reports that accompanied their opening, whether in terms of topic discussion, public attention, or growth in foot traffic, can be interpreted as an important node in the generation of synergies for urban renewal on Yuyuan Road.

Yuyuan Public Market used to be the school building of the former Medicine Workers'

University at No. 48 Hongye Garden, Lane 1088, Yuyuan Road. The first floor will ensure that neighborhood residents can still enjoy affordable food markets, sewing and repair services at the lowest possible cost, while the second floor will house a community art gallery and art gallery with public education functions. Yuyuan Road has the largest number of centenarians among the over-65s, who make up 33% of Changning's household population. Community art museums, art cafes, fu galleries and other new cultural consumption areas have brought young people and "hipsters" to Yuyuan Lu. This area, which had been aging and neglected, has been revitalized.

Yuyuan Department Store is the former residence of Mr. Shi and the old post office. After the renewal, it has a collection of trendy brand stores, coffee shops, small art exhibitions, and flash stores that often cooperate with variety shows and brands. Because Shanghai people have a department store complex, and now those state-run department stores have basically closed down or transformed we simply called Yuyuan Department Store, but also to evoke some of the memories of young people when they were young.

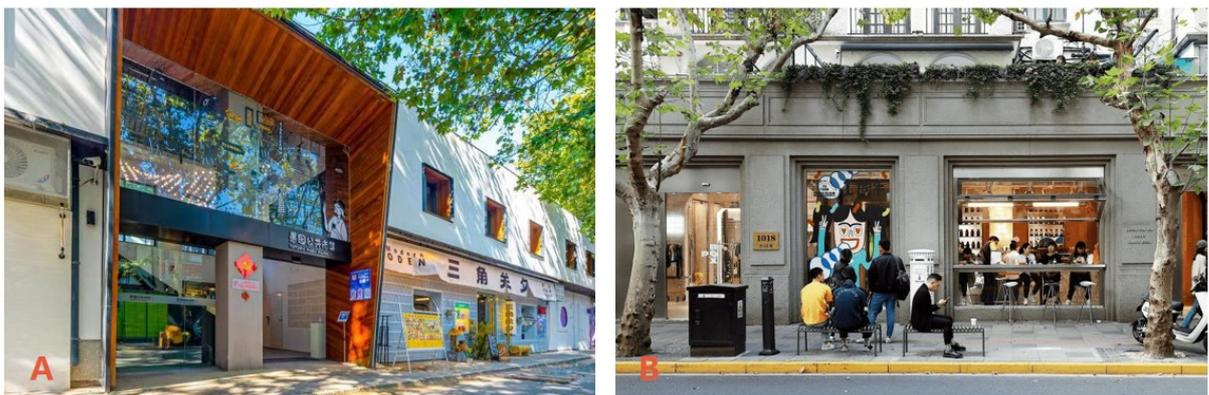


Figure 3-8 A: Yuyuan Public Market B: Yuyuan Department Store

(Source: <https://www.creater.com.cn/>)

Phase 3 (2019-Present) Comprehensive Micro-Renewal:

In 2019, while Yuyuan Road is receiving a lot of attention, the Changning District Government and Jiangsu Road Street are simultaneously launching a more comprehensive community renewal program. Unlike the shantytown renovations of the 1980s or the "people's livelihood projects" of the early 21st century, the community micro-renewal that has taken place in Yuyuan Road's old residential areas and old and new neighborhoods in the past two years is aimed at reshaping the local cultural image, with culture and art as the key tools. While comprehensively improving the basic conditions of residents' lives, community micro-renewal has reshaped the community culture and cohesion of Yuyuan Road. These culture-led community micro-renewal projects include Qishan Village, Changxin District, and the

Aerospace Building.

At the beginning of the comprehensive community micro-renewal that began to penetrate into the hinterland of Yuyuan Road neighborhoods and inside the lilongs, in June 2019, "Social Interest" (a social enterprise under Chuangyi that focuses on community creation) was formally established, organizing residents' storytelling cell phones, neighborhood humanistic walks, and other community activities in the capacity of a social enterprise.

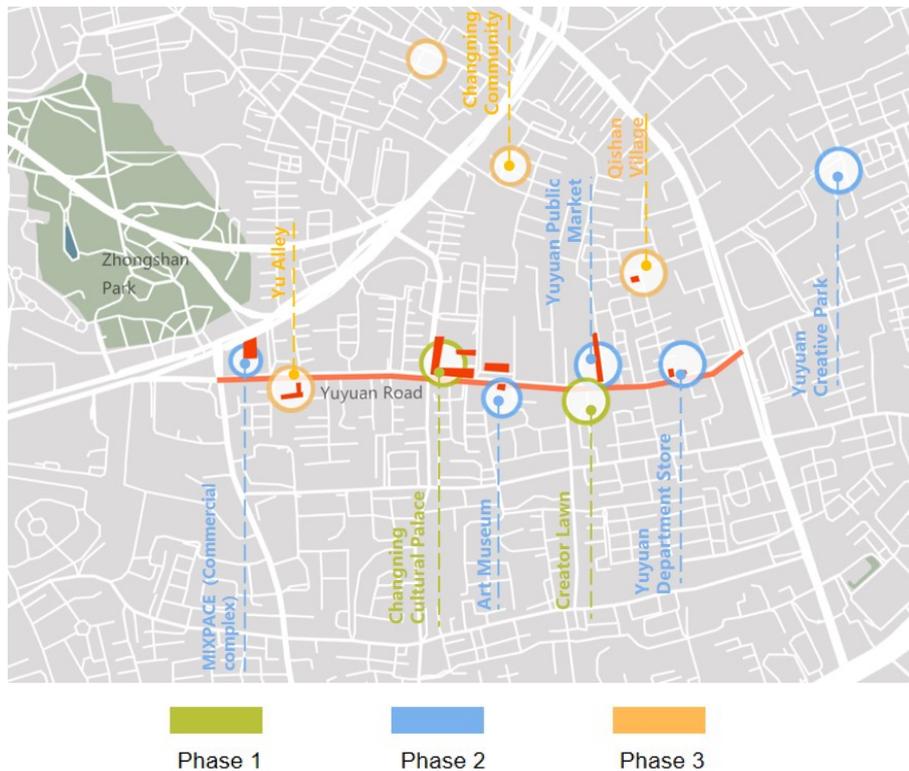


Figure 3-9 Stages of Urban Renewal Development on Yuyuan Road (Source: author)

3.4.3. Implementation and policy

(1) Tactical urbanism in Practice

Yuyuan Road in Shanghai is not entirely urban renewal from a tactical urbanism perspective, but the design concepts and specific measures behind it are highly relevant to tactical urbanism.

First of all, except for a small number of iconic streets, most of the old streets do not have enough funds for renovation due to their positioning, which requires us to be able to use low-cost interventions as much as possible. Based on this requirement, in addition to using the previous approach to control costs as much as possible, a more feasible approach is to divide the renovation into different renovation phases, combined with the planning and Party A's

needs for a reasonable division, and ultimately use the effective renovation funds to achieve the purpose of the renovation as well as possible.

Due to the existing road reconstruction will often affect the residents' life and traffic along the road to different degrees, for Yuyuan Road and Jiangsu Road, the closed reconstruction will not only affect the residents along the road, but also affect the traffic of the whole Shanghai urban area to a large extent. Therefore, how to complete the transformation of the road in a limited time has become a major difficulty in the transformation, the traditional road of large-scale closed transformation of course can not meet this requirement, so in the renewal of Yuyuan Road, the use of prefabricated pop-up facilities to create a public space, or the use of ground spray to improve the pedestrian and traffic conditions.^[43]The design and construction of the project takes into account the future operation and maintenance of the park and the unused turf for holding art and art activities (Site Pre-Vitalization). These events also follow this principle, using installations that can be easily dismantled and replaced as much as possible, and can be flexibly adapted to the different changes in urban renewal.(Figure 3-10)



Figure 3-10 A: Pop up furniture to create public spaces (Source: <http://www.cctime.com/html/2019-10-18/1477981.htm>)

B: Ground spraying to improve traffic (Source: reference[25])

C: Unused turf to host art art events (Source: <http://www.cctime.com/html/2019-10->

18/1477981.htm)

(2) Mechanism of Multiple Participation

On the issue of community building and residents' autonomy, urban renewal is a people's project that benefits both the government and the people. In the past, the government or enterprises were the main decision makers in urban renewal, and there was a lack of direct communication between designers and residents, which made it easy to form a fault line.

When Creater started the urban renewal of Yuyuan Road, it transformed passive management into active participation of the people, and then began to explore grassroots governance innovations such as residents' self-governance and community co-governance. By making full use of new community self-governance methods such as "field survey, community building, and community co-governance", the people and the neighborhood committee were involved in the design of the community micro-renewal plan.

It is in this context that the "Social Interests" community service club was born, aiming to join hands with more social public welfare organizations, and through interesting activities to melt the relationship between neighbors and build up a consensus on urban renewal, so that the community and its residents can gradually become the new driving force of urban renewal. Social Interest plays a better social role than a pure social enterprise, and the key renewal area of Yuyuan Road has always maintained its vitality, while at the same time, it also links up well with the residents in the neighborhoods around Yuyuan Road.

The street government of Jiangsu Road plays a key role, without which the interests of residents and citizens would be eroded by over-commercialization and gentrification; the corporate role of Creater Capital is also very important, without which Yuyuan Road would probably lack new vitality, and Creater, as a corporation, has shown a medium- and long-term vision of the Yuyuan Road renewal process, instead of focusing on immediate short-term and visible economic benefits. economic benefits.

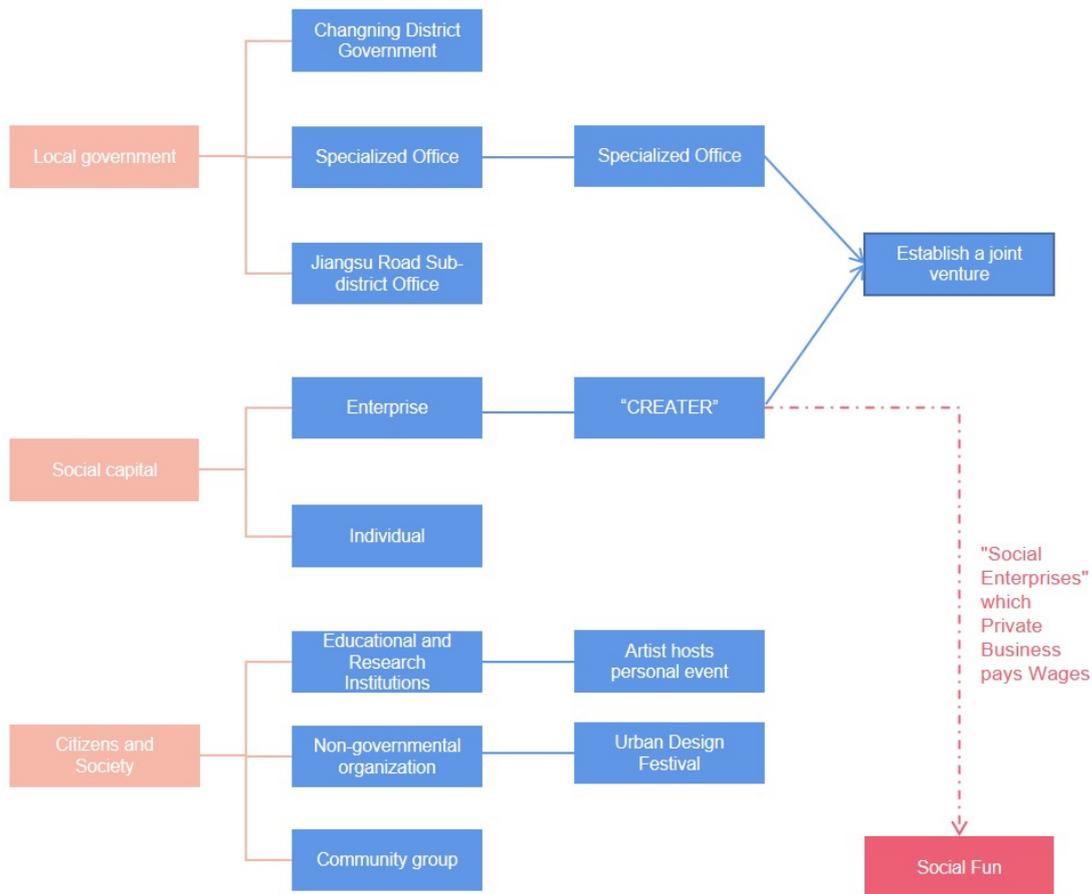


Figure 3-11 Multi-parties participation (Source: author)

3.4.4. Outcomes and subsequent impacts

Yuyuan Road continues to undergo progressive renewal, creating more open spaces and implanting new experiential businesses in the historic neighborhood. During the renewal of Yuyuan Road, it can be seen that the overall appearance of the street has been greatly improved: more places for citizens to rest and communicate have appeared under the tall sycamore trees, the signboards and facades of the stores along the street have been harmonized with the overall appearance of the neighborhood, and the slow-moving system of the neighborhood's lanes and alleys is gradually taking shape. Functionally, new commercial spaces continue to appear, such as shared creative industry parks, cultural and creative product stores, art studios for citizens to experience, and fine dining restaurants.

The renewal of the city is constantly happening, ever-changing, and in motion with the activities of people. The self-innovation of merchants is gradually finding integration and balance with the surrounding community under the guidance of local streets and neighborhood operators. The people involved in the governance of Yuyuan Road also tend to be younger.

With the joint efforts of the government, enterprises and residents, the urban renewal of Yuyuan Road has gone from the tangible to the intangible, from point to line and then connected to the surface, organically combining the preservation of historical features, urban functions, spatial environmental quality and humanistic ecology.

Changning's important exploration of the new form of urban renewal, the Yuyuan Road neighborhood landscape renewal as a sample, is precisely: a change in the previous "big demolition and construction" thinking, through the existing space to solve the public's ever-increasing demand for urban public functions, awakening the long-dormant urban culture. In the completed renewal, more public space is being released to the public.

This year, Yuyuan Road will also host events such as the Urban Flower and Bird Bazaar and the Coffee Culture Festival to encourage important exploration of urban renewal. Bringing in neighboring residents, local artists and other diversified subjects to participate in neighborhood autonomy, it also provides new solutions and ideas for urban renewal paths in other parts of Shanghai and even other cities in China. A more organized and interesting Yuyuan Road will live up to its century-old glory.

3.5. Summary of the chapter

The case study section collects and organizes 27 tactics in tactical urbanism that are more popular and commonly used globally from the literature, books and reports related to tactical urbanism (Play streets, Road repair, Reclaim setbacks ...). . A summary of their practices, as well as a display of representative cases, is conducted. These tactics are summarized into six categories: Functional improvement, Temporary occupation, Pop-up , Reclaimed underutilized space, Public art, and Mix-sharing. The scales involved in the specific tactics are also analyzed to refine the key points of tactical urbanism, so as to facilitate the proposal of subsequent strategies.

Secondly, a total of three typical cases (Rethinking the street in Santana, Estonoesunsolar in zaragoza, and Yuyuan Road in Shanghai) are selected from both domestic and international contexts to reflect on tactical urbanism cases in different countries, contexts, and scales. The analysis is carried out mainly at three part: "development", "implementation and policy", and "overcomes and subsequent impacts", and summarizes the characteristics of tactical urbanism activities. These include the mechanisms and phases of public participation and the design and implementation processes that characterize them.

Despite the varied circumstances of these examples, the case studies still yield some common lessons that are applicable to other cities wishing to implement tactical urbanism.

(1) Foster collaboration:

In order to ensure that projects are not just designed for, but with, local communities in order to provide long-term support and be more conducive to permanence, it is important to capture the voices of the various stakeholders. In addition, efforts should be made to ensure that those groups that are typically marginalized are involved in the project process to achieve more equitable and meaningful project implementation. In order to achieve this goal, a number of strategies and measures are needed. First, establish an inclusive participation mechanism that encourages and facilitates the participation of various stakeholders. This can be achieved by holding open seminars, symposia, workshops, etc. to ensure that their voices are fully heard and included in the project decision-making process. Second, work closely with local communities to establish good communication channels and cooperative relationships. Ensure that the needs and interests of local communities are fully taken into account through regular communication, cooperative projects and joint decision-making. This can be achieved by building partnerships with community leaders, resident representatives and civil society organizations.

By taking the above measures, co-design with local communities can be achieved in urban renewal projects, resulting in more equitable and meaningful projects with broad support and participation.

(2) Reduce resistance:

Tactical urbanism projects may be detrimental to the interests of certain groups. For example, making changes to transportation may cause distress to drivers. When dealing with this situation, certain solutions should be implemented to alleviate the problems faced by drivers. Such as providing alternative transportation options, when making transportation modifications, one can ensure that drivers are provided with alternative transportation options such as adding public transportation routes, providing shared mobility services, or encouraging walking and biking.

Also communicating and publicizing the plans of the project in advance can make stakeholders (drivers) aware of the retrofitting plans in advance and know the possible nuisances they may face. At the same time, by explaining the necessity and long-term benefits of the retrofit, it can increase the understanding and support of others. Meanwhile, for those who suffered losses due to tactical interventions, a reasonable compensation plan can be considered.

To summarize, the resistance to implementation in the case of tactical urbanism practice can be reduced by providing certain solutions, communicating and publicizing in advance,

and a reasonable compensation plan.

(3) Monitoring and Evaluation :

Effective monitoring and evaluation ensures that projects are carried out according to plans and objectives, and that problems are identified and corrective action taken. Proper dissemination of the project will help to increase the impact of the project and convince other stakeholders through qualitative data analysis and measurable indicators. In the case of rational dissemination and implementation, if the local community is not interested, responsive or even opposed to the project, then the temporary intervention will not be made permanent, and then the likelihood of proving replicability in other parts of the city will be reduced. If good feedback is received, then this positive feedback will help to make these temporary interventions permanent and even expand them to other parts of the city.

(4) Program Maintenance:

In the case of tactical urbanism, adopting temporary measures is often challenging and risky. This highlights the importance of program maintenance. While the overall impact of a strategy may be positive, it does not mean that all interventions will be completely successful.

In the case 'Estonoesunsolar', experimental interventions in public urban gardens were attempted to improve the urban environment. However, some of the interventions faced maintenance problems after a year and deteriorated. Lack of timely maintenance and upkeep can lead to failure of interventions, waste of resources and public discontent. This emphasizes the importance of project maintenance. Therefore, it is crucial to ensure that maintenance is emphasized and effectively implemented, including clear responsibilities, development of maintenance plans and resource inputs, and communication and engagement with residents and stakeholders. This will ensure sustainability and public satisfaction with urban interventions.

CHAPTER4: URBAN RENEWAL MODEL

The previous chapter summarized and classified the complex tactics of tactical urbanism, and analyzed three successful cases at home and abroad, obtaining the lessons of tactical urbanism related to the promotion of cooperation and the reduction of resistance. Based on the case studies, this chapter attempts to explore Guangzhou's urban renewal from the perspective of tactical urbanism. However, the current practice of tactical urbanism mainly focuses on Western cities, and the corresponding theoretical research is also mainly carried out from the perspective of Western societies. Western countries have a long history of democratic operation and a mature civic consciousness, and their political forms, cultural patterns, and ways of thinking are very different from those of China. Under these circumstances, can tactical urbanism be localized and developed in China? If so, how can tactical urbanism be adapted to the needs of Guangzhou?

4.1. Tactical urbanism in different countries

4.1.1. Tactical urbanism abroad

As a means of addressing urban challenges and stimulating urban revitalization, tactical urbanism has gained traction in countries around the world. Its application in different contexts demonstrates its adaptability and potential for positive change. Below are the developments and practices of tactical urbanism in different countries.

USA: The United States has seen a significant adoption of tactical urbanism practices. Cities such as New York, San Francisco and Chicago have implemented temporary parks, temporary pedestrian-friendly facilities and street closures to create vibrant public spaces. "Open streets" campaigns, in which roads are temporarily closed to vehicular traffic, are popular and create opportunities for community engagement. The application of tactical urbanism in the United States has sparked a grassroots movement to encourage citizens to actively participate in urban transformation.

United Kingdom: In the United Kingdom, tactical urbanization initiatives have been successful in revitalizing underutilized areas and activating public spaces. London's "Meanwhile Space" program repurposes vacant properties for temporary uses such as art exhibitions, co-working spaces and community events. The "Better Block" approach, originally from the United States but adopted in the United Kingdom, involves community-led efforts to transform neglected areas into vibrant, humane places. Tactical urbanism projects in the UK have demonstrated the potential for temporary interventions to contribute to urban renewal and community empowerment.

Australia: Urban planning in Australia has been influenced by trends in Western Europe and North America. The evidence is all around us, from the grid of pillars of early British settlements to Canberra's garden city layouts and sprawling car-dominated suburbs. Australia has embraced tactical urbanization as a way of transforming cities and engaging communities. At the same time its tactical urbanization has looked to Europe and North America, but its motivation and impetus has largely come from government. Australia's tactical urbanization has been implemented in cities such as Melbourne and Sydney with temporary public spaces, street events and flash markets. These initiatives aim to create vibrant and inclusive urban environments, improve pedestrian connectivity, and promote local businesses. But unlike many other parts of the world, citizen engagement is not as strong in practice in Australia, and more city shaping should be entrusted to citizens, with government playing the role of facilitator rather than controller. Perhaps we have not seen the full potential of tactical urbanization in Australia.

India: India has witnessed the emergence of tactical urbanization initiatives in response to the pressures of urbanization and the need for inclusive and sustainable urban development. Cities such as Mumbai, Delhi and Bangalore have implemented projects such as temporary street closures, pop-up parks and pedestrian-friendly interventions. These projects aim to transform public spaces, improve pedestrian infrastructure and enhance community engagement. The "Raahgiri" campaigns in Gurgaon and Delhi, which created car-free streets for community events, demonstrate the power of tactical urbanism to promote healthy lifestyles and social interaction. However, tactical urbanism faces challenges in India, including regulatory barriers, lack of awareness, and limited resources. Overcoming these challenges requires collaboration between different stakeholders, including local governments, community organizations, and urban planners. With its potential to activate underutilized spaces and promote community empowerment, tactical urbanism holds the promise of solving urban problems and improving the quality of life in Indian cities.

Brazil: In Brazil, tactical urbanism has gained widespread attention as a tool for urban transformation and community empowerment. Cities such as São Paulo, Rio de Janeiro and Belo Horizonte have witnessed the implementation of temporary interventions to improve public spaces and promote active citizenship. Examples include the transformation of vacant lots into community gardens, the creation of pop-up cultural spaces, and the transformation of underutilized streets into walkable areas. These projects have helped address issues such as urban decay, social exclusion and limited resources.

4.1.2. Tactical Urbanism in China

Over the past few decades, China has experienced unprecedented urbanization, with millions of people migrating from rural areas to cities. Rapid urbanization has brought challenges such as overcrowding, traffic congestion and insufficient public space. China currently has a relatively complete strategic planning and design system, but it is still difficult to alleviate various social problems caused by the increasingly complex urban background of the 21st century. A series of tactical urbanism practices in Western countries have also proved that it can be used as an effective supplement to strategic design. China is currently in a new period of social transformation, and under the new normal, more attention will be paid to the renewal of urban stock space. The previous top-down strategic planning method faced problems such as insufficient flexibility and outdated methods in the face of urban stock space. The emergence of tactical urbanism can complement strategy. Tactical urbanism provides a potential solution that enables citizens to actively participate in community transformation and create a more livable urban environment, which has important practical significance.

Although tactical urbanism is not as prevalent in China as it is in some Western countries, examples of its implementation continue to emerge. For example, Shanghai's "urban acupuncture" approach has seen protective green spaces filled with construction debris transformed into community gardens and small public spaces; and in high-traffic or relatively narrow walkways, graphically guided diagonal parking at the same angle has been designed to increase the width of the walkway in front of the parking space while simultaneously increasing the density of parking. density. These projects demonstrate the potential of tactical urbanism to activate underutilized spaces, engage communities, and enhance livability.



Figure 4-1 A: Children from neighboring communities watering beets in the farmyard (Source: https://www.sohu.com/a/473924434_121124456)

B: Chains that keep bikes in line
(Source: https://www.sohu.com/a/330418588_720180)

4.2. Urban Renewal in Guangzhou

4.2.1. Urban Renewal Trends in Guangzhou

Guangzhou's urban renewal has been divided into five stages since the reform and opening up. The first phase (1979-1989) is the reform and opening up after the government directly promote the dangerous and dilapidated housing city transformation stage, to dangerous and dilapidated housing as the object of transformation, to the government transformation as the transformation mode, piecemeal transformation of the main, at this time, the capital is the transformation of the face of the biggest problem. The second stage (1989-1999) is the stage of reconstruction of dilapidated houses in a row driven by market forces after the establishment of the land use right system and the beginning of the development of the real estate market. The third stage (2000-2009) is the government co-ordination, development enterprises do not get involved in the old city transformation stage, this time the public awareness gradually awakened, urban renewal from the government decision-making to the pattern of multi-party games; the fourth stage (2009-2014) to revitalize the inventory, accelerate the transformation for the purpose of the "Three Olds" transformation period, in order to revitalize the inventory of land as the goal of the "Three Olds" transformation period. The fourth stage (2009-2014) to revitalize the inventory, speed up the transformation of the "Three Olds" transformation period, to revitalize the inventory of land as the goal of urban renewal. The fifth stage (2015 to the present) to open a comprehensive transformation and micro-reconstruction of two-pronged, and the establishment of the first domestic urban renewal agency - Guangzhou Urban Renewal Bureau, in December of the same year, the introduction of the *Guangzhou Urban Renewal Measures*, which creatively put forward the "micro-reconstruction" mode of urban renewal, focusing on the balance of the interests of multiple parties and the improvement of the human environment. The urban renewal model of "micro-remodeling" was creatively proposed, focusing on the balance of interests of multiple parties and the improvement of human environment.^[44]After forty years of urban renewal development, Guangzhou is gradually exploring and moving towards a "government-led, market-participating, comprehensive, fair and just" urban renewal.^[45]

4.2.2. Major Problems and Obstacles Facing Urban Renewal in Guangzhou

Despite Guangzhou's continuous exploration in urban renewal initiatives, there are still some problems in the promotion process, including insufficient industrial empowerment, poor policy articulation, insufficient planning response to complex needs, and lack of public participation.^[46] These problems are at a certain distance from the requirements of pursuing the goal of high-quality urban renewal development. They are specifically manifested in the

following aspects:

First, insufficient industrial empowerment. Although Guangzhou focuses on the integration of industry and city in urban renewal, there is still a lack of detailed guidelines for industrial development in actual practice, such as strategic guidelines for industrial demonstration and development assessment rules for the district. In addition, the degree of refinement of policy support and regulatory requirements related to industrial development in terms of land, talent, taxation and financing still needs to be improved. Projects that have completed industrial investment either have not formed a clustering effect or have not invested enough in post-management, resulting in overall operational efficiency, lack of awareness of full-cycle management, and industrial vitality to be enhanced.

Secondly, the policy articulation is not smooth. The goal of the new round of urban renewal is to create a demand-driven multifunctional complex, whose additional effect is more prominent than before, and the requirements for policy linkage are also higher. However, due to the division of responsibilities, the response, formulation and implementation of policies on land, taxation, housing, education, environmental protection and safety are not fully capable of rapid linkage and precise matching. Some policies may lag behind or lack details, making it difficult to implement some policy measures in a timely and effective manner.

Third, strategic planning is unable to cope with complex renewal needs. China now has a relatively sound strategic planning and design system, but at the city and regional level, Guangzhou faces problems such as complex site texture, unclear property rights and a large number of stakeholders. Traditional top-down, capital-led and expert-driven planning often tends to be out of touch with community needs, leading to uneven distribution of benefits and difficulties in implementing many plans. Traditional planning methods focus too much on the content of development at the expense of the means of development, resulting in insufficient action and a lack of corresponding motivational mechanisms at the community level.

Finally, public participation is lacking. At present, many public participation methods still remain theoretical, without legal or institutional protection. Most urban renewal projects are still led by the government and lack a clear strategy for multi-party participation. As a result, public interests are often neglected in actual urban renewal.

4.2.3. Tactical Urbanism as a New Approach to Guangzhou

Tactical urbanism is a bottom-up approach to urban planning and design that involves temporary or low-cost interventions in public spaces to improve their function, aesthetics and

livability. It allows communities to play an active role in shaping their cities and testing new ideas before making permanent changes. This paper discusses the prospects for the general application of tactical urbanization in Guangzhou, based on its characteristics and potential benefits, and in the context of the current state of urban renewal in Guangzhou.

Civic engagement: Involving citizens in the decision-making process is essential to creating inclusive and vibrant cities. Tactical urbanism encourages community participation by empowering residents to transform and revitalize their neighborhoods. By organizing local schools and community residents to participate in the planning and implementation of tactical projects, a sense of ownership and collective responsibility for public spaces can be fostered.

Testing ideas and driving innovation: Tactical urbanism provides the opportunity to test new ideas and concepts on a small scale before committing significant resources to large-scale projects. It enables cities to experiment with innovative technologies, urban designs and policies, fostering a culture of innovation and adaptive urban planning. For example, by implementing temporary interventions such as temporary parks, pedestrian zones or bike lanes, cities can collect feedback and data to inform future permanent urban planning decisions.

Rapid and cost-effective solutions: One of the main advantages of tactical urbanization is its ability to implement rapid and low-cost interventions. This approach is particularly beneficial for cities like Guangzhou, where the long-term urban planning process, and the idle physical conditions of some of the city's older urban areas, make it difficult to design large-scale renovations. Tactical projects can be implemented relatively quickly, such as the placement of some urban furniture to provide public space for the community. Utilizing tools such as planters, plants, and triangular cones to create slow or even car-free streets for the city at a certain point in time.

While the specific prospects for the application of tactical urbanization in Guangzhou will depend on specific circumstances, regulations, and community engagement, the principles of this approach align with the city's goals of sustainability, civic engagement, and innovation. By adopting tactical urbanism, Guangzhou has the potential to create a more livable, inclusive, and vibrant urban environment, and this paper will follow up by selecting Zhuangyuanfang district in Guangzhou as a case study in which to explore the application of tactical urbanism in Guangzhou's urban renewal.

4.3. Tactical Urbanism Process

China, like many countries around the world, is at a critical stage in deciding how best to

address the challenges facing our urban centers. Many cities are struggling to cope with the decay of older urban areas, unsafe traffic on their streets, and problems with public health. People need tools to adapt their streets to these challenges. At one time urban development in the Middle East and West told us the answer; large-scale development plans are not the solution. Instead, the answer lies in the need for residents to shape their own towns and cities so that more people can join in urban renewal more effectively. These changes on our streets can be challenging, and cities are finding that experimenting with change can help people reimagine their streets and ultimately accelerate projects.

Tactical urbanism makes such experimentation possible. As a design methodology and engagement strategy, it involves implementing temporary "tactical demonstrations" and "pilot interventions" to test and evaluate the design in real time with the community.^[47] This real-world test focuses on delivering human-centered cities. Tactical urbanism projects are best conducted using a co-design methodology that allows the community to be directly involved in shaping how the project is created and delivered. This approach involves design and user testing with the community rather than for them, resulting in a design that is generated as much by the community and collaborators as it is by the designers. The resulting design is then implemented as a pilot intervention in a low-cost, low-risk and low-commitment way, enabling the community to try out the design for themselves and provide valuable feedback. The effectiveness of the trial is evaluated and measured. Those solutions that work are improved and made more sustainable; those that don't are removed and the lessons learned are documented for use in future urban renewal programs.

Ultimately, after successful implementation and feedback on the program, permanence is considered while it provides an opportunity to replicate, increase and evolve the program to work for the wider urban area.

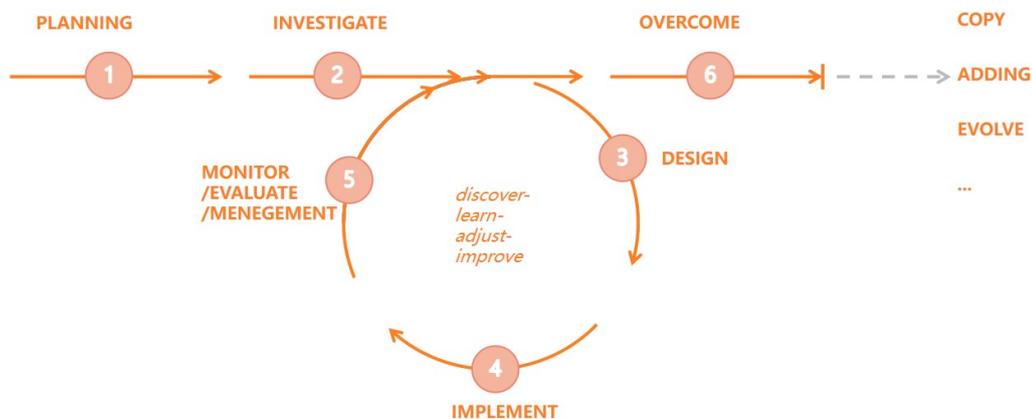


Figure 4-2 Tactical urbanism process (Source:Further draw based ^[48])

4.3.1. Plan

(1) Clarity of purpose

Existing problem solving: Tactical urbanism proposes a direct, "acupuncture" model of intervention, because most of its proponents are faced with extreme local problems. [49]As a result, its time horizon is relatively short, even impulsive or spontaneous. Similarly, its spatial scale is relatively limited - for example, parks, buildings, streets or neighborhoods. It is to take the spatial lots with the most prominent material space problems and the most serious contradictions between spatial places and residents' behaviors as the entry point to realize targeted intervention in the material environment and solve urban problems.[45]

Before the project renewal, it should be problem-oriented, fully examining the various needs of residents, merchants, tourists and other groups in the city and the spatial problems that don't satisfy their daily lives; during the renewal process, it fully implements the characteristics of tactical urbanism, encourages the participation of residents, realizes the self-worth of residents, and prompts people to give feedback and participate on their own. A platform for feedback and information exchange is set up to mobilize multiple stakeholders to promote the renewal and transformation of urban space.

In accordance with the principles of Tactical urbanism, interventions similar to "acupuncture" are applied to the most urgent needs and areas in need of improvement in the urban space in order to respond quickly. Therefore, each Tactical Urbanism project should be locally specific, in tune with the local environment and social conditions, and influenced by factors such as local policies and social relations.[50] This is reflected in the following aspects: (1) close cooperation between the government, residents, and experts to propose local solutions that address specific problems and needs in an "acupuncture-style" manner. (2) Low-cost and rapid interventions are used as much as possible to solve problems at a small cost, making full use of recyclable or local materials. (3) Local history, culture, folklore, and habits are fully integrated into the project program to show the unique charm of the local area.

Experimentation with long-term plans: Tactical urbanism projects are characterized by low cost, short-term experimentation and immediate results, i.e., short-term action for long-term change. After the success of a pilot project, Tactical urbanism uses iterative planning and an open-minded approach to gain more attention and support. For example, in the Estonoesunsolar project, the early plan was only to partially clean up the site for public space renovation, and the scope was only 14 sites. With the implementation of the program and positive feedback from the public, the abandoned plots were gradually transformed into urban gardens and children's playgrounds. The program has continued to be implemented since 2010,

with more than 33 sites, and continues to have a positive effect on the urban space of Zagagoza. This reflects the fact that tactical urbanism projects are generally small-scale, temporary experiments in the transformation of urban space in the early stages, and after obtaining success and a wide range of social impacts, especially with the support of citizen participation, they will have the opportunity to be replicated to achieve holistic and sustainable improvements.

(2) Define the leadership of urban renewal and the path of renewal

The main participants of urban renewal include the government, enterprises, social organizations, citizens, experts and so on. According to the subject characteristics of tactical urbanism, every group and every person in the city can be the renewal subject of tactical urbanism projects. In China's urban renewal, there are three overall types: top-down, bottom-up, and top-down parallel.^[51]

Tactical urbanism encompasses all of these subject types, with local governments and municipalities playing a crucial role in promoting and supporting tactical urbanism initiatives. They provide the necessary licensing, permitting, and regulatory guidance for temporary interventions. Urban designers and planners contribute their expertise and knowledge to tactical urbanization initiatives. They work with residents and community groups to develop design solutions, provide technical guidance, and ensure that interventions are consistent with broader urban planning principles and goals. Non-profit organizations and community groups often act as facilitators, bringing stakeholders together, coordinating resources, and providing technical support for tactical urbanization initiatives. Business owners and local businesses can contribute to tactical urbanization by providing support, resources, or sponsorship. By engaging these diverse stakeholders, tactical urbanism utilizes collective creativity, expertise, and resources to create a collaborative and inclusive approach to urban development and placemaking.

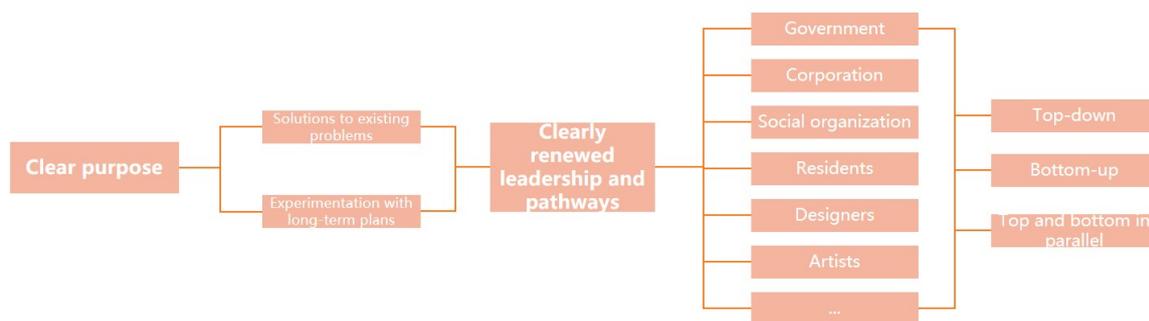


Figure 4-3 Planning Process for Tactical urbanism (Source: author)

4.3.2. Investigate

Learn as much as possible about the site through available resources and understand that the investigation phase of the project consists of three main parts: background research and mapping, public life survey, and identification of update targets.

The first is background research, which requires an understanding of the project's history, existing conditions, spatial arrangement and quality, and how it fits into and contributes to the larger movement network and community. Current and historical information should also be gathered about the site related to transportation and movement (including parking surveys), strategic plans and guidelines, land use and planning, environmental factors, census data, etc. This information is critical to the design team and will help shape the dialog and community. Map your project at different scales (city scale, neighborhood scale, and site scale) separately to document and analyze connections to the broader system.



Figure 4-4 Investigations at different scales (Source: author)

Public life surveys are audits and measurements of certain aspects of public life in a street or public space, aiming to better understand what is already happening in a given place and what changes might be of public benefit. In addition to site visits, observation and research of public life can also be used to listen to the public's wishes through the Internet, questionnaires, interviews, presentations, community posters, and other forms to identify problems in urban public spaces.

Finally, it is the confirmation of the renewal object. After the background research and public life survey, the current problems of urban public space renewal are firstly clarified. And according to the characteristics of tactical urbanism, when determining the renewal object, clarifying its scale and selecting the site, it should try to public property rights of the land parcel and reduce the scope of intervention, especially it can be reactivated and reused the dilapidated, abandoned or underutilized lots in the city. In the principle of physical space selection, conditions such as land ownership, relevant regulations, physical state and use state

are fully considered.

In terms of land tenure, the ownership of the land on which the tactical urbanization intervention will be carried out is determined. It may be public land, private land or a combination of both. Depending on the ownership, it may be necessary to seek permission or cooperate with the relevant landowner or authority to install objects on the site. In the case of private land, due consideration should be given to the views of the owner, as in Estonesunsolar in zaragoza, where unused private land was used and the corresponding temporary installations were removed when needed by the future private owner.

4.3.3. Design

4.3.3.1. Progressive design approach

Incremental design approaches play an important role in tactical urbanization by allowing for flexible, adaptive, and participatory shifts in public space. These approaches emphasize the iterative development of interventions, starting with small-scale changes that build over time.

Progressive design breaks down the transformation of public spaces into smaller, manageable steps. This incremental approach ensures that interventions can be implemented gradually as resources, permissions, and community support become available. It allows for incremental improvements that build momentum and generate enthusiasm among community members and stakeholders.

Incremental design emphasizes learning from each step of the process. By continuously monitoring, evaluating, and collecting feedback, valuable insights can be gained to inform subsequent design decisions and interventions and gain long-term sustainability. This feedback loop ensures that interventions meet the needs and desires of the community, leading to more successful and impactful outcomes.

Incremental design interventions can have a catalytic effect on their surroundings. Even small-scale changes can inspire and stimulate further community initiatives, investments, and neighborhood improvements. The success of an incremental intervention can attract the attention and support of stakeholders, leading to additional resources and opportunities for further development. By employing incremental design methods, tactical urbanization projects can create dynamic, responsive, and inclusive public spaces. These approaches promote community engagement, experimentation, and learning while allowing for adaptive and sustainable transformation over time.

Inventory design in Tactical urbanism enables communities to play an active role in

shaping their urban environments and contributes to the creation of vibrant, human-centered cities.



Figure 4-5 The Case for Progressive Design (Source: author)

4.3.3.2. Low-cost, temporary interventions

Low-cost, temporary interventions are an essential component of tactical urbanization. They are low-cost, quick to implement and highly adaptable. They prioritize the use of inexpensive materials and resources or reduce financial requirements by repurposing existing elements or using readily available materials. Examples include transforming underutilized spaces such as parking lots or vacant lots into temporary parks or plazas using portable seating, planters, and temporary facilities. Or creating crosswalks and bike lanes using colored paint to improve safety and visibility for pedestrians and cyclists. These tactical urbanism projects can be implemented at a fraction of the cost of traditional urban development programs. The lower financial burden allows a wider range of communities, including those with limited financial resources, to participate in transforming their public spaces.

At the same time temporary interventions can be implemented relatively quickly, resulting in immediate impact and results. Low-cost interventions can be realized in a much shorter period of time than long-term infrastructure projects that can take years to plan and implement. This rapid implementation fosters a sense of momentum, enthusiasm, and tangible progress that encourages community engagement and participation.

Low-cost, temporary interventions provide opportunities for experimentation and prototyping. They allow urban designers, planners, and communities to test new ideas, concepts, and approaches before committing to long-term, expensive projects. The experimentation allows stakeholders to assess the feasibility, acceptance and impact of

different design interventions, thus fostering a culture of innovation and learning.

Interim interventions can be easily removed, modified, or adapted based on community feedback or changing needs. This reversibility allows for flexibility and responsiveness to changing circumstances. If interventions do not produce the desired results, they can be adapted or replaced with alternatives. This adaptability ensures that public spaces can be fine-tuned and optimized over time.



Figure 4-6 Material palette for tactical urbanism (Source: author)

4.3.3.3. Flexible and adaptable tactics

Flexible and adaptive tactics can evolve and respond to changing needs, preferences, and conditions. By starting with small-scale changes, it can be adapted and refined based on community feedback and emerging insights. The participatory nature of tactical urbanism encourages creative thinking and innovative solutions. With the mechanism of multi-party

participation in Tactical urbanism, there is a wider range of ideas and resources to draw upon. Participants can bring their diverse skills, experiences, and perspectives to the table, as well as many unconventional approaches to design challenges. The global practice of tactical urbanism to date has also led to many more imaginative and unexpected solutions that can transform urban spaces in exciting ways.

This paper categorizes the typical 27 tactical urbanism projects that have emerged globally into six types: Functional improvement, Temporary utilization, Pop-up use, Reclaimed underutilized space, Public art, and Mix-sharing.

Functional improvement: Functional improvement focuses on improving and optimizing urban spaces to serve a specific purpose. For example, initiatives such as Building Better Neighborhoods aim to transform neglected areas into vibrant community spaces. Other examples include implementing bicycle parking facilities, rehabilitating roads, removing sidewalks (depave), and creating complete streets that prioritize pedestrians, cyclists, and public transportation. Functional improvements play a critical role in making cities more functional, livable, and responsive to the needs of residents. By prioritizing safety, accessibility, and sustainability, these initiatives contribute to the overall well-being and quality of life in urban environments.

Temporary utilization: Temporary utilization involves the temporary repurposing of urban spaces to create active and attractive environments. Play Streets, Open Streets and Street Fairs are examples of initiatives that temporarily close streets to vehicular traffic, allowing people to participate in recreational activities and community events. These initiatives create safe and inclusive spaces for people of all ages and backgrounds to socialize, play and connect. This fosters a sense of community, strengthens social connections and promotes a more cohesive and vibrant urban fabric. Flash retail stores and parklets provide temporary retail space or mini-parks in existing urban areas. Enhancing the visual aesthetics of the city at the same time, but also maximizing the potential of existing infrastructure and efficient use of urban land and resources.

Pop-up : Pop-up involve the temporary activation of space for a variety of purposes. Flash uses are important because of their ability to foster innovation, entrepreneurship, community engagement, and cultural enrichment in urban environments. This includes the establishment of flash cafes, food carts/trucks, and mobile vendors serving food and beverages in a variety of locations. Their special temporary and adaptive nature allows them to respond quickly to changing needs, trends within the city. Pop-up play an important role in supporting local events, festivals and community activities. They provide additional amenities,

services or attractions during these events that enhance the overall experience of attendees. By activating temporary spaces, they enhance the character and uniqueness of an area, making it more attractive to residents and visitors. They contribute to the overall image and reputation of a city, reinforcing its brand and identity.

Reclaimed underutilized space: Reclaimed underutilized space focuses on transforming underutilized or neglected spaces into vibrant functional areas. This includes initiatives such as site pre-activation, which is the temporary activation of vacant land or abandoned buildings to host events. Temporary activation and transformation of underutilized or neglected spaces within cities. It involves repurposing these unused spaces for various purposes such as community engagement, green initiatives and temporary interventions. The significance of unused utilization lies in its ability to breathe new life into neglected areas, promote community engagement and contribute to the overall well-being of the city and its inhabitants.

Public art: It encompasses a wide range of artistic mediums including sculpture, murals, installations, performances and interactive artworks. Public art initiatives aim to enhance the visual appeal and cultural vitality of urban spaces. Chair bombing involves adding artistic elements to existing public seating. Ad sabotage involves modifying or subverting advertisements to convey alternative messages. Visual catalysts include temporary installations or artworks that inspire creativity and conversation. Weed bombing involves transforming neglected areas by planting flowers, plants or vegetation. Public art plays an important role in the urban environment, contributing to the cultural, social and aesthetic fabric of the city.

Mix-sharing: Mix-sharing involves initiatives that facilitate the exchange of resources, knowledge or skills within a community. Also co-transactions are platforms or activities where people can trade or exchange goods or services. Mix-sharing programs often provide cost-saving opportunities for individuals and businesses. Mix-sharing platforms that facilitate resource sharing, joint trading or collaborative consumption create a more affordable and accessible urban environment. Mix-sharing goes beyond the sharing of physical resources and also encourages the exchange of knowledge and skills. Platforms that facilitate the exchange of knowledge enable individuals to share their expertise, learn from others and engage in lifelong learning. This creates a culture of continuous learning and personal growth within the city, fostering innovation, creativity and professional development.

These different types of tactical urbanization offer a range of ways to temporarily or permanently transform urban spaces, encouraging community engagement, creativity and revitalization.

4.3.4. Implementation

Implementation is a critical step in the tactical urbanization process. It involves bringing design concepts to life, implementing interventions and activating desired changes in public spaces. Successful implementation requires careful planning, coordination, and engagement with various stakeholders.

The Tactical urbanism implementation process should enhance stakeholder engagement and build close collaborative relationships with residents, business owners, citizens, experts and other stakeholders. Their views and suggestions should be collected and incorporated into the decision-making process through public engagement activities, seminars and workshops. The implementation process should be carried out in a way that ensures transparency in the implementation process, provides adequate information to stakeholders, establishes effective communication channels such as through social media, press releases, posters and other communications identified in the communication plan Raising awareness on a wider scale can help to showcase the upcoming project and attract people. This is also an ideal opportunity to recruit volunteers. Gathering as many volunteers and helpers as possible will make implementation faster and easier while building and demonstrating community support for the project.

Tactical urbanism projects are often installed in a matter of hours or days, rather than weeks or months as with traditional urban renewal delivery. As a result, disruption should be much less than normal. Short implementation windows require thorough and clear implementation plans to enable rapid implementation so as not to disrupt the productive lives of residents as well as neighboring businesses.

At the same time, temporary monitoring equipment should be in place during implementation if applicable. If manual counts, interviews, or surveys are conducted, materials should be prepared and training should be provided for staff volunteers responsible for managing data collection. Conducting counts before and after installation is an important method of tracking program impacts. All of these tools are designed to follow up on the next phase of tactical urbanism-Monitoring, Evaluation, and Management effectively.

4.3.5. Monitoring, evaluation, and management

Monitoring, evaluation and management are important components of tactical urbanization processes. They involve systematically evaluating the impacts and outcomes of interventions, collecting community feedback, and ensuring the long-term maintenance and sustainability of transformed public spaces. Each aspect is described in more detail below:

Monitoring: monitoring involves collecting data and observing the performance and usage patterns of the intervention. It helps to understand how the intervention is working, whether it is achieving its intended goals, and whether any adjustments or improvements are needed. Monitoring can include quantitative measures such as footfall counts, surveys or observational studies. It also involves qualitative assessment through community feedback and participation.

Evaluation: Evaluation focuses on analyzing the data and feedback collected to assess the effectiveness and success of the intervention. It involves interpreting findings, identifying strengths and weaknesses, and drawing conclusions about impacts on the community and urban environment. Evaluation provides insights into what worked well, what needs to be improved, and lessons learned for future tactical urbanization initiatives.

Community engagement and feedback: Community feedback is actively sought throughout the tactical urbanization process. Encourage residents, businesses, and other stakeholders to share their experiences, suggestions, and concerns. This can be done through surveys, public meetings, workshops, or online platforms. Involving the community ensures that their perspectives are considered in the evaluation process and informs future decisions.

Management: management involves taking responsibility for the long-term management and maintenance of the tactical urbanization intervention. It ensures that the transformed public space continues to be well maintained and serves its intended purpose. Stewardship may involve partnerships with local organizations or community groups to take responsibility for the ongoing maintenance, planning and promotion of the space, such as watering and litter picking. Designs that are designed to use temporary and reusable products that can be moved or altered are also more likely to be subject to mobile theft or vandalism. If not properly maintained, designs intended to be fun and functional may receive negative attention and ultimately less support for future temporary projects. Planting is susceptible to theft, vandalism, and changing weather conditions, so plant species selection is important, recommending plants that are appropriate for the local climate, abundant, and low-growing (not interfering with visibility).

Finally the results of monitoring and evaluation are obtained and necessary adjustments and improvements are made to the intervention. Identify areas for improvement or modification to better meet the needs and desires of the community. Use the evaluation process as a learning opportunity to inform and guide decision-making for future tactical urbanization projects. If the program is evaluated as not meeting the initially agreed upon goals, the trial may not transition to a more permanent state, but rather require a dismantling

plan.

4.3.6. Outcomes and subsequent impacts

Tactical urbanism's programs are monitored and evaluated and then learned, adjusted, and improved over the course of the program. The first intuitive results fall into two main categories, one is cleanup and the other is permanence.^[52]

(1) Clean up

Restore Site: For temporary projects, such as Play streets setups, all materials should be removed from the site when the project is successfully completed, including any temporary traffic equipment such as signs and cones. If paint or other pavement markings have been applied to the ground, they can be cleaned to restore the site to its previous condition.

Properly Store or Dispose of Materials: Where possible, store and reuse materials such as planters, vertebrae for future tactical urbanization projects as this can reduce costs and waste. Make sure to clean all brushes before storing painted materials so they are ready to be used for future projects.

(2) Perpetuation

A project can become perpetual if it has proven to be successful and has the support of stakeholders, the public, and the municipality (including the City Council). At this point, the capital project planning process should begin. This will include evaluating the project and identifying a way to upgrade materials and create a final, more permanent design.

The outcomes and subsequent impacts of tactical urbanization interventions play a critical role in shaping communities and influencing urban development. Outcomes of tactical urbanization projects can have immediate and long-term impacts, creating ripple effects that extend beyond the specific intervention. The following is a discussion of the outcomes and subsequent impacts of tactical urbanization:

Replication: replication involves replicating successful tactical urbanization interventions in different locations. When an intervention proves to be effective and popular in one community, it can serve as a model for other communities or cities facing similar challenges. This can lead to more flexible zoning regulations, streamlined permitting processes, and the incorporation of community engagement into urban planning practices. The process of replication involves adapting the intervention to the specific context and needs of the new site while retaining the core elements that contributed to its success. By replicating interventions, tactical urbanism can have a broader reach and greater impact on the urban environment.

Add: Add refers to the incremental expansion or enhancement of an existing tactical

urbanism intervention. Once an initial intervention has been implemented and proven successful, additional elements or features can be added over time. This can include expanding the physical reach of the intervention, introducing new programs or activities, or incorporating new design elements based on community feedback and changing needs. Adding allows tactical urbanization projects to evolve and develop in response to changing circumstances, ensuring continued relevance and engagement.

Evolution: Evolution implies adaptation and improvement of tactical urbanism interventions over time. As communities change and urban dynamics evolve, it is critical to continually reassess and update interventions to meet new needs. This may involve modifying the design, planning or management of interventions based on monitoring, evaluation and community feedback. Evolving interventions ensure their continued relevance, effectiveness, and ability to respond to changing challenges and aspirations.

It is important to first document the entire process of a tactical urbanization project. This documentation can serve as a valuable resource for future reference and knowledge sharing. Share project outcomes, lessons learned, and best practices with other communities, urban planners, and policymakers to inspire and guide similar initiatives. Some Tactical urbanism projects have had an impact beyond the scope of specific projects, contributing to a paradigm shift in urban planning towards more responsive, inclusive and people-centered cities.

4.4. Summary of the chapter

This chapter begins by exploring the development of tactical urbanism and related practices in various countries around the world. Tactical urbanism has received a great deal of attention worldwide as a means of addressing urban challenges and promoting urban renewal. Its application in different contexts demonstrates its adaptability and potential for positive change.

Subsequently, comparing China, author study the vein of Guangzhou's urban renewal, and distill that Guangzhou's urban renewal is currently facing the problems of insufficient industrial empowerment, poor policy articulation, and lack of public participation. Therefore, this paper discusses the general application prospects of tactical urbanism in Guangzhou based on the characteristics and potential benefits of tactical urbanism and the current status of urban renewal in Guangzhou, refining the process of tactical urbanism and adapting the proposed, tactical urbanism process of planning-investigation-design-implementation-supervision, evaluation and management. This process achieves improvements in the urban environment through inventory design approaches, low-cost temporary interventions, and

flexible and adaptive tactical implementation. There is also a focus on community engagement and feedback, and by engaging these diverse stakeholders, Tactical urbanism utilizes collective creativity, expertise and resources to create a collaborative and inclusive approach to urban development and placemaking.

CHAPTER5: DESIGN APPLICATION

5.1. Plan

Why choose the Zhuangyuanfang district?

(1) As a microcosm of many old towns in Guangzhou and the whole country

The continuation of urban renewal is not only the continuation of the physical environment, but also the continuation of the connotation of the living environment; not only the continuation of the surface of the form, but also the continuation of the internal structure of the form. Zhuangyuanfang district is in urgent need of renovation, or rather, it is necessary to reverse the situation of the decline of the place through external forces. If this is allowed to go on, this area will only become a lifeless warehouse in the middle of Guangzhou's cultural monuments. This area is close to the Sarcophagus Sacred Heart of Jesus Church, Aiqun Mansion, Beijing Road and the Shangxiajiu Pedestrian Street, and the place itself should provide a backdrop for vibrant urban activities.

Zhuangyuanfang district is a characteristic commercial street with a history of over 700 years, rich in Lingnan history and culture as well as traditional Lingnan material resources, cavalry architecture historical buildings and traditional streets. At the same time, with the rapid acceleration of urbanization, many historic districts are generally facing problems such as low environmental quality and outdated infrastructures, and they can no longer adapt to the needs of social and economic development, which is also referred to as "outdated" in the book *Revitalizing Historic Urban Quarters*. Zhuangyuanfang is not immune to this, like many once prosperous historic districts, it has gradually declined with the development of the times and the aging of its business structure.^[53]

Secondly, the declining Zhuangyuanfang faces many of the same problems as China's older urban centers, such as a lack of green space, traffic congestion, and poor sanitation. It is hoped that the study of the Zhuangyuanfang district can provide a reflection and reference for the renewal of old urban areas in Guangzhou and even in China.

(2) Expectations of the Government and the People

Most Guangzhou residents' memories of Zhuangyuanfang will be stuck in the period when it was at its peak. Due to the high flow of people, Zhuangyuanfang was often characterized by "people bumping into people".

However, as Zhuangyuanfang declined, many people were saddened, and the information about Zhuangyuanfang on the Internet and social platforms was always filled with memories of the time and calls for the transformation of Zhuangyuanfang.

Meanwhile, local residents have been plagued by poor hygiene and traffic congestion for a long time. The government has repeatedly proposed the renovation and renewal of Zhuangyuanfang district in the hope of inheriting the traditional culture and preserving the memory of the city. At the same time, the Yuexiu District Government put forward the long-term goals of improving the environment, improving the facilities to realize the transformation and upgrading of the industry, and building a pedestrian community in the *Renmin South Historical and Cultural District Protection and Utilization Plan* for the Zhuangyuanfang community.

(3) Problems are prominent and difficult to solve

After visiting and researching, it was found that although the neighborhood of Zhuangyuanfang district has a certain amount of human activity, including a certain number of stores and activities for tourists and nearby residents, it is not devoid of vitality. However, among the many factors that make the area lose its vitality, the "housing to warehouse" is undoubtedly the most fatal one. The poor quality and lack of repair of the buildings in Zhuangyuanfang district did not make them very competitive as rental housing, but the stores on the main street needed storage space, so they rented them out as warehouses. Therefore, the low quality of the buildings is also a factor that induces "conversion". At the same time, the emergence of the phenomenon of "Housing to warehouse" will threaten the living environment itself, leading to a vicious circle. It seriously affects the hygiene of the living environment and the traffic condition, and even poses traffic hazards. Gradually, an area loses the possibility of self-renewal.

The Guangzhou government and related organizations have repeatedly proposed the transformation of the Zhuangyuanfang district, but many times stopped with the research and design stage. 2018 in the *"Renmin South Historical and Cultural District Protection and Utilization Plan"* mentioned the micro-renovation of the Zhuangyuanfang district, but due to the complexity of the structure of the neighborhood, the many departments involved, a wide range of stakeholders and the transformation of the difficult source of funds and other issues, the transformation of Zhuangyuanfang was again put on hold. It can be seen that traditional planning and design can no longer solve the social problems faced by the new normal, so the urban renewal of the Zhuangyuanfang needs to introduce new methods and approaches.

5.2. Investigate

5.2.1. Introduction

The Zhuangyuanfang district is located on the edge of Guangzhou's Yuexiu Old Town,

near the Liwan district and close to the traditional central axis of Guangzhou.(Figure 5-1) Zhuangyuanfang is an inner street manor house on Renmin South Road, with a history of more than 700 years. Zhuangyuanfang street has a total length of 260m, with a width of about 5 to 7 meters, and the narrowest part of the street is only 2 meters. The Zhuangyuanfang district is centered on the inner street Zhuangyuanfang, bounded by Dade Road in the north, Yide Road in the south, Renmin South Road in the west, and Tiancheng Road in the east, with relatively intact architectural and historical features from different periods, which is why this area is called the "Zhuangyuanfang" district. Zhuangyuanfang district is a typical commercial area in the old part of Guangzhou, with a favorable location near the Shangjiu Commercial District in the west, the Beijing Road shopping district in the east, and the Yanjiang Road Pedestrian Street in the south.(Figure 5-2)

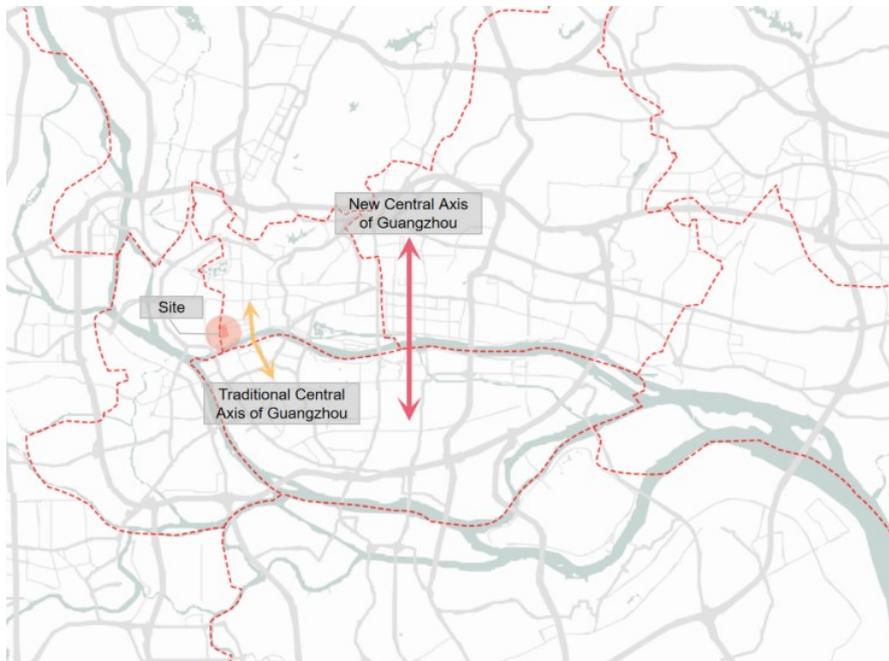


Figure 5-1 Location of Zhuangyuanfang district (Source: author)

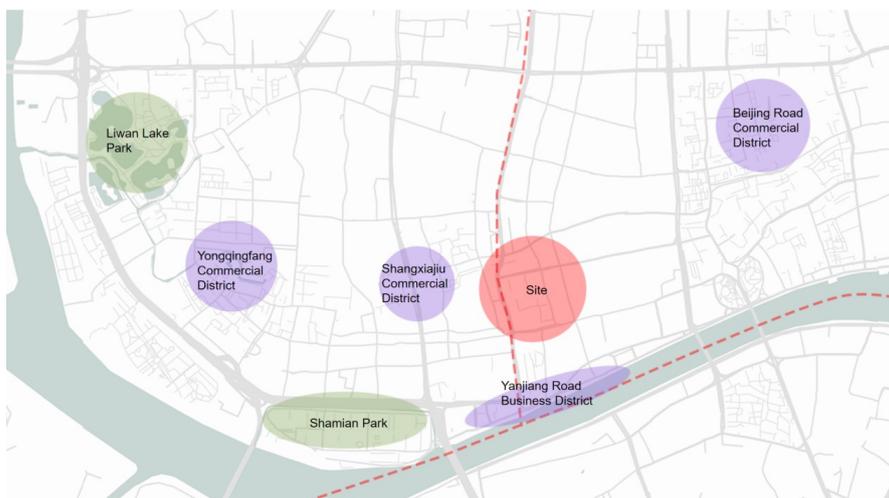


Figure 5-2 Zhuangyuanfang as a typical commercial area in the old city (Source: author)

5.2.2. History and Culture

(1) The Ming and Qing Dynasties

Guangzhou's early urban construction activities were closely linked to the changes in the Pearl River shoreline, and Zhuangyuanfang was also formed during the southward shift of the Pearl River shoreline and the expansion of the city. (Figure 5-3) The history of the Zhuangyuanfang district is closely related to the change of the Pearl River shoreline and the formation and expansion of the Guangzhou city site.

During the Ming Dynasty, the Pearl River shoreline shifted southward to the vicinity of Yide Road, and the Zhuangyuanfang district was located in the area north of Zhulan Gate and east of Taiping Gate, with the lowest terrain, and was often flooded during the high tide of the flood season. In order to protect the south of the city to the Zhuangyuanfang district mainly commercial street from the threat of flooding, in the south of the city to add the outer city, the Zhuangyuanfang district neighborhood by the ordinary market evolved into the south of the city's commercial street, so far, Zhuangyuanfang district of the overall pattern of the basic formation.

By the Qing Dynasty, the general layout of Guangzhou City followed the urban form of the Ming Dynasty, but as the Pearl River shoreline continued to move south, the Qing Dynasty Shunzhi four years (1647) to build the east and west two wings of the city to the south through the river, each with a gate, which is the last time in the history of the city of Guangzhou city construction. The commercial area of Zhuangyuanfang became the intersection of the commercial area within the city and the Xiguan commercial area outside the city.

At this time, the commercial district of Zhuangyuanfang, which was dominated by handicraft workshops, was very prosperous, mainly dealing with clothing, embroidery, jewelry and other products with exquisite skills and craftsmanship. It was widely known. At the end of the Qing Dynasty before the war, Guangzhou's foreign exchange trade increased, the handicraft industry flourished, folk clothing artists gathered here, settled here, the production here, the formation of the clothing industry which is the first climax of the development of Zhuangyuanfang.

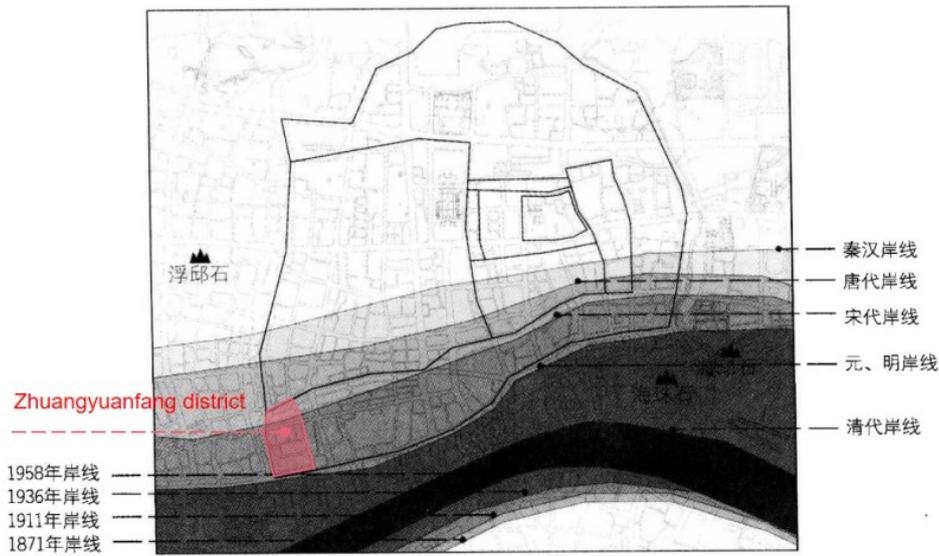


Figure 5-3 Map of Pearl River shoreline changes (Source: The Past of the Commercial Capital: A Handbook for the Study of Guangzhou's Urban History)

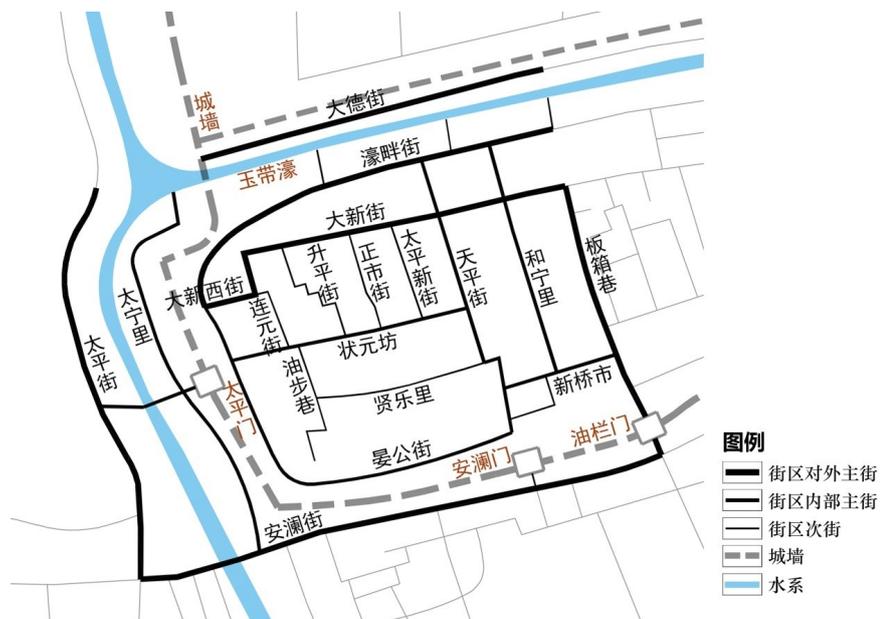


Figure 5-4 Qing Dynasty Street Level Distribution Map (Source: reference [54])
 (2) Republican Period (1912-1949)

During the Republican Period, the southern military government ruled Guangdong, and Guangzhou began urban renewal. A series of urban construction activities, such as tearing down city walls, building roads, building parks, setting up markets, and clearing property rights, modernized the city. As a result, a new order was established in the road network pattern of Zhuangyuanfang district.

At this time, the embroidery and gold and silver jewelry industries were still very prosperous.^[55] With the Republic of China's improvement movement, opened up a large

number of riding commercial streets, Zhuangyuanfang commercial outward, a large number of businesses to the infiltration of Taiping South Road, Zhuangyuanfang district within the commercial status of the decline.

(3) Early stage of China to the reform and opening up (1949-1978)

The founding of China made Zhuangyuanfang district a reversal of the downturn during the war, and entered a new round of development and construction; the early stage of the founding of new China, at this time based on the socialist public ownership and planned economy, the development of commerce was strictly controlled by the government. The state has transformed the industry of Zhuang Yuanfang, and the opera costumes, embroidery store for state-run transformation. However, during the "Cultural Revolution", the normal social order was seriously disrupted. This phase of urban form change was given a strong administrative color. At the same time after the founding of the country, the feudal and capitalist economy completely disintegrated, most of the private property into public ownership, the newly established enterprises and public institutions have begun to encircle the traditional lot, forming a number of units of land pattern.

(4) Reform and opening up into a period of rapid development (1978-2007)

The reform and opening up in 1978 made Guangzhou once again a front-runner in development, and the transition from a planned economy to a market economy achieved a qualitative leap in the Zhuangyuanfang district neighborhood. Guangzhou, as the frontier of reform and opening up, was endowed with countless national preferential policies to promote economic development. With the environment of rapid economic development, policy support and good spatial location during this period, Zhuangyuanfang once again became a nationally renowned commercial character street in line with the trend of young people. 1990, the government invested heavily in the Zhuangyuanfang old houses, streets fully renovated, so that Zhuangyuanfang has become a professional street for students' cultural goods with historical and cultural, tourism and tourism, leisure and shopping and business characteristics, so that the old streets and lanes renewed their vitality. . Through its advantageous location, low rent and small-scale business model, it attracted a large number of merchants and consumers. This was the second development climax of Zhuangyuanfang. The spatial form of the Zhuangyuanfang district did not change significantly during this period.

(5) Current Status

The year 2007 was a turning point in the decline of the Zhuangyuanfang district This year, the neighborhood of Zhuangyuanfang was included in the protection of the historical and cultural city. At the same time Zhuangyuanfang experienced the second fire regulation,

because the fire conditions did not pass, many stores were forced to close, and commercial popularity declined dramatically. The government began to micro-update from a mass demolition construction model to a preservation model and a conservation model. The development of the wholesale industry in the neighborhood is still showing an upward trend, while the Internet began to develop rapidly, the retail situation is obviously declining, and relative to the development of other streets in Yuexiu District, Liwan District, lagging behind significantly. Zhuangyuanfang began to decline. The popularity of the Zhuangyuanfang district began to decline, and merchants began to turn to the online model, and even needed the income from online stores to support the expenditures of brick-and-mortar stores. Offline stores became warehouse storage or physical displays. Nowadays, due to the large number of aborigines moving out of the neighborhood around Zhuangyuanfang, many residential buildings are rented out as warehouses, and most of the original stores in the surrounding streets have been turned into small warehouses for e-commerce. This phenomenon of "Housing to warehouse" has further deteriorated the environment of the neighborhood, leading to certain health and fire problems, resulting in a vicious cycle in the neighborhood.

5.2.3. Upper Planning Analysis

In the *Renmin South Historical and Cultural District Protection and Utilization Plan (2018)* issued by the government of Guangzhou City, the site of Zhuangyuanfang is included in the cultural protection zone, which belongs to the Renmin South Road Historical Protection Zone and Cultural Zone (Figure 5-5) . The framework for the protection of historical and cultural cities is based on "one city, two zones and multiple districts". The establishment of historical and cultural cities is to protect history and culture and improve the environment of the city and focus on the overall protection of historical and cultural cities. The cultural connotation is used to revitalize the economy of the inner city and to continue the social and humanistic lineage.

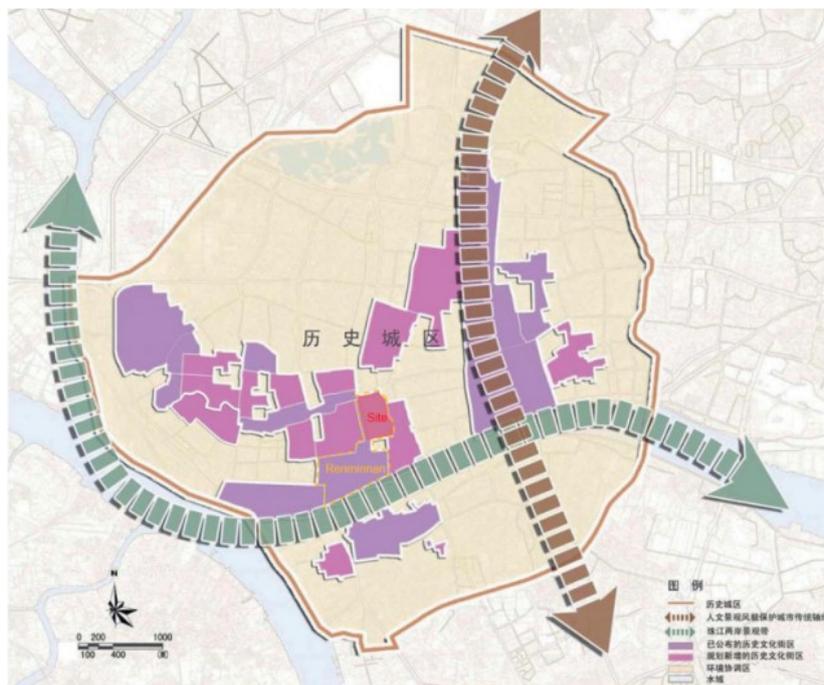


Figure 5-5 Guangzhou Historical and Cultural City Protection Planning (Source: Guangzhou Historical and Cultural City Protection Planning)

Remin South Historical and Cultural District is the south gate of foreign trade of Guangzhou and even China in ancient times, and it is the witness place for the development of commerce and foreign trade of Guangzhou in ancient and modern times. It is the witness place of Guangzhou's business development and foreign trade in the past and present. It is also one of the typical examples of Lingnan architectural art in Guangzhou, which is a masterpiece of Lingnan architectural art. In recent years, the Renmin South Road Historical and Cultural District has gradually become a key area for the renewal of the old city. The protection scope of the Renmin South Road Historical and Cultural District includes the core protection scope and the construction control zone, covering an area of 40.39 hectares. It is emphasized that the revitalization and preservation of the Renmin South Road should be harmoniously integrated with the revitalization and preservation of the area. In addition, specific protection requirements are proposed for the Renmin South Historic District:

(1) Scope of protection

There are two main types of protection areas, the core protection area and the construction control area. The western part of the Zhuangyuanfang district belongs to the core protection scope, and the rest are located in the construction control area. New buildings in the core protection area are strictly controlled by the necessary new and expanded buildings are controlled below 12 meters, and new and expanded buildings are controlled within 18 meters of the construction control area.

(2) Historical and cultural value

The historical and cultural values in the neighborhood are divided into tangible cultural preservation and intangible cultural heritage preservation. The tangible culture is mainly historical buildings, traditional style buildings, ancient trees, traditional streets and alleys. Intangible cultural heritage includes traditional handicrafts with characteristics of the Cantonese culture, such as costumes, Cantonese color, Cantonese embroidery, jade carving and ivory carving in the Zhuangyuanfang district, as well as the culture of celebrities in Lingnan centered on Zhuangyuanfang.

(3) Conservation measures for building categorization

The remedial measures for the four categories of buildings are different, and the main measures to be adopted are "restoration, improvement, remediation and renewal". For the heritage conservation units and immovable cultural relics in the historical and cultural district, the protection and remediation method of "restoration" is adopted. The main means include daily maintenance, protection and reinforcement, repair of the current situation, and key restoration, etc. The main facade, main structure, plan layout, characteristic decorations and elements of the historical environment shall not be changed. For historical buildings and clues, the "improvement" approach is adopted. The interior of such buildings can be improved and renewed according to functional needs, and cultural display and public service functions can be introduced appropriately. The main facade and the parts, materials, structures and decorations that reflect the characteristics of the historical style shall not be changed. For "remediation", necessary internal upgrading is allowed to adapt to the requirements of the use function; expansion, alteration and in-situ reconstruction of dilapidated buildings are allowed if necessary. The Preservation Plan provides different restoration and preservation plans to match different need buildings, so as to improve and preserve the overall landscape of the historic district. For general buildings in the Historic Districts that are in conflict with the traditional landscape, the main approach is "renewal". This can be done by changing the appearance of the façade, or by lowering the building height or changing the shape of the building in a way that harmonizes with the overall traditional style, while demolition can be considered for some buildings of great impact and poor quality.



Figure 5-6 Zhuangyuanfang district renewal and preservation plan (Source: Renmin South Historical and Cultural District Protection and Utilization Plan, further by author)

5.2.4. Analysis of current situation

5.2.4.1. Transportation

(1) Street traffic conditions

The district is directly connected to the Inner Ring Road through the main road, which is convenient to reach various administrative districts; it is convenient to reach the Guangzhou Ring Road through the Inner Ring Road, which makes the external traffic more convenient. The Renmin Elevated Road on the west side of the neighborhood was completed and opened to traffic in September 1987, and is an important north-south traffic artery in the old part of

Guangzhou. The elevated road exit on Daxin Road on the north side ensures the accessibility of the area, but also hinders the pedestrian traffic on both sides of Daxin Road.

The district is well served by public transportation accessibility with convenient subways, buses and terminals. Four metro stations, Metro Line 6 Yide Road Station, Culture Park Station, Metro Line 1 Ximenkou Station and Metro Line 2 Haizhu Square Station, are located around the neighborhood, with Yide Road Station being the closest to the neighborhood, located on the south side of Daxin Road, close to the boundary of the site.



Figure 5-7 Street traffic conditions (Source: author)

(2) Street System

According to the width of the street and its position and role in the city street system, the street system of the Zhuangyuanfang district can be divided into four levels: Main Street,

Secondary Street, Community Alley, and New Group Road . Main streets and secondary streets divide the neighborhood, and the roads are wide enough to carry motor vehicles; Community Alley is narrower, and the streets mainly used by residents are cleaner and tidier, while the streets mainly used for wholesale trade are more cluttered. The street system in the area is generally smaller in scale, with fewer roads carrying large freight traffic. However, due to the factor of its special function as a warehouse, the internal streets and lanes are filled with workers, carts and goods placed on the side. Alleys and new cluster roads are the internal traffic that connects the interior of the site to the more distant and important street organization streets. The new group roads are roads formed by the sequential reconstruction of the buildings in their original plots to meet the traffic needs of the site, with no clear boundary lines and clearly not forming a system with the first three roads.



Figure 5-8 Street System (Source: author)

After the visit and investigation, the width of the main street of the neighborhood is basically between 1-7 meters, while the interior of the neighborhood mainly consists of 2-3-

story row houses, and the D/H of the street is between 0.2-1. Due to the haphazard construction of some residents, these structures affect the lighting of the streets to a certain extent, and at the same time lead to the overall spatial clutter of the streets. However, the overall street network structure of the neighborhood still represents the traditional Guangzhou Old Town.

Road	Zhuangyuanfang	Youbu Alley	Xianleli	Zhengshi Street	Shengping Street	Lianyuan Street	Yangong Street	Meifangli	Shengping New Street
Photo									
Figure-ground									
D (Road width)	2.4-8.9m	3.0-5.0m	2.5-6.8m	2.1-5.7m	1.0-5.5m	1.4-8.0m	2.8-7.1m	1.0-7.4m	4.1-5.8m
D/H	0.37-1.27	0.42-0.71	0.35-0.97	0.3-0.81	0.14-0.78	0.28-1.14	0.2-0.5	0.14-1.05	0.2-0.82
Section									

Figure 5-9 Street scale (Source: author)

5.2.4.2. landscape

The analysis of the internal landscape elements of Zhuangyuanfang district shows that the main existing landscape of Zhuangyuan Square includes cultural landscapes such as the gate and the ancient well. The green landscape mainly consists of large trees and some flower beds and potted plants to form a point-like landscape. There is no centralized green space needed by the community, only a children's park in the south, but due to its type of idleness and transportation accessibility, it does not provide residents of Zhuangyuanfang with a centralized green space for recreation and play.



Figure 5-10 Survey of the landscape (Source: author)

5.2.4.3. Architecture

(1) Age of buildings

The overall architectural structure of the neighborhood is relatively well preserved, but some of the buildings have deteriorated facades and roofs. Many residents have also undertaken some self-initiated modifications to preserve the original roofs through aluminum roofing. Meanwhile about two dozen buildings were abandoned, mostly concentrated within the streets and alleys of the Zhuangyuanfang district neighborhood due to structural deterioration and the age of the enduring facades. These buildings have been largely renewed through five periods of replacement, and the distribution of existing buildings shows a mottled pattern. An effective count of the approximately one thousand existing buildings in Zhuangyuanfang district was made, of which 87 buildings were built during the Qing Dynasty, accounting for about 8% of the neighborhood; 396 buildings were built during the Republican

Period, accounting for 35% of the neighborhood; 312 buildings were built during the early period of the founding of the country, accounting for 27% of the neighborhood; 286 buildings were built during the early period of reform and opening up, accounting for 25% of the neighborhood; 52 buildings were built during the nineties up to the present day. The buildings of the Republican period and the early period of the founding of China are the most numerous, accounting for almost 2/3 of the total number of buildings.



Figure 5-11 Age of buildings (Source:from [55], futher by author)

(2) Building Types

The Zhuangyuanfang district, with the main street of Zhuangyuanfang as its core, is crisscrossed with streets and alleys, filled with low-rise and simple bamboo houses, and with

Chinese and Western riding-storey buildings along the street, which reflect the traditional architectural style of Guangzhou and form the historical and cultural background and texture of the city.^[56] However, due to the lack of protection and renewal, the Zhuangyuanfang district is facing a severe test as it is gradually experiencing the aging of its physical structure, the aging of the community, the low-end commercial function, and the economic recession.

The Zhuangyuanfang district has a wide range of building types, and the architectural forms formed by different buildings under specific socio-economic and policy contexts vary, reflecting the characteristics of the times. Combining the architectural style, building function and other characteristics, the buildings in the neighborhood can be broadly classified into six types: Commercial arcade, Commercial building (Non-arcade), Row residential, Collective building, Public single building, and Large scale complex.

Type	Site	Example	Characteristic
Commercial arcade	Mainly distributed on both sides of Daxin Road, east of Renmin South Road and north of Yide Road		The arcade building is a representative of Lingnan characteristic buildings, mainly adopting the mode of commercial on the ground floor and residential on the upper floor.
Commercial building (Non-arcade)	Mainly located on Tiancheng Road and Zhuangyuanfang Main Street		Since arcades not only promote commerce, but also affect road construction and green planting, the government has made relevant regulations to prohibit the construction of arcades on some small-scale streets. At the same time, the commercial vitality of areas without arcades will be relatively low.
Row residential	Located inside the Zhuangyuanfang district, usually connected to secondary roads		The intensification of land space is achieved with the architectural form of "large depth, small surface width", which solves the problem of increasing population. The downside is that there are potential safety hazards.
Collective building	Irregularly distributed in Zhuangyuanfang community		Unlike a single-family building, it is not surrounded by independent roads, but only has roads on one or both sides. Most of the blocks are for residential purposes, and there are also some industrial storage uses, which are relatively large in size.
Public single building	Located near Yudaihao		It is used by citizens and has public space inside. Most of the blocks are used by religions, schools and hospitals.
Large scale complex	Close to Yide Road and Yangong Road, open to the city		As a modern commercial complex newly built after 1990, it mainly provides clothing-related business services.

Figure 5-12 Examples of building types (Source:author)



Figure 5-13 Map of Building Types (Source:from [55], further by author)

One of the main types of buildings is the commercial/residential street house, tracing back to the architectural prototype, the most important type is the bamboo house, with a sloping roof, wooden tiles, brick walls and stone foundations, with a narrower face width of only one room, and a depth that varies depending on the length of the site. Usually there are five houses in depth, with the ratio of width to depth between 1:3 and 1:5, and the layout is like a section of bamboo, so it is called a "bamboo house".

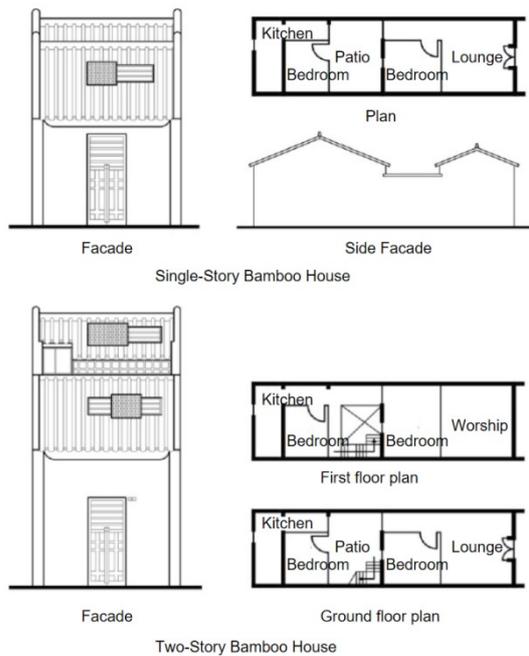


Figure 5-14 Typical Bamboo House in Qing Dynasty (Source: *Guangdong Folk House*, Lu Qi)

5.2.4.4. Industrial situation

The distribution pattern can be summarized from the functional layout of Zhuangyuanfang, which is dominated by commercial activities along the main road, with the interior being predominantly residential. The existing major industries in Zhuangyuanfang district are mainly wholesale and retail. The main industries include garments, hardware, paper products, printing equipment and packaging. The function of the main street of Zhuangyuanfang district has shifted from the former glorious handicrafts and retailing to industries based on warehousing and garment wholesaling. Due to the impact of e-commerce, most of the stores have transformed into online stores, focusing on online sales and offline as warehouse storage and display.^[57] Only in the Yide Road subway station, Zhuangyuanfang northwest area (near the direction of the Shangxiajiu commercial district) rely on the larger urban flow and core warehousing area can get some commercial vitality. Zhuangyuanfang internal block is also more and more residential buildings converted and rented out for warehousing, resulting in a long-term malignant development of the neighborhood business. A large number of pulling and unloading vehicles occupy street space, goods are stacked, and the street is inefficiently utilized. And storage also brings serious fire hazards. And the garment industry was affected by e-commerce, and the surrounding warehouses, goods, and unloading vehicles led to further environmental degradation. In recent years, due to the rise of

tourism, in the north of Zhuangyuanfang district, the tourism and cultural business forms have begun to develop, and the settlement of homestays and cultural consumption trends have emerged.



Figure 5-15 A:Business Vitality Map B:Industrial Statistical Tables (Source:author)





Figure 5-16 Industry Distribution Map (Source:author)

5.2.4.5. Public open spaces and activitie

Zhuangyuanfang district has few open spaces and a relatively single form due to the physical conditions inside the neighborhood. Mainly point distribution, space type to linear space, followed by some major use of street intersections will form a certain amount of open space, to provide certain municipal services as well as open space. Lack of open space within the neighborhood, while failing to provide enough open space and space left behind.

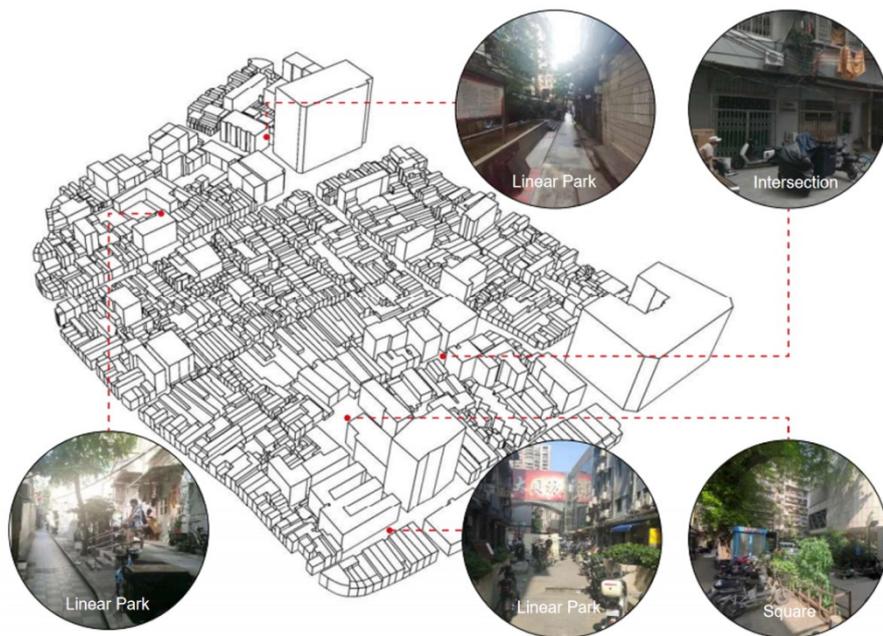


Figure 5-17 Open space in the Zhuangyuanfang district (Source:author)

Since the neighborhood is not a single residential or commercial function, the occupational composition of the people in the neighborhood is more diverse, including retired elderly, tourists, office workers, workers, and students. In terms of age composition, about 10.7% of the population is over 55 years old, 27.4% is middle-aged between 35 and 54 years old, 49.2% is young people between 19 and 34 years old, and 12.7% is children under 18 years old. The area is mainly in the garment industry as well as warehousing, with a large

number of workers with relatively low educational attainment. Through the analysis of the interaction activities in the neighborhood, the research learns that the necessary activities in the neighborhood are going to and from school, going to and from work, operating stores, shopping, delivering goods, etc., and the activity places are schools, work units, and stores; the spontaneous activities mainly include relaxation, walking, chatting, and outdoor fitness, etc., and the activity places are concentrated in the space of the road, the node space of the street, and the space of the community plaza, which are the key links of the interaction space creation in the process of renewal and transformation. Social activities mainly include children's gathering and playing, neighbors' leisure activities, etc. The activity places are concentrated in the fragmented green space of streets and lanes, existing open space, and spontaneously formed activity center space, which is an effective space for organizing collective activities, among which the large-scale surface area-type space has greater creativity.

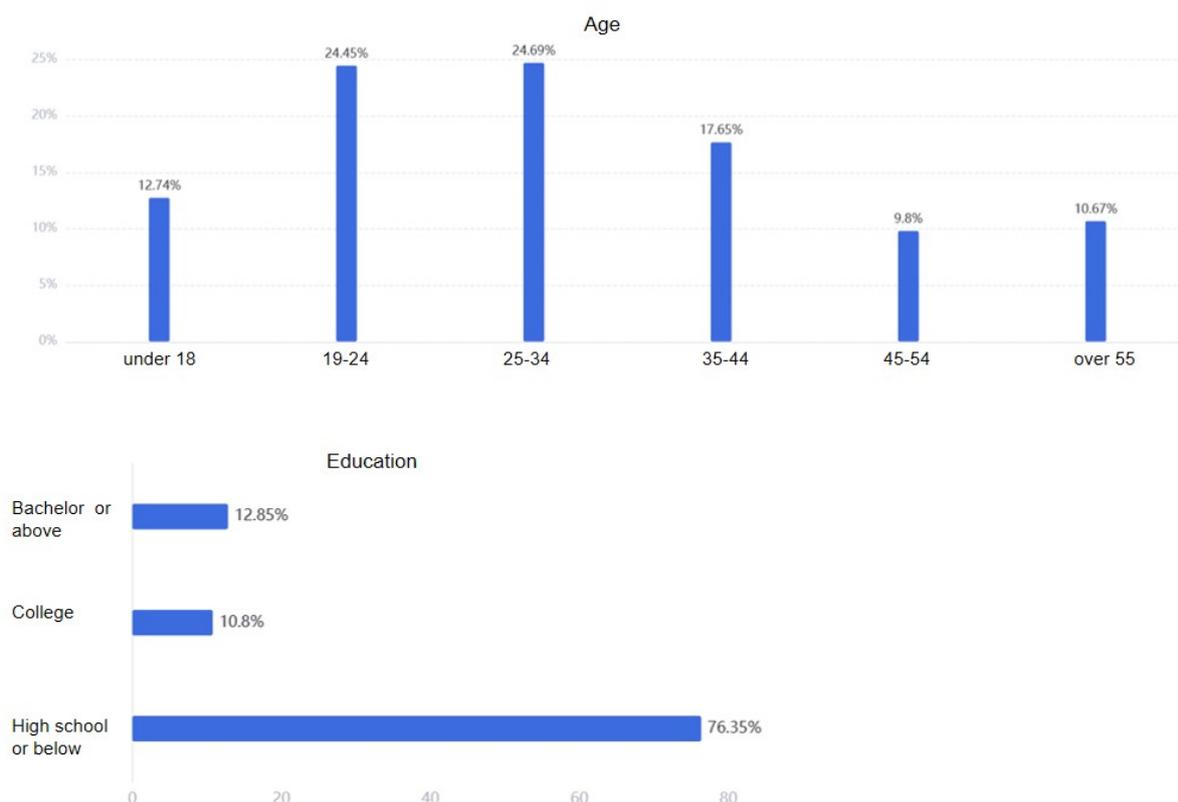


Figure 5-18 Demographic and Educational Survey (Source:author)

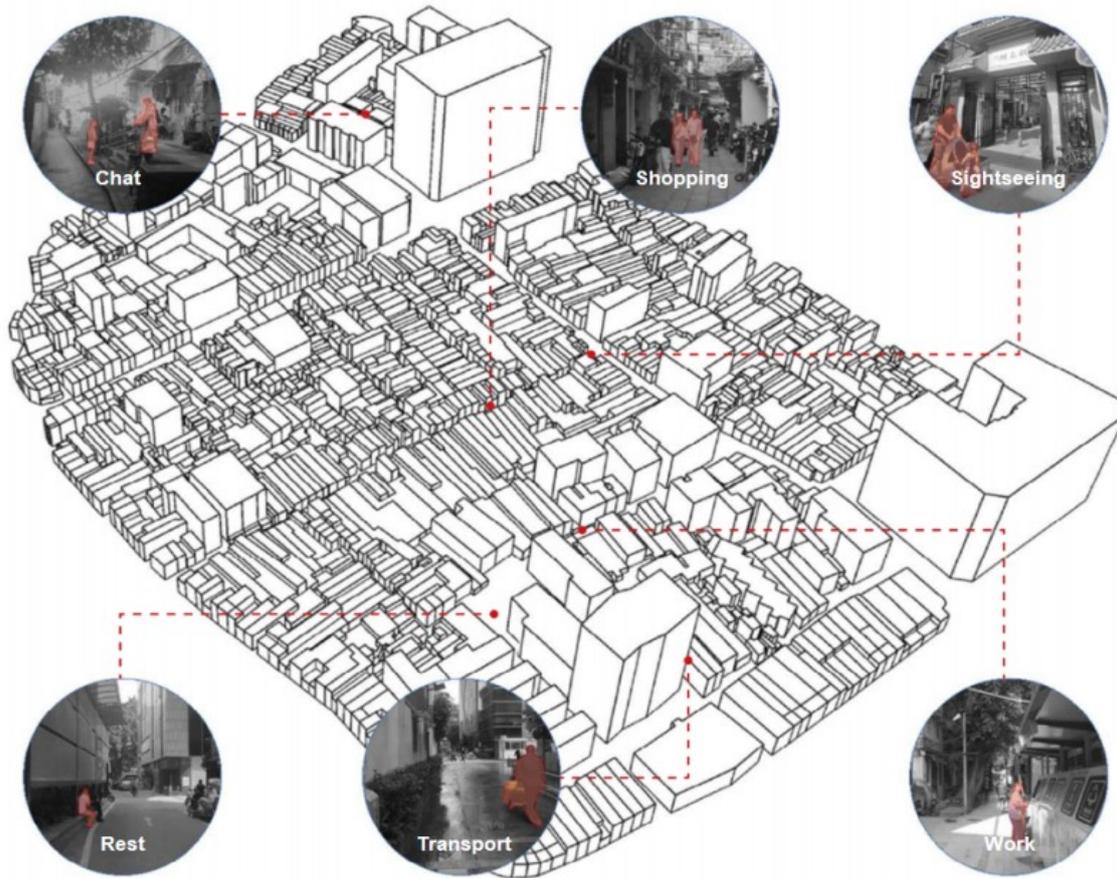


Figure 5-19 Activities in district (Source:author)

5.2.5. Neighborhood Public Opinions

First of all, through the network platform, ordinary citizens' views on Zhuangyuanfang were investigated, and some of them were interviewed in detail. By making statistics on the high-frequency words of Zhuangyuanfang on some network platforms, the obtained high-frequency words roughly express the general impression of the citizens on Zhuangyuanfang and the current status quo. Includes shopping, costumes, warehouses, memories, decline, and more. Generally speaking, as a historical district with extremely prosperous market economy from the late 1990s to the early 21st century, it has gradually declined and gradually become people's memories.



Figure 5-20 Word frequency statistics for Zhuangyuanfang (Source:author)

Considering the high proportion of elderly people and workers in the community, it is difficult to fill out the questionnaire online, so the questionnaire was partially filled out offline. The questionnaire was designed to understand the current situation of the community, including transportation, health and public infrastructure. It also collects the willingness of different groups mainly including residents, merchants and citizens to remodel. Finally 160 questionnaires were collected and 132 were valid. The related documents are shown in the appendix. Among them, due to the development of the warehousing industry, there is a higher proportion of males among the merchants as well as workers studied. To summarize the opinions and views of residents, merchants, citizens and experts on the future transformation of Qiangyuanfang, in order to provide a reference for the subsequent design.

First of all, regarding the most attractive feature of Zhuangyuanfang, more than 80% of the micro-renovation direction is its location and 10% is its history and culture, while its architectural features and environment and other elements have become a minus point of Zhuangyuanfang district with the decline of the neighborhood. Different groups of people have different views on what needs to be improved in Zhuangyuanfang. Residents are mainly concerned about environmental hygiene and fire safety, and there is some conflict with another group of workers in the warehousing industry, who believe that their goods pose a safety hazard, and that the large number of people is a burden on the neighborhood's sanitary environment. The commercial tenants are mainly concerned about the traffic situation with the site, by the streets and alleys as well as the scale of the external streets, its goods are difficult to transport by motor vehicles, only through the use of small flatbed trucks for transportation. Citizens were more concerned about the architectural condition of the Zhuangyuanfang in relation to the urban interface. At the same time some hardware and packaging industries are not compatible with the flow of people from the Shangshangjiu commercial area.

Urban renewal questionnaire in Zhuangyuanfang

Hello! I'm a student from the architecture. The purpose of this questionnaire survey is to understand the current situation of the community and collect the willingness and direction of the transformation, so as to provide suggestions for the construction of a better community. This questionnaire is filled in anonymously, and your information will only be used for academic research. You are welcome to give comments or suggestions on relevant issues. Thank you for taking time out of your busy schedule to fill it out!

1. Are you from Zhuangyuanfang district?[single choice]*
 Resident Entrepreneurs, Tenants Citizens Around Other

2. Your gender is [single choice] *
 Man Woman

3. Your age is [single choice] *
 18 below 18-30 31-55 55 +

4. What is your overall impression of the Zhuangyuanfang district?[single choice]*
 Very good Good Normal Bad Very Bad

5. Your impression of the Zhuangyuanfang district [Multiple choice] *
 Guangzhou Historical and Cultural Block Once a prosperous commercial street Clothing storage street There is no obvious tendency Other

6. What do you think is the most attractive part of the Zhuangyuanfang district?[single choice]*
 Architectural Style Business Match Historic Culture Assanation Location Traffic Other

7. What do you think is the most important area that needs to be improved in the near future?[single choice]*
 Transport Assanation Business Match Architectural Style Fire Safety Other

8. What do you think are the main problems in the landscape style of Zhuangyuanfang district?[multiple choice]*
 Has a Poor Health Environment Billboard Clutter The Building Layout Is Messy The Appearance Of The Building Is Not Beautiful Lack Of Characteristic Landscape Lack Of Green Landscape Other

9. What public service facilities do you think are missing in the community?[multiple choice]*
 Commercial Facilities Children's Amusement Facilities Cultural And Entertainment Facilities Public Green Area Sports And Fitness Facilities Facilities For Respecting The Elderly Parking Space Other

10. In order to further improve the quality of the community, you hope that the priority type within 3 years is [multiple choice] *
 Environmental remediation (sanitation, fire protection and other environmental governance, wall cleaning and maintenance, improve the door logo) Community greening (greening configuration, greening facilities, plant configuration) Architectural exterior decoration (exterior wall decoration, anti-theft net renovation, air conditioning position renovation, roof decoration) Characteristic construction (public space, public art, wind and rain corridor, entrance archway, building greening) Building facilities upgrade (install elevators, one meter for one household, pipeline gas) Public facilities improvement (rainwater and sewage pipe diversion, parking facilities, non-motor vehicle facilities, intelligent management, express delivery facilities)

11. Overall, what is your attitude towards the micro-transformation of the community?[single choice]*
 Very Supportive Support Normal Nonsupport Objection

12. If you have the chance, which way do you like to participate in the renovation of Zhuangyuanfang district [Multiple choice] *
 Offline Seminar Network Opinion Collection Volunteering Temporarily Not Involved Other

Figure 5-21 Urban renewal questionnaire in Zhuangyuanfang (Source: author)

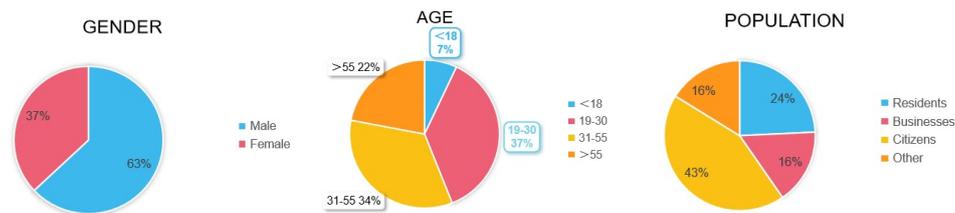


Figure 5-22 Sample questionnaire (Source:author)

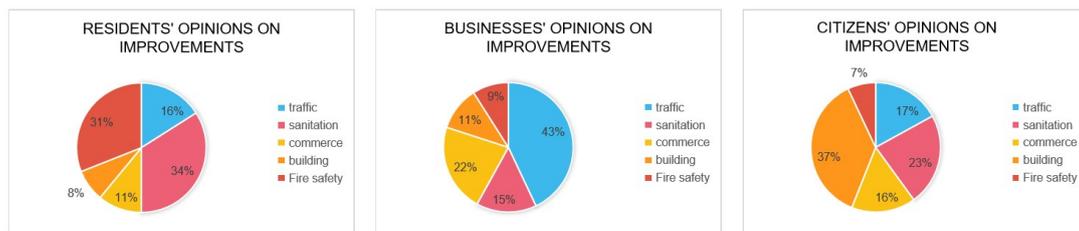


Figure 5-23 Selected results of the questionnaire (Source: author)

Combining interviews and questionnaires, this paper summarizes and refines the main problems reflected by different groups. Residents are mainly more concerned about issues related to the physical environment of the community, such as the mixing of pedestrians and vehicles within the Zhuangyuanfang district neighborhood, and the dilapidation of the buildings. They also hope that the government will introduce appropriate policies, such as funding, to help them improve their neighborhood. Due to the backward material conditions, the percentage of aboriginal people living in the Zhuangyuanfang district now is not high;

most of them are relatively weak economically and are tenants working in the vicinity of the Zhuangyuanfang district. Most of them are economically weak and work in the neighborhood, and they generally lack community identity and are not interested in culture.

Among the merchants, there are two groups. One is mainly in the warehousing, packaging and hardware industries, and their concern is the surrounding transportation environment. They are also concerned about the increase in rent due to urban renewal and are not interested in the overall environment of the neighborhood. The other group is the traditional culture-related clothing and new culture-related businesses in the northern part of Zhuangyuanfang, such as bed and breakfast owners, who hope that the government will introduce policies to help improve the industry and believe that urban renewal will provide opportunities for the community and their own development.

The public is concerned that the zhuangyuan district, as a bustling commercial street in the past, carries the memories of many people in old Guangzhou. But now as a storage street, its declining history and culture remains a great pity to most citizens. The decline of this place has also led to the dilapidation of the buildings as well as the poor hygienic environment. It has a long history and a rich traditional culture of Cantonese embroidery, opera, costumes, celebrity culture, trade and so on. Perhaps it lacks an opportunity to be re-understood and presented.

There are many reasons for its decline that are mainly considered by experts, including problems such as backwardness of industry and physical environment. Its location, economic, historical and cultural values make it necessary to study the current situation cautiously, to improve the social governance heritage under the concept of inherited culture, and to find a path of self-renewal for the future of Zhuangyuanfang district.

The government, on the other hand, believes that Zhuangyuanfang is facing problems such as cultural decline and health and fire safety, which are submitted to be solved. However, its complex urban fabric, complicated property rights and sources of funding all limit the implementation of the plan. The government now hopes to collect public opinion through new methods, such as micro-renovation, in order to carry out a phased urban renewal of the Zhuangyuanfang district.

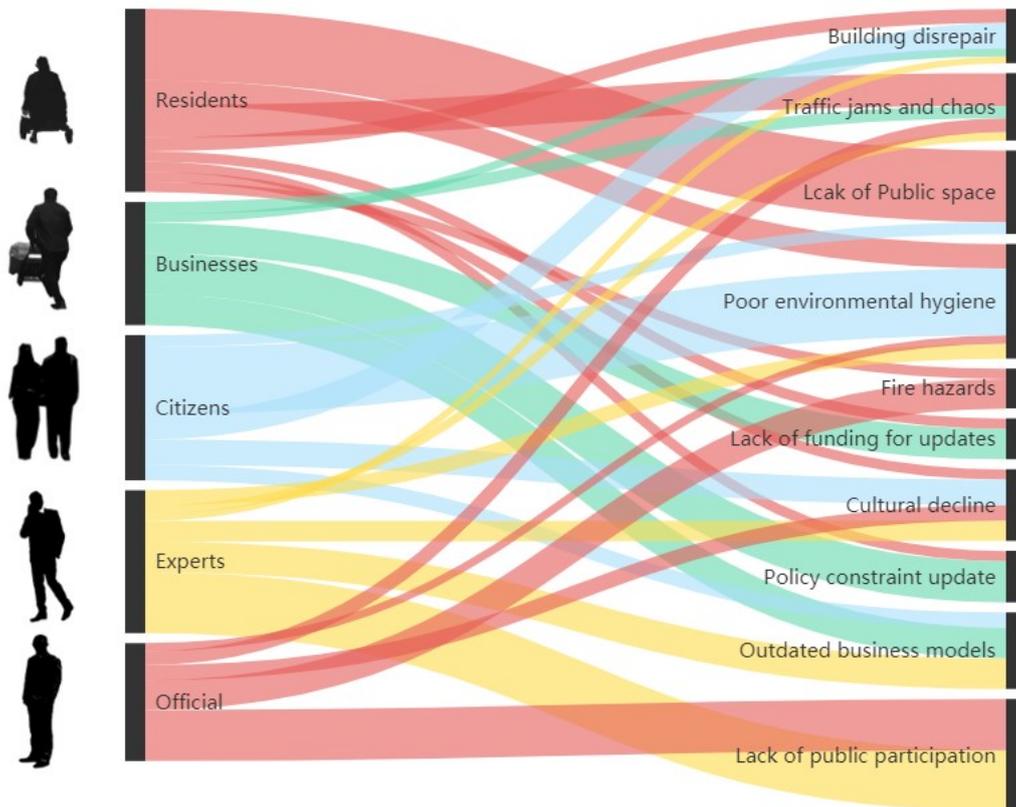


Figure 5-24 Opinions of different groups (Source:author)

5.2.6. Summary of issues

Physical space:

(1) Insufficient space for public activities and lack of green space

The main activity space of the district on streets, which were originally very narrow in scale and have a small number of open nodes. In addition, most of the businesses near the function are wholesale and retail, there are also many goods and carts are piled up in the original narrow streets and alleys, which further compresses the public space for residents. There are also many shared bicycles parked indiscriminately, resulting in streets that are narrower than before. Activities are limited by the existing conditions in the neighborhood, and residents can only do some activities on the street or move out of their seats and chat at the entrance. There is no place for children to play there, and the basic playground is in the street, and mixed goods traffic in the street is also a safety hazard for children. Streets have a monolithic green planting, with only a few trees present, and the majority of the green street consists of potted plants that the residents have made their own. There is a lack of uniform placement and guidance on greening the neighborhood. However, the existing streets are narrow, and how to incorporate uniform greenery with the scale of the existing streets and

some open or walled spaces is a key issue.

(2) Aging of the Built Environment

Most of the buildings in the district are Republican buildings consisting of row houses, arcades, and general stores, and the surrounding structural infrastructure is aging, poorly maintained, and lacking in modern amenities. At the same time the irregular development of the buildings has led to excessive building density, small spacing between buildings, and serious problems with lighting in many of the buildings. Along with the historic maintenance style, the district interface exhibits a heavily deteriorated style of architecture. The buildings in the district show a collage of development, with historic buildings and buildings of historic value gradually losing their historic identity in an aging district.

(3) Health and fire hazards

Excessive building density also brings problems of poor lighting and poor ventilation. Unauthorized construction by some families along the street frontage makes the building scale smaller. At the same time, many buildings are in a state of disrepair plus the development of warehousing industry. Large quantities of goods are piled up not only in warehouses, but in some cases even directly on the street pavement, leading to serious fire safety hazards as well as hygiene problems. There is a lack of community infrastructure such as toilets, garbage cans, fire hydrants and fire extinguishers. The lack of community infrastructure such as toilets, garbage cans, fire hydrants and fire extinguishers, and the ineffectiveness of the corresponding supervision and management mechanisms have also led to further deterioration. There is an urgent need for some infrastructure development to address poor sanitation, faulty electrical wiring and inadequate fire safety measures to reduce the risk of accidents.

Humanistic environment:

(1) Lack of neighborhood communication, loss of history and culture

The lack of communication and social connections between neighbors affects the cultural environment of the neighborhood. Lack of interaction weakens the sense of community and leads to social isolation, and further leads to conflicts between residents and merchants. With a development history of more than 700 years, Zhuangyuanfang has the presence of Lingnan historical and cultural resources and celebrities of great value. Zhuangyuanfang has always been an important commercial street, from the famous embroidery street and famous handicrafts in Lingnan, to the present day has been reduced to only one street for warehousing and wholesaling. The former historical and cultural atmosphere is no longer known, and traditional customs, stories and local traditions are disappearing, leading to a loss of identity and collective memory.

(2) Economy:

The model of the industry is single and obsolete, and there is an urgent need for new industries to be placed in the area.

The main industries in Zhuangyuanfang are warehousing, packaging and printing, and hardware. These industries are brought together by the location of Zhuangyuanfang and its low rent. However, with the development of e-commerce, its location advantage is also gradually receding. After investigation and visits, in the last two years, the vacancy rate of stores has exceeded 30%, while more than half of the former printing stores have closed down, and the remaining ones have gradually switched to online business, and the offline stores are gradually closing down. At the same time, warehousing activities in the neighborhood have a negative impact on the lives of residents, seriously squeezing the small public space on the street. The business structure of today's economy is monotonous and outdated. Reliance on low value-added industries such as warehousing in urban centers and within neighborhoods limits economic growth and innovation, while leading to a vicious cycle that hinders the creation of new jobs, discourages entrepreneurship, and restricts the community's potential for economic development. There is an urgent need for new industries to emerge in the Zhuangyuanfang district. The introduction of new industries, such as culture, entertainment, and creative arts, can revitalize the local economy, promote Zhuangyuanfang's traditional culture, and contribute to the overall development of the community.

5.3. Design

5.3.1. Design Intentions

Renewal mechanism construction:

In urban renewal, policies are often difficult to implement due to the complex texture of old urban areas, which involves numerous stakeholders. Problems such as destruction of neighborhoods, gentrification, and cultural loss are also inevitably caused in the implementation process. The author tries to start from the perspective of tactical urbanism and utilize its characteristics of gradualness, low cost, temporary and adaptability. Conduct small-scale interventions and rapid, low-cost experiments to test ideas and gather feedback. Finding and establishing the most appropriate approach for their specific context reduces the risks and barriers associated with large-scale redevelopment, while providing an opportunity to experiment and iterate on urban design strategies. It enables residents to actively contribute to the revitalization of their community by building a multi-stakeholder renewal mechanism. It fosters a sense of ownership, pride and collective responsibility among community members

and promotes social cohesion and a shared vision for the future. Enables communities to reclaim their spaces, revitalize their surroundings and shape the future of their neighborhoods in a way that respects their unique heritage and identity.

Improve the physical environment:

The structural infrastructure of buildings within the Zhuangyuanfang district is aging, poorly maintained, and lacks modern amenities. The ultra-high building density creates environmental problems such as lighting and ventilation. Also the lack of public space leaves the elderly and children without their necessary space to move around. The lack of community infrastructures such as toilets, garbage cans, fire hydrants, and fire extinguishers also creates many hygiene and fire prevention problems. Overall, the physical environment of the neighborhood has seriously affected the normal production and life of the residents and merchants, and the improvement of the physical environment should not be delayed.

Promoting History and Culture:

In the course of its development, Zhuangyuanfang's historical and cultural characteristics have gradually faded and it is slowly losing its proper value as a historical district. From the former handmade workshops specializing in opera costumes and Cantonese embroidery to the crowded "Renmin village", the historical memory of Zhuangyuanfang is fading. Passing on and promoting history and culture can provide valuable educational opportunities for residents, especially the younger generation. This history and culture can foster a strong sense of community identity. At the same time history and culture can be a driving force for economic development. By promoting heritage tourism, the presence of cultural events, festivals and craft activities can create opportunities for entrepreneurship and small business development.

Therefore, in the process of renewal, it is necessary to trace the historical and cultural connotations to revitalize the lives of the residents, the community culture, and the businesses to achieve a true renaissance of the historic district.

Business Model Transformation:

Due to the current special "Housing to warehouse", the chemical industry, printing industry and warehousing industry are not in line with the functional position of Zhuangyuanfang, which has also led to the further decline of the neighborhood. Some warehouses with corrosive and explosive risks also threaten the safety of neighboring residents. Zhuangyuanfang should explore the unique cultural and historical features of the neighborhood, such as traditional handicrafts, embroidery Guangzhou enamel and other intangible cultural heritage, and encourage the development of local businesses, start-ups and creative industries to promote economic growth and job opportunities.

Pedestrian Neighborhood Creation encourages residents and visitors to walk by improving sidewalks, replacing surface pavers, and reducing vehicular traffic, helping to promote healthier lifestyles and reduce dependence on automobiles. Increased walkability also promotes social interaction as people have more opportunities to meet and interact on foot. Contributes to the overall livability, vitality, and sustainability of the historic district, making the Zhuangyuanfang district a desirable place to live, work, and visit.

By incorporating the above design goals into a tactical urbanism approach, the Zhuangyuanfang district can undergo a positive transformation into a vibrant, sustainable, and culturally rich community that will benefit residents and visitors alike, and achieve sustainable development for the Zhuangyuanfang district.



- | | |
|--------------------------------|-------------------------------------|
| 1. Pocket Park | 8. B&B (renovation example) |
| 2. Tourist Service Center | 9. Community center |
| 3. Community Logistics Center | 10. Activity center for the elderly |
| 4. Costumes Museum | 11. Community library |
| 5. Handicraft Workshop | 12. Costume complex |
| 6. Community History Museum | 13. Children's Park |
| 7. Cantonese Embroidery Museum | |
-
- | | | |
|---|--|--|
| Buffer strip | Bike lane | Living infrastructure |
|---|--|--|

Figure 5-25 Site plan (Source: author)

5.3.2. Tactical urbanism renewal mechanism

5.3.2.1. Tactical experimentation with long-term strategies

Tactical urbanism enables experimentation for government programs. Different approaches and solutions are experimented with on a smaller scale by urban planners, architects and community members before large-scale, long-term investments are made. When selecting targets, it is recommended to choose publicly owned sites or those private sites that have the desire to be transformed. By experimenting with typical targets, such as temporary interventions like temporary parks, bike lanes, or pedestrian plazas, the community can observe how these changes affect the use and perception of public spaces. By piloting interventions and gathering community feedback, tactical urbanism helps refine strategies, identify successful initiatives, and build a strong case for future investments and policy changes.

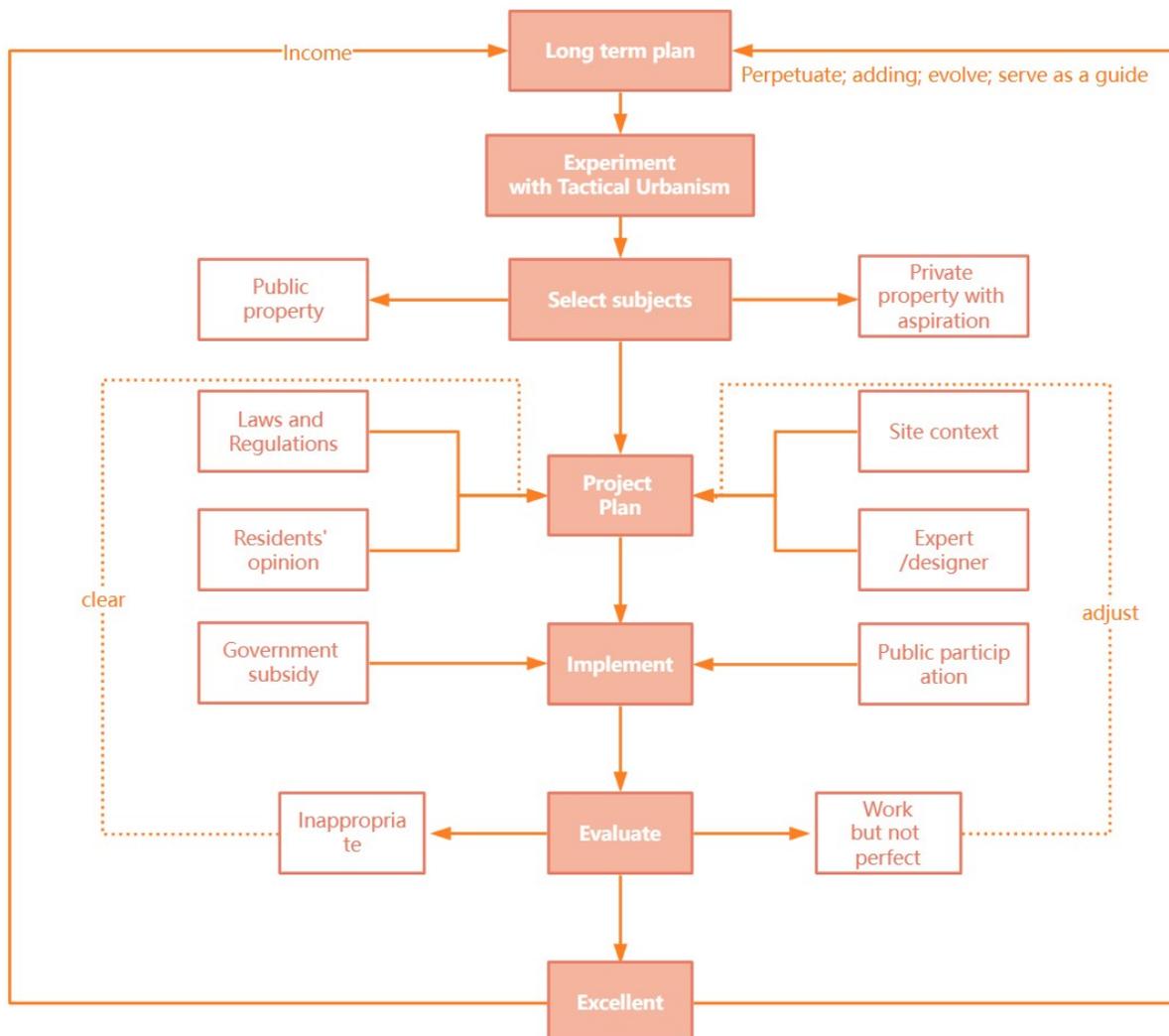


Figure 5-26 Top-dawn tactical experiments (Source: author)

5.3.2.2. Social Spontaneous Tactical Transformation

Today, strategic development in China often sets up a long-term vision with a broad appeal, but often neglects the daily experience and needs of people. Today, however, people have higher demands for material and spiritual needs, and improving the quality of urban life has become especially important. Private individuals or organizations wishing to renovate and renew their cities can approach the government for assistance. When the government is unable to officially implement the project for various reasons, bottom-up tactical implementation can be carried out by posting messages through social media platforms, announcing their plans, and exchanging opinions in the process. Social connections are made through workshops, community meetings, and collaborative design sessions, where community members can share their ideas, preferences, and desires for the community. This collaborative approach ensures that the final interventions reflect the unique needs and desires of the community, resulting in spaces that are more inclusive, relevant, and responsive to the local context. The enactment of the plan also facilitates subsequent implementation as well as ensuring the legitimacy of the action.^[58] Ultimately, this active process fosters participatory processes, co-creates spaces, builds social connections, strengthens local initiatives and influences policy decisions, promotes community participation and empowerment, involves residents in shaping their urban environments and creates a sense of pride and ownership among community members.

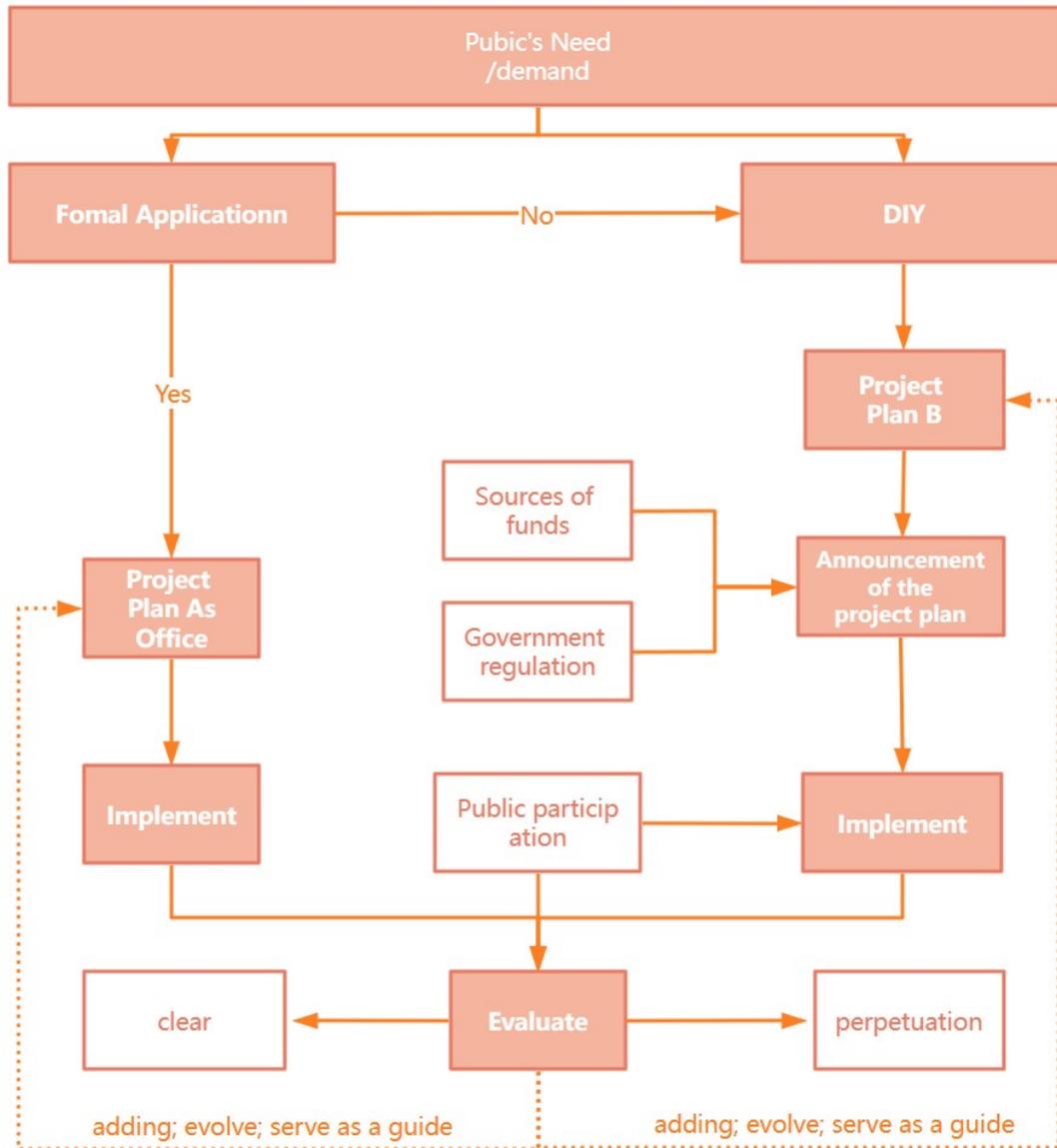


Figure 5-27 Bottom-up tactical implementation (Source: author)

5.3.2.3. Multi-participated

The first is diversified sources of funding. The most important stability of urban renewal is the source of funding. In the renewal, not only through the policy and government support, but also through the introduction of diversified funding for each stage for the tactical implementation of different to urban renewal to help. The second is to strengthen the guidance and activation role of non-governmental organizations. NGOs can act as communicators and coordinators between residents and the government. For example, Yuyuan Road in Shanghai, a joint venture between a state-owned enterprise and a private company was formed to oversee and operate the urban renewal of a specific block. The urban renewal operator ensures professionalism, impartiality, and more effective implementation of the urban renewal process,

as well as better realization of the residents' voices in the renewal process. Finally, it guides residents' participation, such as through conducting community workshops, questionnaire surveys, and feedback on online platforms, to listen to residents' opinions and encourage them to participate in the renewal of their communities, to maintain the social fabric of their neighborhoods, and to improve the urban environment.

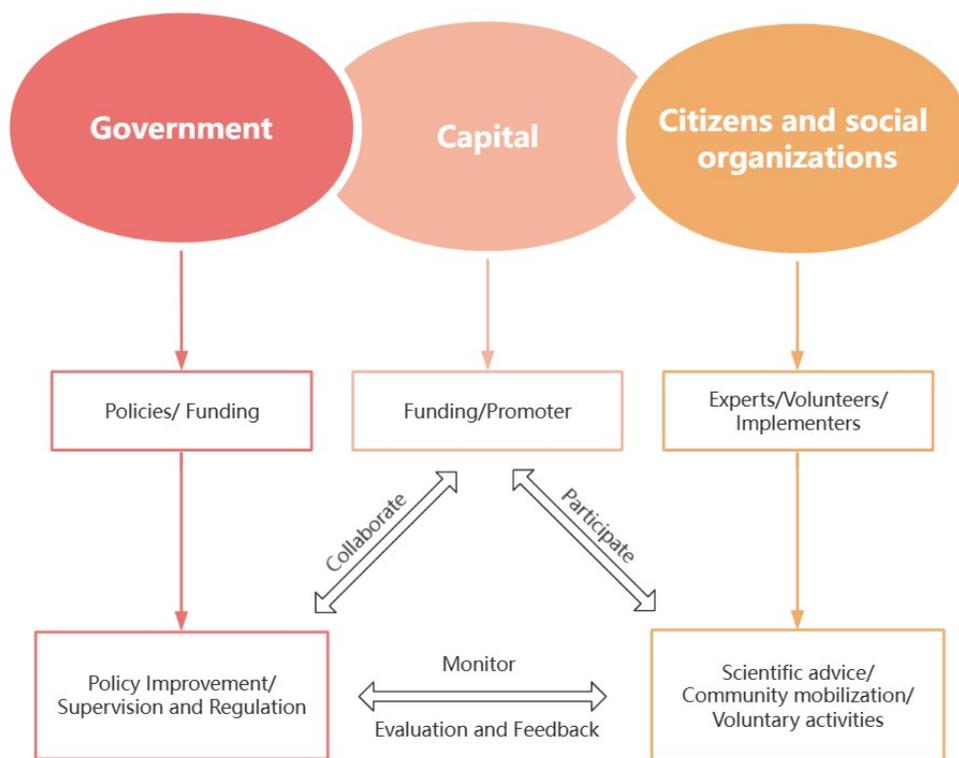


Figure 5-28 Multi-participated in tactical urbanism (Source:author)

5.3.3. Appropriate Tactics in Zhuangyuanfang

From the previous research, we can see that Zhuangyuanfang District is facing internal problems including material and non-material aspects, including insufficient public activity space, lack of green space, aging building environment, health and fire hazards, outdated economic models and cultural forgetting. Through tactical urbanism, citizens, governments, capital, and various organizations are united to conduct spontaneous tactical interventions on specific issues. At the same time, the low-cost and flexible characteristics of tactical urbanism also allow it to be used as an experiment for the government's long-term strategy. This section combines the existing problems of Zhuangyuanfang, long-term vision and the spatial characteristics of Zhuangyuanfang, and chooses the appropriate tactics from the many tactics in the third chapter. And draw relevant schematic diagrams, explain the main participants and

the implementation purpose of tactics, and make suggestions on related methods and implementation sites.

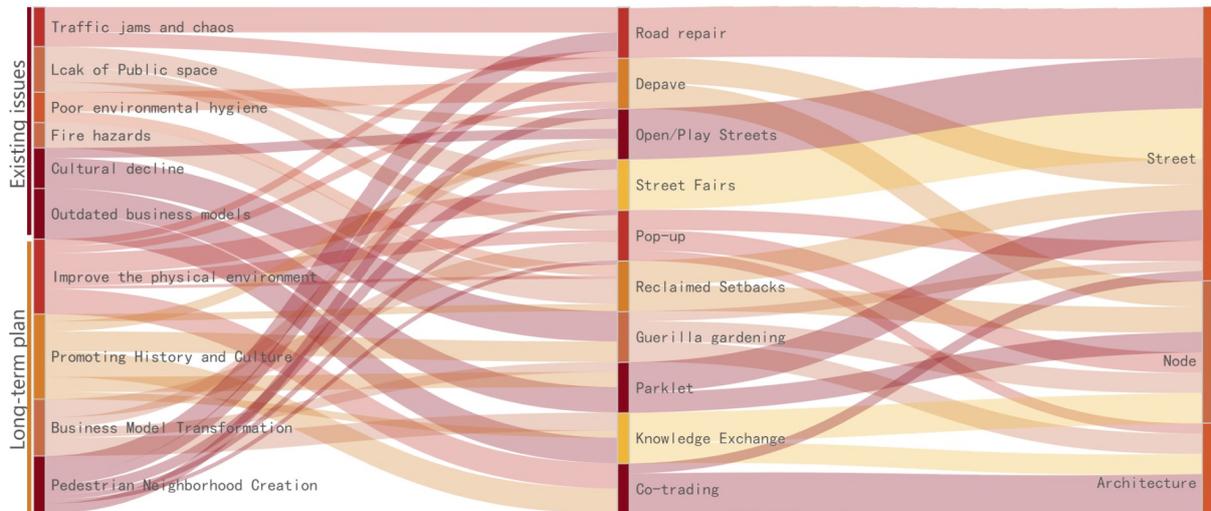
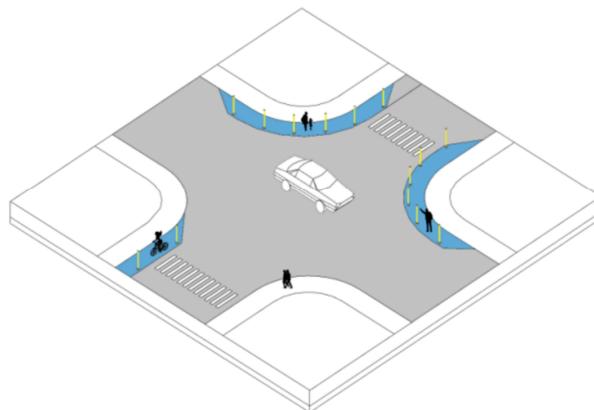


Figure 5-29 Application of tactics (Source: author)

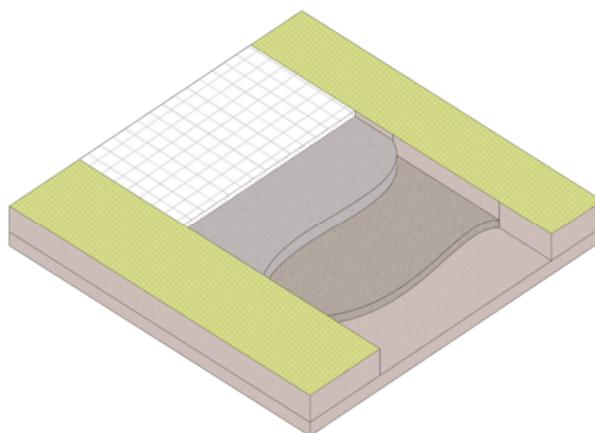
(1) Road repair



Purpose	To provide a safer and more engaging public environment for pedestrians and cyclists.
Recommended Approach	Defining space through Bulb-outs or paint extends existing curbs and sidewalks into the travel lanes, providing buffer areas for pedestrians and cyclists. Also reduce the turning radius, thereby reducing turning speeds.
Recommended Location	Intersections with heavy pedestrian traffic, narrow sidewalks or large turning radii. For example, the intersection of Daxin Road and Tiancheng Road, the intersection of Yide Road and South Renmin Road.
Participant	Community Groups, Government, Local Advocates, Traffic authority.

Figure 5-30 Road repair (Source: author)

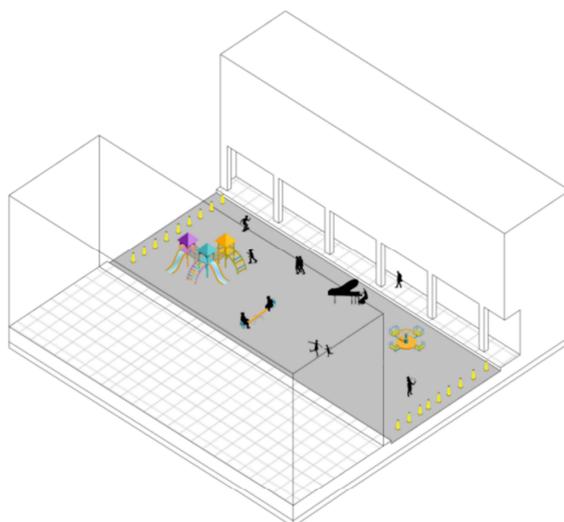
(2) Depave



Purpose	In terms of ecology, reduce stormwater pollution and improve urban resilience. In terms of culture, enhance the cultural identity of historical districts.
Recommended Approach	Firstly, the unnecessary hardened pavement is converted into a permeable garden, and secondly, some pavement that does not meet its usage scenarios are depaved to enhance the cultural attributes of the block.
Recommended Location	Large nodes within the block, such as shopping malls around buildings, and dilapidated alleys.
Participant	Community Groups, Government, environmental agency, Municipal.

Figure 5-31 Depave (Source: author)

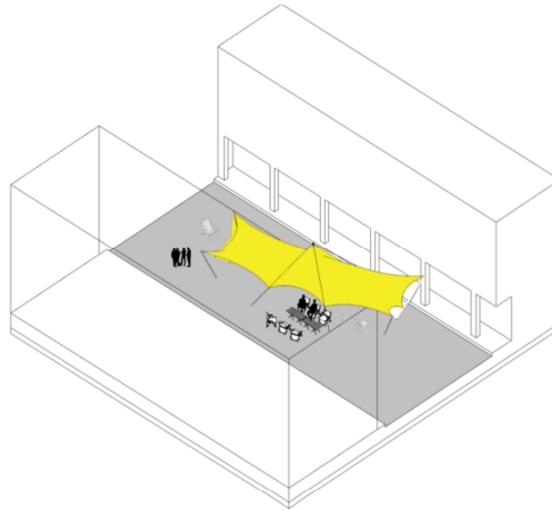
(3) Open/Play Streets



Purpose	To temporarily provide safe space for walking, bicycling, entertainment, and social activities.
Recommended Approach	Temporary conversion of streets into areas for pedestrians and cyclists using materials such as cones, planters and paint.
Recommended Location	Easily accessible streets with possible temporary closures. For example, Daxin Road and the main streets inside the street.
Participant	Community Groups, Government, Citizens, Traffic authority, Entrepreneur.

Figure 5-32 Open/Play Streets (Source: author)

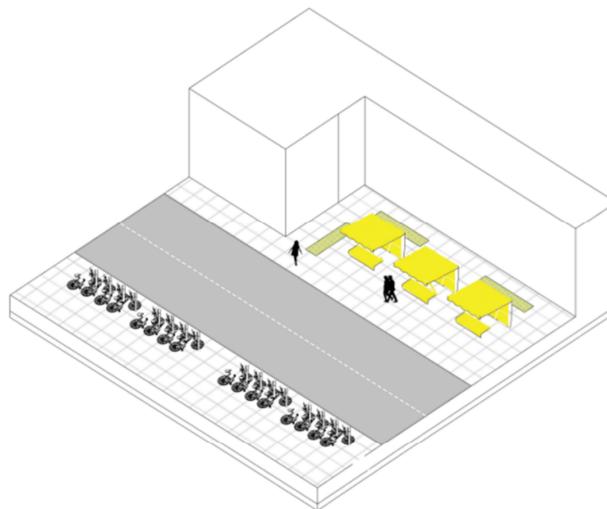
(4) Street Fairs



Purpose	Promote economic development and cultural dissemination by providing opportunities for publicity and display for merchants in the block and surrounding areas.
Recommended Approach	Use simple devices and materials to hold street fairs on holidays.
Recommended Location	An open node in the district, or a temporarily closed street.
Participant	Entrepreneurs, Citizens, Traffic authority, Tourists.

Figure 5-33 Street Fairs (Source: author)

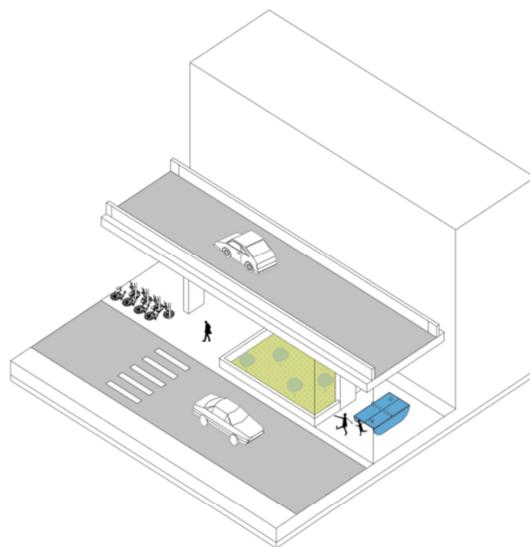
(5) Pop-up



Purpose	Quickly meet people's needs for public space.
Recommended Approach	Solve problems in a low-cost, fast way. Like pop-up bike racks to plan parking, pop-up furniture to provide space to relax...
Recommended Location	Most public spaces in district.
Participant	Community Groups, Government, Local Advocates, Citizens.

Figure 5-34 Pop-up (Source: author)

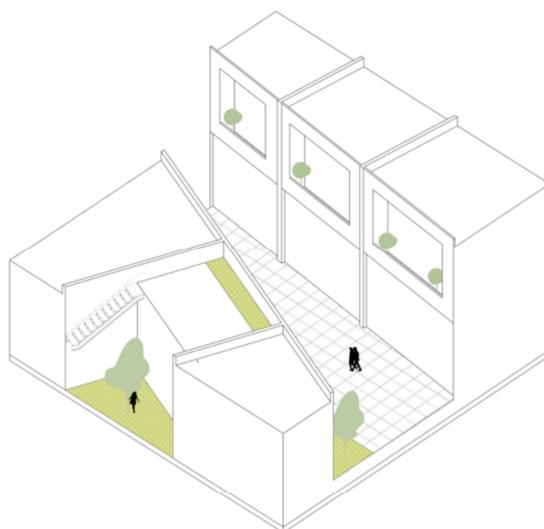
(6) Reclaimed Setbacks



Purpose	Provide space for people to stop and relax.
Recommended Approach	Use turf, wooden decks, and fitness equipment to convert unused spaces into parks and recreational areas.
Recommended Location	The space under the viaduct, and some blurred areas of buildings and roads
Participant	Community Groups, Government, Local Advocates, traffic authority.

Figure 5-35 Reclaimed Setbacks (Source: author)

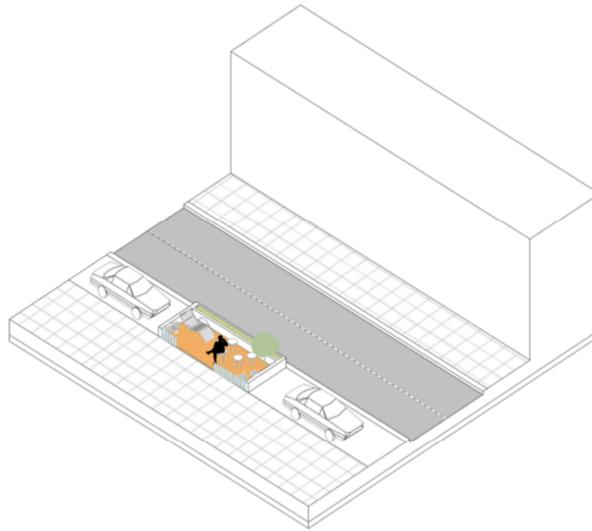
(7) Guerilla gardening



Purpose	To introduce more greenery and gardening into the urban environment.
Recommended Approach	Plant vegetables as well as flowers on the land, taking care not to plant trees that are too tall. For areas with space constraints, this can take the form of turf and planters.
Recommended Location	The remaining public spaces, building elevations, building roofs...
Participant	Residents, Community Groups, Government, Local Advocates.

Figure 5-36 Guerilla gardening (Source: author)

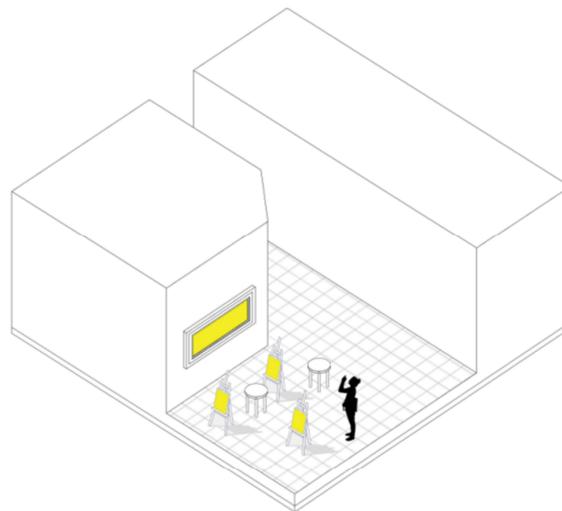
(8) Parklet



Purpose	To provide new and flexible public space within smaller footprints.
Recommended Approach	By creating pocket parks in a parking space on the street, which may have furniture, greenery, bike racks, and other interactive pieces inside.
Recommended Location	District with excessive parking, underutilized small urban spaces, corners, and areas lacking shade and vegetation.
Participant	Community Groups, Government, Traffic authority, Entrepreneurs.

Figure 5-37 Parklet (Source: author)

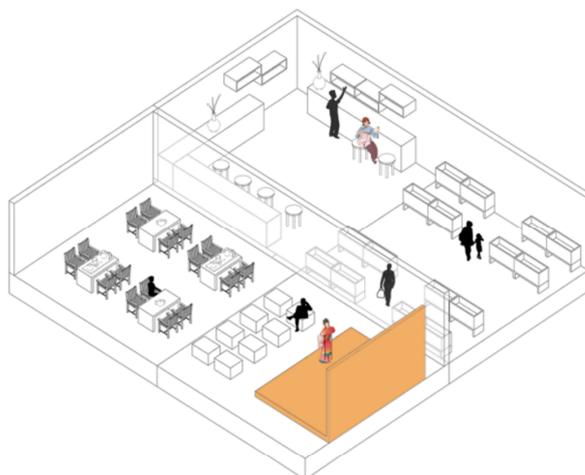
(9) Knowledge Exchange



Purpose	To strengthen community ties and shareskills, perspectives or stories.
Recommended Approach	Establishment of community posters and an out-of-house reading room.
Recommended Location	Small nodes within district, such as linear parks and spaces under old trees.
Participant	Community Groups, Government, Local Advocates, Not-For-Profit Organisations, Artists.

Figure 5-38 Knowledge Exchange (Source: author)

(10) Co-trading



Purpose	To incubate new businesses and sustain existing ones through the co-location of mutually supportive uses.
Recommended Approach	Mixed-use spaces, such as a studio with product sales, a theater performance with a tea room, a bookstore with coffee.
Recommended Location	Some small business owners who are not yet able to afford rent on their own, as well as government-subsidized specialty industries.
Participant	Creative Industries, Entrepreneurs, Government, Local Business, Not-For-Profit Organisations, Artists

Figure 5-39 Co-trading (Source: author)

5.3.4. Tactical intervention in the street

5.3.4.1. Demolition of unauthorized building

Building top floor sunroom, ventilation wells transformed into rooms, unauthorized toilets on the second floor..... Today, unauthorized buildings still exist in various forms in the corners of Zhuangyuanfang district. In particular, some of the unauthorized structures have affected the connection with the main road of the main street, resulting in inconvenient transportation within the neighborhood. In the street some residents carry out unauthorized building many of the former roads have been illegally occupied structures that make available to a wider range of people to use the open space public. Therefore, the first task is to remove the occupied illegal buildings and structures and optimize the connection of the streets within the neighborhood to the city streets.



Figure 5-40 Map of demolished buildings (Source: author)

5.3.4.2. Pop-up facilities to supplement municipal services

Rapidly developing urbanization and the imbalance of development between the region makes the old town in the middle of the city compared with the new high-rise buildings. Zhuangyuanfang district residential fire facilities aging, insufficient fire spacing, dilapidated houses and a series of problems are very Tu Chi, its fire safety is a big problem that needs to be solved urgently. At the same time, the community within the public toilet is difficult to meet today's population size. There are only a small number of large nodes in the neighborhood with corresponding sanitation facilities, especially in some of the internal streets and alleys, facing the lack of garbage bins, lack of hygiene management problems. The first step in solving this problem is to increase sanitation and fire protection measures. Through some street nodes, blank walls to increase the corresponding facilities. At the same time, Zhuangyuanfang district road scale is narrow and the reason for the development of warehousing industry, the light weight of the electric car is highly favored by the residents and merchants inside the Zhuangyuanfang. However, the illegal parking of some electric

vehicles affects the passage of other vehicles and people, and illegal charging also poses a security risk. Therefore, should be bicycle, electric car parking designated areas, standardized management, convenient for the public at the same time also enhance the cityscape.



Figure 5-41 Map of supplementary facilities (Source: author)

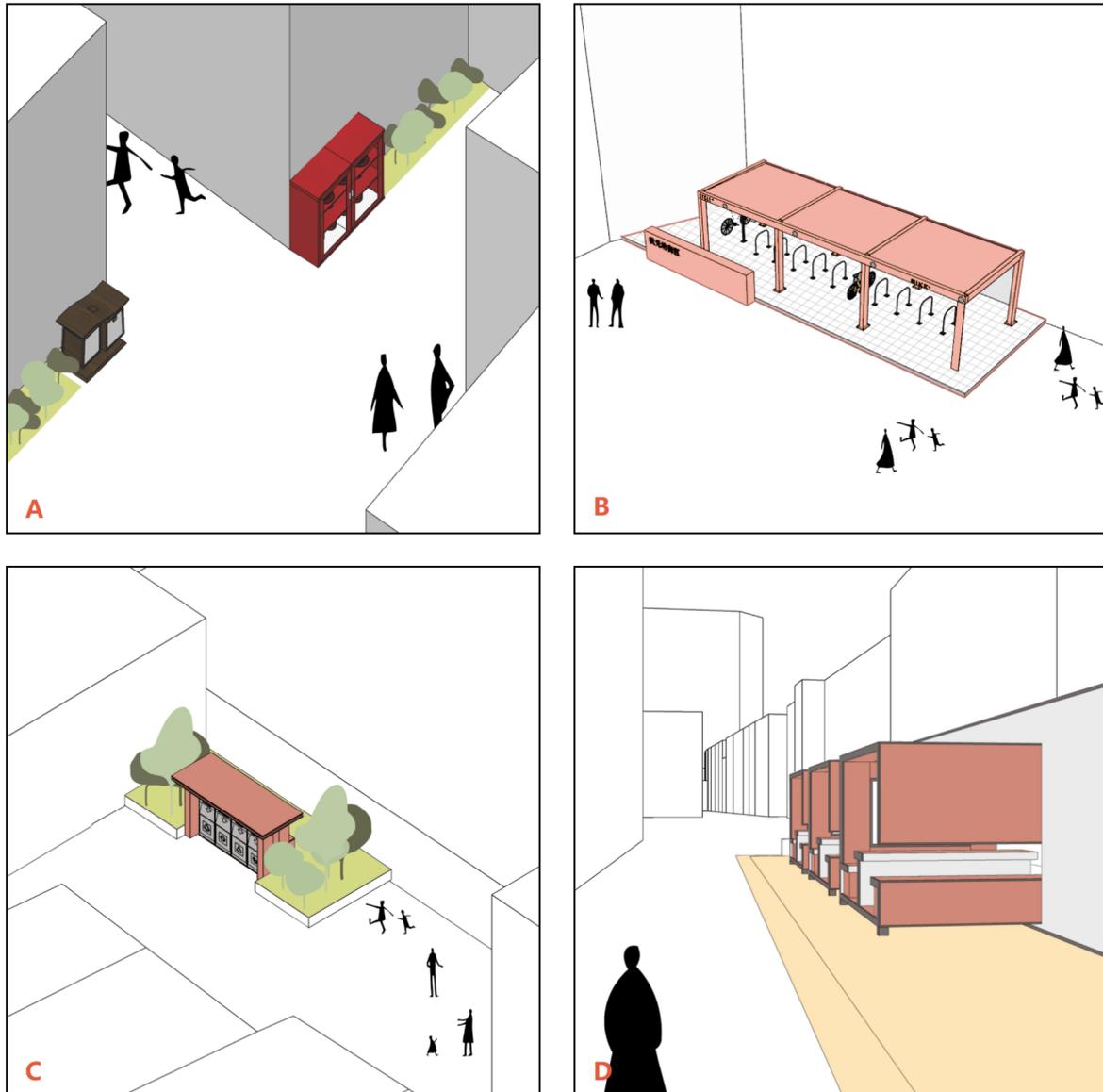


Figure 5-42 Scenarios of supplementary facilities (Source: author)

5.3.4.3. Environmental optimization

After a visit and research, the Zhuangyuanfang district neighborhood lacked appropriate space for residents' activities. Revitalize the city streets through the placement of pop-up furniture. Fill in the street gaps and improve the micro-environment of the neighborhood through portable and mobile greening devices such as planting boxes and flower pots. Some wider streets can appropriately adopt the form of flower beds. Flower beds are mainly arranged in spacious streets and non-entry interface areas, and make full use of the first step materials to remove broken building materials, and combine with seating in areas where pedestrians can stay to increase the communication and activity space of the street.

5.3.4.4. Pedestrian-First Streets

With the vision of making the Zhuangyuanfang district a complete pedestrian area, the site study found that Zhuangyuanfang now suffers from a mix of pedestrian and vehicular traffic, goods occupying the internal streets, and safety hazards on Daxin Road. Combined with the Tactical urbanism perspective, a gradual transformation of the Zhuangyuanfang district was carried out to reorganize the street structure. It also proposes a smooth enjoyment of the long-term pedestrian system of Zhuangyuanfang. Reasonably set up the ground pavement, rest facilities and street furniture, guidance system; increase the bus terminal, social parking lot and supporting service facilities.

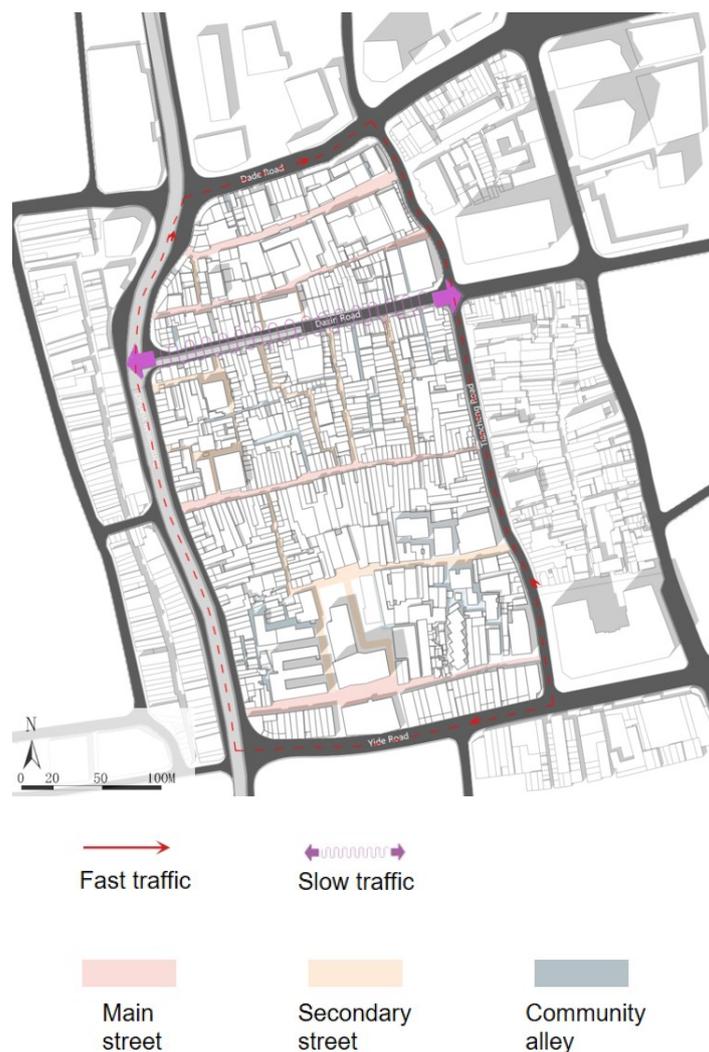


Figure 5-43 Street Walking Organization (Source: author)

(1) Intersection Improvement

Daxin Road:

Zhuangyuanfang district is located within the Renmin South Historic Preservation Area, close to the traditional central axis of Guangzhou. The external street scale here is relatively small, mostly 6-10 m. At the same time, there are a large number of historical buildings in the

area, such as Daxin Road, for example, the traditional arcade buildings create a good shopping environment, but at the same time, they occupy the street space to a certain extent, while at the same time, they block the driver's vision to a certain extent at the street corners. In the intersection of Daxin Road and Tiancheng Road, the traffic safety hazard here is already very prominent. From the perspective of tactical urbanism, ground spraying can be used to create a buffer space between pedestrians and vehicles, and the distinctive color of the ground also alerts vehicles to the intersection ahead. In addition to the use of ground spray, easily movable features such as planters and road cones can be used.



Figure 5-44 Status of Daxin Road Intersection (Source:author)



Figure 5-45 Tactical intervention (ground painting) (Source: author)

(2) Improvement of the whole district

After adjusting the roadway at the accident-prone point of Zhuangyuanfang district - the intersection of Daxin Road and Tiancheng Road. It further radiates the impact on the road intersections around the Zhuangyuanfang district in the Zhuangyuanfang district Neighborhood. The non-motorized lane is clearly defined, and the space between the bicycle

lanes in different directions is set as a buffer space to ensure the traffic safety of bicycles when turning, and at the same time, provide a certain buffer space for pedestrians to pass through the intersection.

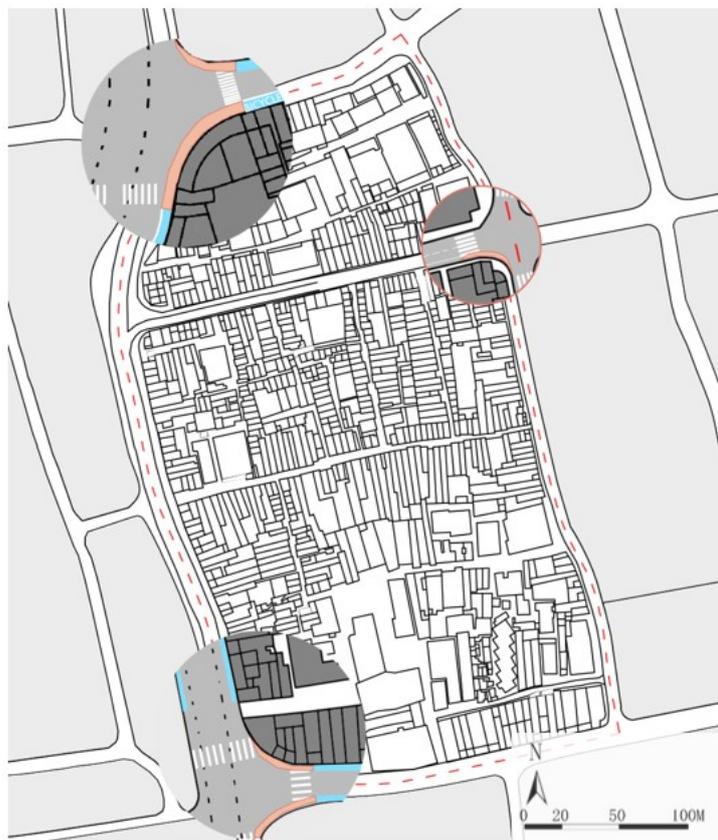


Figure 5-46 Examples of Transportation Modifications (Source: author)

The plan considers that the Renmin Elevator still undertakes an important transportation function at this stage, and its historical value still needs to be further demonstrated, and whether to dismantle it in the long term should be demonstrated in conjunction with the adjustment of the city's transportation system, so the plan treats the Renmin Elevator in a way that is to be retained in the near future, and to be further demonstrated in the long term. However, the new version of the plan also proposes to make an environmental impact assessment of the noise, exhaust gas, dust and other pollution caused by the Renmin Elevated Walkway in the district, and to put forward remedial measures in the near and long term.

(3) Creation of a slow-moving road on Daxin Road

The plan considers that the Renmin Elevated Road still carries an important traffic function at this stage, and its historical value still needs to be further demonstrated, and whether to demolish it in the long term should be demonstrated in conjunction with the adjustment of the city's transportation system, so the plan treats the Renmin Elevated Road as

retained in the near future, and further demonstrated in the long term. However, the new version of the plan also proposes to make an environmental impact assessment of the noise, exhaust gas, dust and other pollution caused by the Renmin Elevator in the district, and puts forward remedial measures in the near and long term. The Renmin South Elevator exit at Daxin Road has seriously affected the traffic system in the Zhuangyuanfang district. It causes congestion during peak hours and safety hazards at intersections. At the same time, the elevated exit occupies half of Daxin Road's total length of 240m, and there is no crosswalk in the middle, which has a great impact on the study of business and the preservation of the historical buildings on Daxin Road. From the perspective of tactical urbanism, the exit section of Daxin Road of Renmin South elevated elevator can be temporarily closed. After the temporary closure, data collection can provide long-term recommendations and guidance for the construction of a pedestrian system for the Renmin South Elevated Highway and the Zhuangyuanfang district. By broadcasting the Daxin Road experimental plan in advance, the city will temporarily close Daxin Road by using road cones, planters and other devices to temporarily close the street. The resulting space can be used as a place for children to play or as a temporary marketplace to revitalize the urban space.



Figure 5-47 A:Tactical intervention to form pop-up bazaar B:Tactical intervention to form play streets
(Source: author)

5.3.5. Tactical intervention at the node

5.3.5.1. Urban vacant land

Despite the extremely high density of buildings in the Zhuangyuanfang district, some

open spaces still exist. These spaces provide open space for people, some are planted with greenery to improve the landscape, and some have been abandoned. To address the lack of community activity space, children's play space and age-friendly facilities in Zhuangyuanfang district. Through field surveys and visits and investigations, we counted and drew a map of open spaces in the Zhuangyuanfang district.

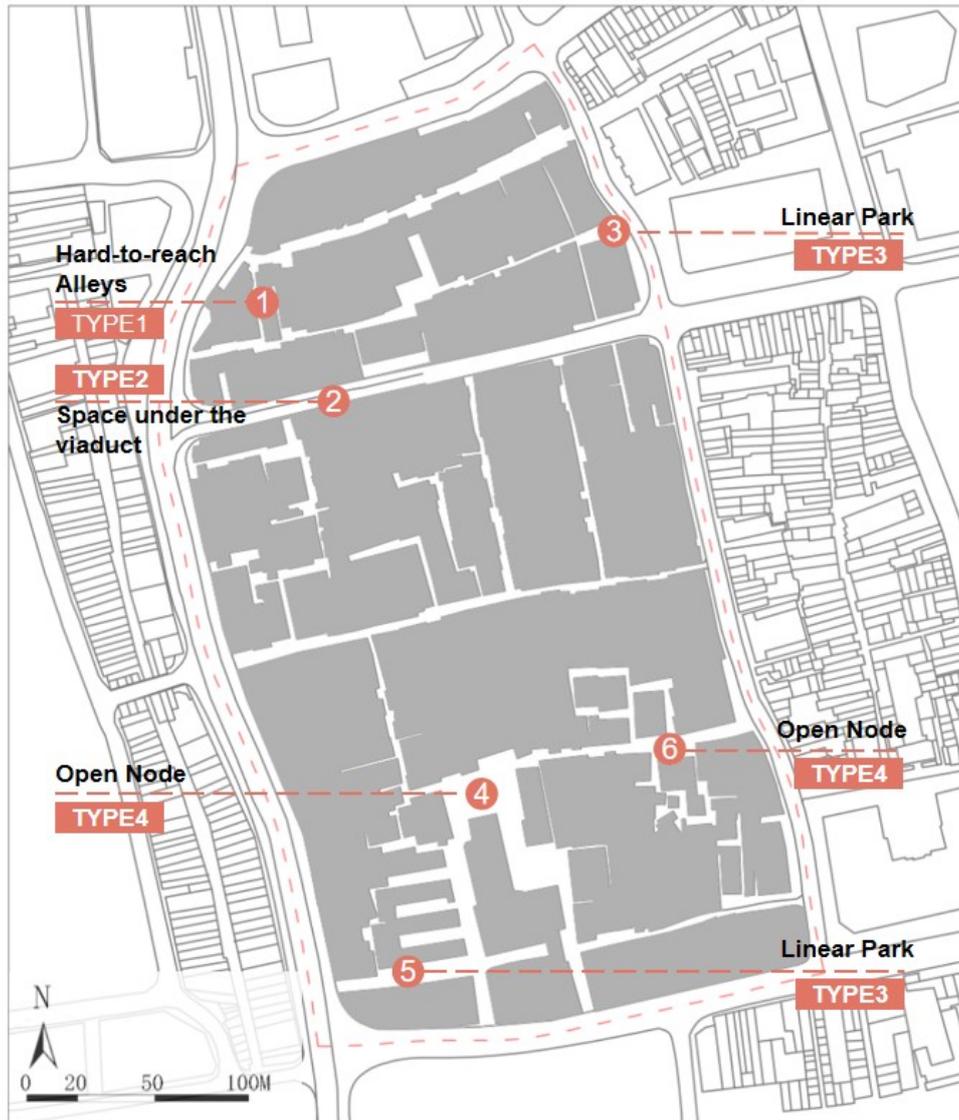


Figure 5-48 Types of nodes (Source: author)



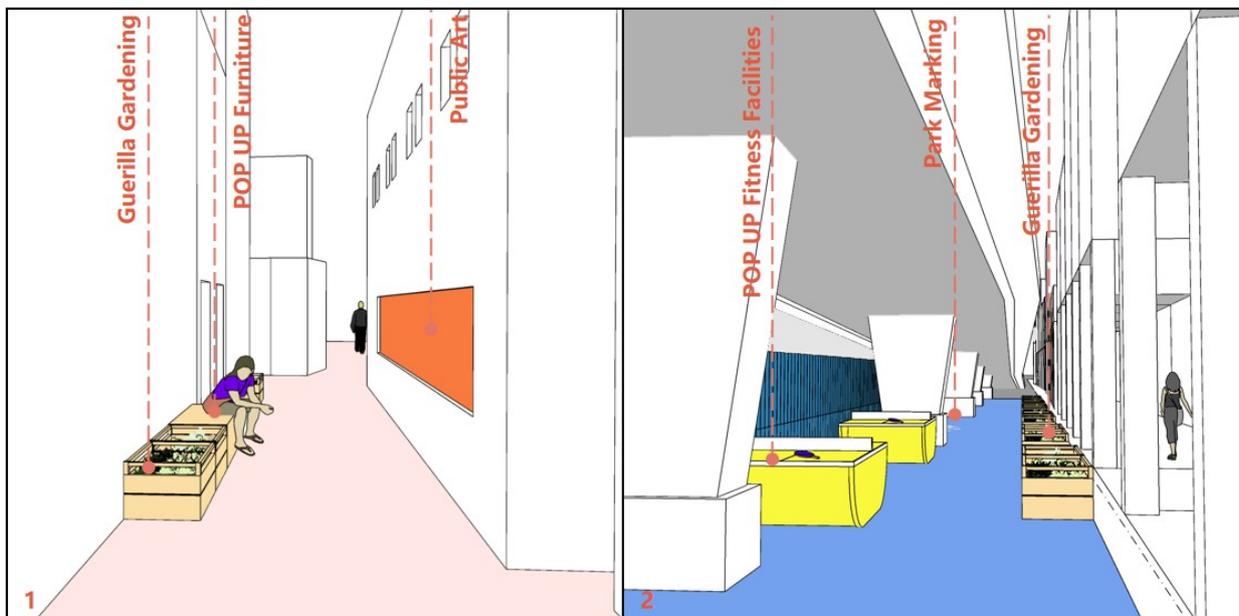
Figure 5-49 Field examples of nodes (Source: author)

The site in Figure 1 is located in an alleyway adjacent to Yudaihao. Type 1 is an inaccessible alley. Zhuangyuanfang is dotted with townhouses, mainly bamboo huts, and the density of buildings in the neighborhood is extremely high, with a large number of alleys

between different buildings through which people enter the houses. These alleys are usually squeezed by the buildings on both sides, and the D/H of the street is usually between 1/3 and 1/5. These inaccessible alleys often have openings on one side and the backs, or walls, of other buildings on the other side. Neighborhoods will usually have some enlargement of space present where the street is close to the main urban interface in order to form Type 2 aka linear parks. Only a small number of intersections can form nodes, and it is at the major intersection of old and new buildings, near the garment and commercial buildings, that the most open node space within the Zhuangyuanfang district exists, where it is reached by residents and neighborhood workers with high frequency.

5.3.5.2. Implementation

Experimental retrofitting using low-cost, temporary interventions with nodes. For example, Guerilla Gardening is used to fill in small open spaces between buildings and streets, and between buildings to improve the microclimate of the city. Pop-up facilities, such as furniture, fitness equipment or garbage cans, are utilized to provide residents with space for recreation and relaxation. Pop-ups for sanitation and firefighting facilities complement the city's municipal system. Interventions include existing spaces as well as vacant land in the city. The reuse of vacant land for public space can create new opportunities for interaction and community space to stimulate more social activity and improve neighborhoods.



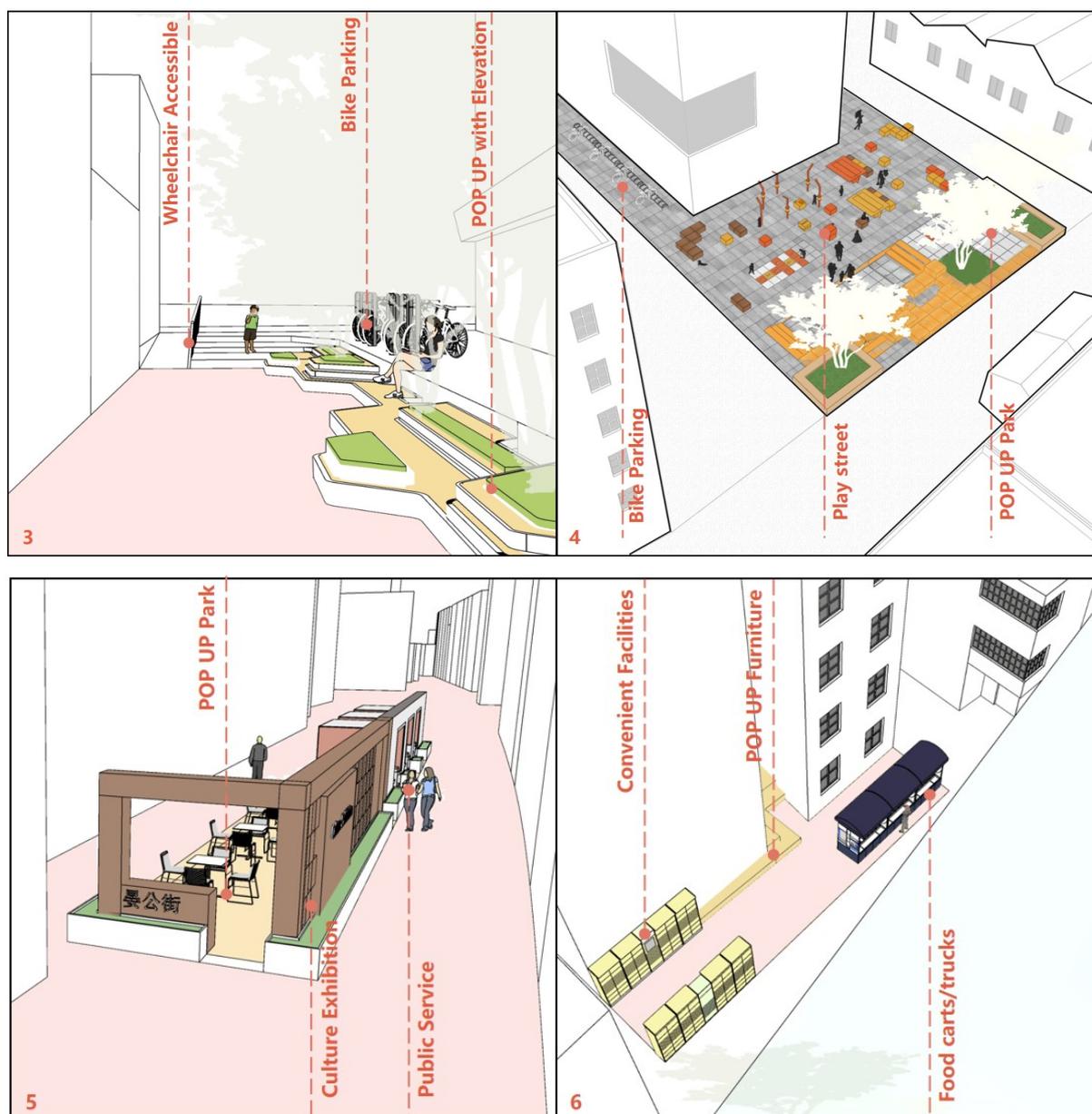


Figure 5-50 Tactical intervention scenarios (Source: author)

5.3.5.3. Monitoring, evaluation and management

Data collection and observation of performance and usage patterns of interventions through a multi-participant tactical urbanism mechanism on transformed sites and nodes. Qualitative assessment through community feedback and participation. Propose further options for the transformed nodes, such as in Node 4, which as the largest open node within the Zhuangyuanfang community, has complex and varied roles and uses, and can be experimented with and tested to determine its ultimate function. In addition to making the pop-up park permanent, other interventions can be adapted and modified. For example, in the square between the building and the corner park, different events could be organized. Events

like "Street Fair" can be organized regularly, such as sales of traditional costumes, Cantonese embroidery and other cultural and creative products during holidays. In addition to revitalizing the Zhuangyuanfang economy, it can also better promote and pass on history and culture. Or on weekends, by adding more modular boxes to form a higher grandstand, combined with a pop up stage to form a "pop up town hall", providing a gathering place for the public.

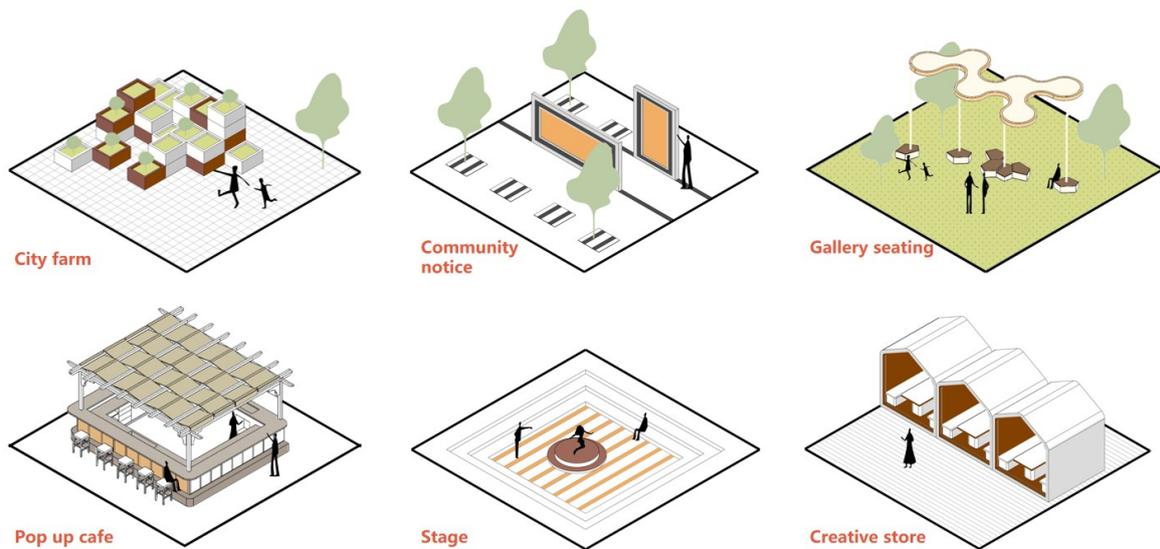


Figure 5-51 More Possibilities for nodes (Source:author)

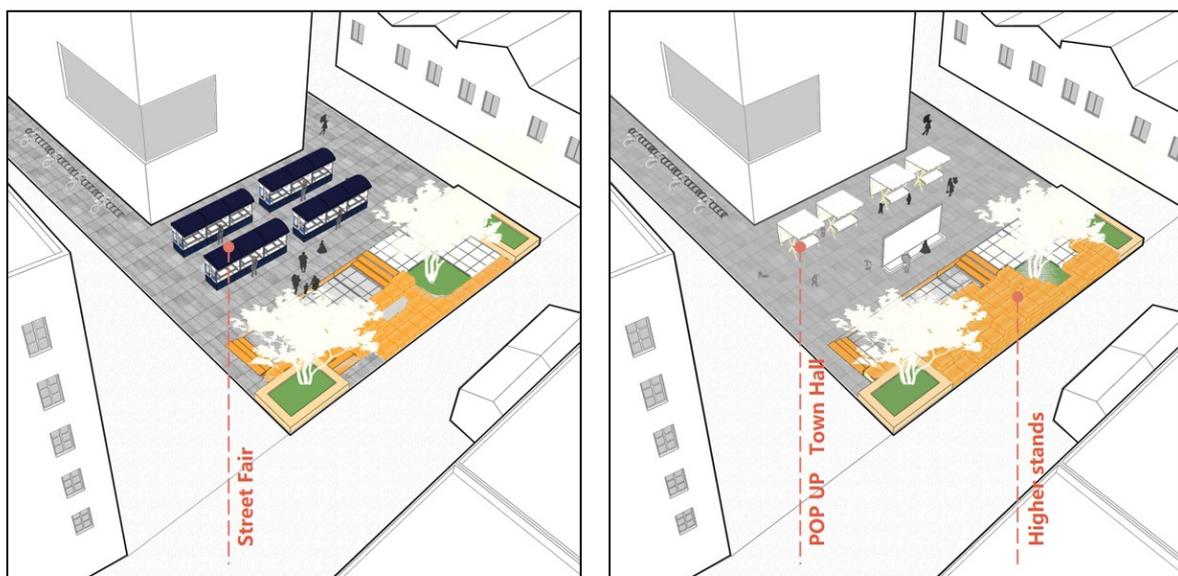


Figure 5-52 Alternatives to the Plaza (Source: author)

5.3.6. Tactical intervention in architecture

In the Zhuangyuanfang district, a publicly owned house is selected for renovation in order to serve as an experimental project for the overall development of the neighborhood and

to provide an example for the renovation of other buildings. This public housing may be owned by the government, a community organization, or other related institutions, and is considered a public asset of the neighborhood. There are multiple advantages to selecting a public ownership house for rehabilitation. First of all, the transformation of such a house can directly provide an experimental platform for the overall development of the neighborhood. By retrofitting them, we can explore and validate different design concepts, sustainable development options and community engagement models. This will help us gain valuable experience and lessons learned to guide other building renovation projects.

By selecting a public ownership house for renovation, we will provide an experimental platform for the overall development of the Zhuangyuanfang district and a paradigm for other building renovations. This will set an example for sustainability and community engagement in the neighborhood and provide useful lessons for the future development of the city.





Figure 5-53 Distribution of publicly ownership (Source: from [53], further by author)

5.3.6.1. Status quo

Located at 81 Tiancheng Road, Yuexiu District, Guangzhou City, Guangdong Province, the target building is situated on the main street interface of Tiancheng Road and is a typical mixed commercial and residential building in the Zhuangyuanfang district, with an architectural form of the traditional Lingnan "bamboo tube house". The building is also affected by the overall decline of the neighborhood, and the stores on the first floor are unused. According to the relevant documents of Yuexiu District, the building belongs to the Environmental Protection Office of the Renmin Government of Yuexiu District as a public property right. In the "Renmin South Historical and Cultural District Protection and Utilization Plan", the building belongs to the category of "remediation" buildings, such buildings are allowed to carry out the necessary internal renovation to adapt to the requirements of the use of the function; there is a real need for expansion, alteration and reconstruction of dangerous buildings, but the appearance of the building shall not change the traditional style and appearance of the building. But the appearance of the building shall not change the traditional style.

Along Tiancheng Road, most of the buildings are 3-4-storey bamboo houses, and the quality and height of the target buildings are relatively consistent with those of the traditional buildings around them, but the main body of the buildings along the street was originally 3-storey, which was later renovated and added to 4-storey by the tenants themselves.



Figure 5-54 Pilot building (Source: author)

5.3.6.2. Renewal mechanism

The author tries to establish a continuous renewal workflow while ensuring balanced funding and distribution of benefits as much as possible. Firstly, the government drives the renovation of public ownership houses, transforming their originally low-value low-cost housing into higher value-added tourist lodgings. Evaluate with the results of the transformation experiments, and take different further measures for different evaluations, cleaning up or adjusting or making permanent. The revenue generated from successful experiments can also be used to further support long-term programs.

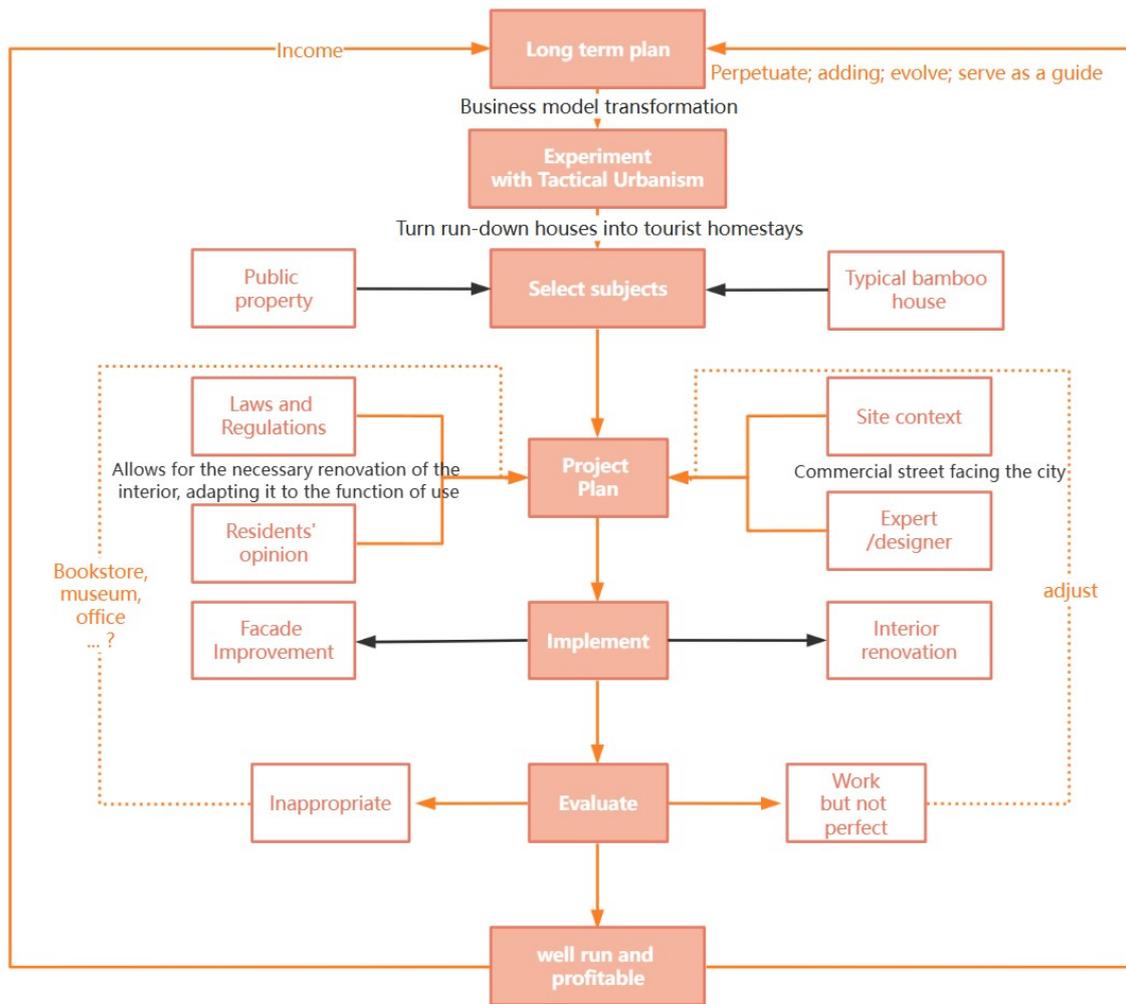


Figure 5-55 Renewal mechanism (Source: author)

5.3.6.3. Renewal of the building

Façade Enhancement: A large percentage of the buildings within the Zhuangyuanfang district Neighborhood suffer from a dilapidated appearance as well as illegal structures. In order to maintain the neighborhood and restore the historic appearance of the neighborhood, certain enhancements were needed to confront these buildings. The first step was to remove the illegal structures on the façade, which expanded the street space and allowed for a tidy street interface. Uniform placement of cluttered air conditioning, followed by the replacement of worn out windows and doors, the unification of certain forms, the repair of damaged brick façade to further ensure the integrity of the neighborhood. Finally, add greening on the inside level, do not take up ground space, increase the greening rate of the city, and then achieve the effect of improving the urban ecological environment. Not only that, green plants also have a certain decorative effect, can increase the aesthetic appearance of the building.



Figure 5-56 Cluttered building façade (Source: author)



Figure 5-57 Façade Enhancement (Source: author)

Interior space remodeling: Utilizing the characteristics of the traditional bamboo house space layout and the good climate adaptability of the bamboo through-house in terms of ventilation, shading and heat preservation, the original design of the courtyard and backyard is retained. However, the space is divided into the public space on the first floor and the rooms upstairs, with three ordinary rooms and one suite respectively. At the same time, the unauthorized structure on the roof was removed to form a roof garden, providing a good outdoor environment for people to rest and play.

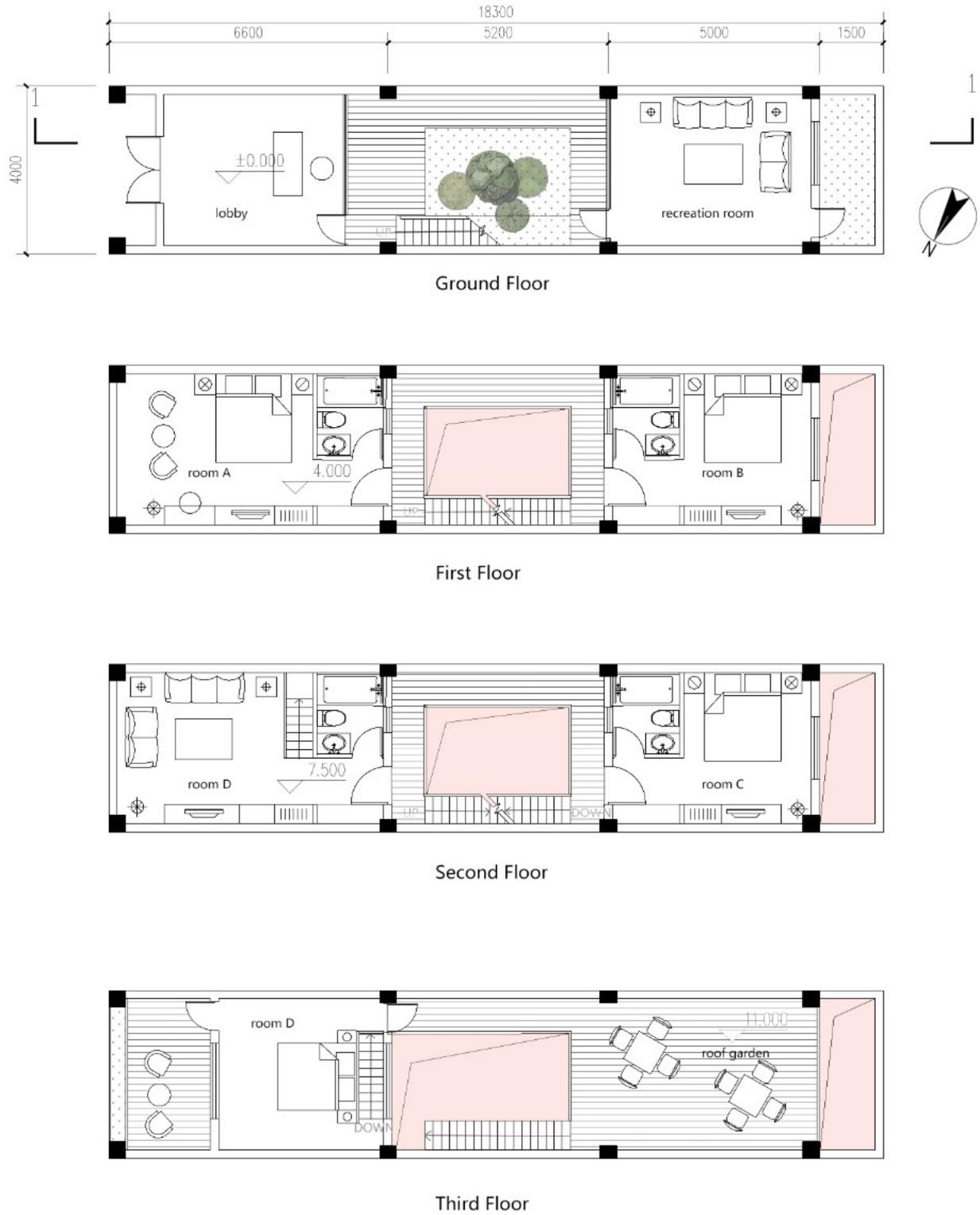


Figure 5-58 Plan of Pilot building (Source: author)

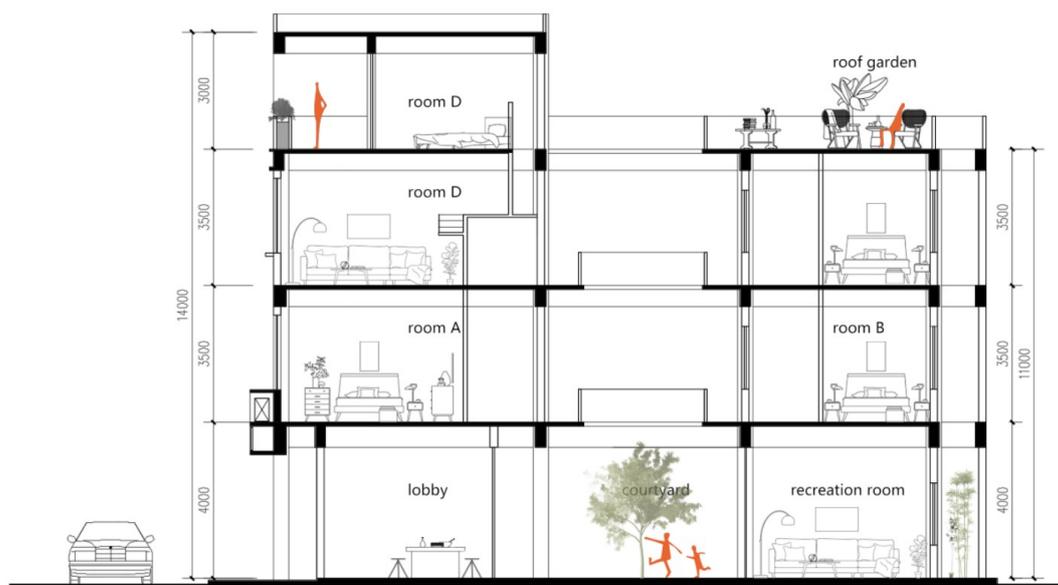


Figure 5-59 1-1 Section (Source: author)

5.4. Summary of of the chapter

Zhuangyuanfang district as as many Guangzhou and even the country as the epitome of the old city, its problems are typical and prominent. With the development of the times, the industry model has become old, and the infrastructure is difficult to meet the use and gradually declined. The author hopes that through the research of Zhuangyuanfang, it can provide thinking and reference for the renewal of old urban areas in Guangzhou and even Chinese cities.

After a detailed study of Zhuangyuanfang in terms of policy, economy, transportation, architecture and many other aspects, mainly using fieldwork and questionnaire, it was found that there are problems in Zhuangyuanfang's current physical space, humanistic environment and economic structure. Such as insufficient space for public activities, loss of history and culture, outdated industry model and other specific problems. The design objective of this project is to combine the upper planning with the wishes of the residents. Through the construction of renewal mechanism, improvement of physical environment, promotion of history and culture, transformation of business model and creation of pedestrian zone, Zhuangyuanfang Street will finally realize positive transformation and vitality and finally achieve sustainable development. Then we propose the renewal mechanism of Zhuangyuanfang Street from the perspective of tactical urbanism, and discuss the strategy and practice of tactical renewal in Zhuangyuanfang district from the three levels of streets, nodes and architectures.

CONCLUSION

As urbanization of China enters the late stage of development, inventory renewal has gradually become the form of urban space development in China. The study of urban renewal in China and the West reveals the difficulties and challenges facing urban development and urban renewal in China today, such as delayed policies, difficulties in implementation, and unequal distribution of interest. It then explores the potential application of tactical urbanism. It examines the role of tactical urbanism in urban renewal as a complement to planning, empowering community participation, and providing new ideas.

Then, through researching and analyzing a large number of tactical urbanism practice cases around the world, author extract the core elements and core values, and summarize the characteristics of tactical urbanism actions. The tactical urbanism process of planning-investigation-design-implementation-monitoring, evaluation and management is proposed as a reference for urban renewal strategy in Guangzhou. Finally, the research and analysis of Zhuangyuanfang district, a typical old city, concludes that Zhuangyuanfang faces the problems of insufficient space for public activities, loss of history and culture, and outdated business models. And then the design objective is proposed to construct a renewal mechanism. Discuss the strategy and practice of tactical renewal in Zhuangyuanfang district from three levels: street, node, and architecture.

Innovation Points:

This thesis summarizes the connotation and characteristics of tactical urbanism and its unique urban renewal process. The introduction of tactical urbanism, with its high degree of flexibility and adaptability, makes it an ideal complement to traditional planning methods. It enables planners to respond quickly to emerging needs and changing circumstances in urban areas. The temporary nature of tactical urbanism interventions allows for adjustments and refinements based on community input, ensures that planning decisions meet the changing needs and desires of the community, and provides a direction of learning and reference for the renewal of domestic urban inventory spaces. Meanwhile, this thesis constructs a tactical urbanism renewal mechanism for the urban renewal of Zhuangyuanfang district. It also proposes concrete solutions to the main problems facing Zhuangyuanfang, a typical historic district that has been declining over time, and whose renewal problems are also found in other similar districts. The innovative strategies may be extended to a wider range of old urban areas, exploring new possibilities for the renewal of old city in Guangzhou.

Reflection:

First of all, tactical urbanism originated in the West. Western countries have a long history of democracy and a mature civic consciousness, and their political forms, cultural patterns, and ways of thinking are different from China significantly. Some tactical urbanism practices are not officially sanctioned and may be subject to legitimacy issues, while in China encouraging residents to spontaneously change their surroundings may trigger a series of reactions.

Meanwhile, the design tends to be conceptual, although the importance of the implementation, monitoring and evaluation phases of tactical urbanism are mentioned in Chapter Four. However, it has not yet been practiced and lacks practical feedback. The program needs to be improved in further practice.

Finally, the purpose of this thesis is not to provide a solution, but to express the vision to envision the future urban renewal of Guangzhou through tactical thinking. It is hoped that in the future urban renewal, a mature urban renewal mechanism can be established, focusing on the residents' life, and establishing our better city step by step through small changes by the efforts of every person and every group.

REFERENCES

- [1] 《中华人民共和国国民经济和社会发展第十四个五年规划和2035年远景目标纲要（草案）》摘编[N]. 人民日报, 2021-03-06(9).
- [2] 黄路, 刘媛, 战术都市主义: 一种叛逆的城市设计尺度[J]. 设计艺术研究, 2018, 2018, 8(5):8-13.
- [3] ALLISON A. The rise of tactical urbanism[J/OL]The urbanist,2011,508(12): 6-7[2015-10-2]
<http://www.spur.org/publications/article/2011-12-01/rise-tactical-urbanism>.
- [4] Mitchel D. The right to the city-social justice and the fight for public space[J]. Ethics Place and Environment, 2003, 6(1): 273-281.
- [5] Courage D. The Global Phenomenon of Tactical Urbanism as an Indicator of New Forms of Citizenship[J]. engage 32:Citizenship and Belonging, 2013.
- [6] Ahbe Lab. From Prototype to Permanent: Tactical Urbanism in Landscape Architecture[EB/OL].(2017 -11-16)[2020-064].
<https://ahbelab.com/2017/11/16s/from-prototype-to-permanent-tactical-urbanism-in-landscape-architecture/>.
- [7] De Certeau, Michel. L'invention du quotidien, tome 1: Arts de faire. Paris: Gallimard,[M] 1980/1990.
- [8] Lydon M,Garcia A. Tactical urbanism:short-term action for long-time change[M]. Island Press, Washington, DC, 2015.
- [9] Lydon M., Garcia, T., Flynn, J., Murriente, S., Wall, D., & Simpson, C. (2016). Tactical Urbanist' s Guide to Materials and Design.[M/OL]. Retrieved from The Street Plans Collaborative <http://tacticalurbanismguide.com/>
- [10] Lehtovuorip, Ruoppila S. Temporary uses producing difference in contemporary urbanism[R/OL]//Transience and pennanence in ur-ban development, 2015[2015- 10- 12].
- [11] Sierra Gardner. REVITALIZATION STRATEGIES FOR LOW RESOURCE COMMUNITIES[D]. The Boston Architectural College. 2022-12.
- [12] Bishop P, Williams L, The temporary city[M]. London: Routledge, 2012
- [13] Beekmans J, Boer J D. Pop-up city: City-making in a fluid world[M].Amsterdam: BIS Publishers, 2014: 113-114.
- [14] TALEN E.Do-it-yourself urbanism: A history[J]. Journal of Planning History, 2015,

14(2): 135-148.

[15] BEEKMANS J, BOER J D. Pop-up city: City-making in a fluid world[M]. Amsterdam: BIS Publishers, 2014: 113-114.

[16] 丁小涵. 快闪城市若干理论研究 [D]. 北京: 清华大学, 2019.

[17] 刘悦来, 寇怀云. 上海社区花园参与式空间微更新微治理策略探索[J]. 中国园林, 2019, 35(12): 5-11.

[18] 董玛力, 陈田, 王丽艳. 西方城市更新发展历程和政策演变[J]. 人文地理, 2009, 24(5): 42-46.

[19] 李建波, 张京祥. 中西方城市更新演化比较研究[J]. 城市问题, 2003, (5): 68-71, 49.

[20] 阳建强, 陈月. 1949-2019年中国城市更新的发展与回顾[J]. 城市规划, 2020(2): 9-19, 31.

[21] 杨保军. 城市公共空间的失落与新生[J]. 城市规划学刊, 2006 (6): 7.

[22] 张京祥, 赵丹, 陈浩. 增长主义的终结与中国城市规划的转型[J]. 城市规划, 2013(1):47-52, 57.

[23] 王承慧. 走向善治的社区微更新机制[J]. 规划师, 2018, 34(02): 5-10.

[24] Hinthel, S. K., et al. . "The impact of the public good for the tactical urbanism practices on the contemporary urban scene." [J]. IOP Conference Series: Materials Science and Engineering, 2020, 870(1).

[25] Vallance Suzanne, Edwards Sarah. Charting New Ground: Between Tactical Urbanism and Strategic Spatial Planning[J]. Planning Theory & Practice, 2021, 22(5).

[26] Elrahman, A. S. A. . "Tactical Urbanism “A Pop-up Local Change for Cairo's Built Environment” ." [J]. Procedia - Social and Behavioral Sciences, 2016, 216: 224-235.

[27] 张侃. 战术城市主义下的街道改造——以麦迪逊广场为例[A]. 中国城市规划学会、重庆市人民政府. 活力城乡美好人居——2019中国城市规划年会论文集（02城市更新） [C]. 中国城市规划学会、重庆市人民政府: 中国城市规划学会, 2019: 10.

[28] Pfeifer L. Tactical urbanism and the role of plan - ners [R/OL]. Supervised Research Project School of Urban Planning McGill University, 2013.

[29] 张翰卿, 陈莉莉. 城市规划视角下的战术城市主义研究[J]. 城市规划学刊, 2016(05): 35-41.

[30] Silva P. Tactical urbanism: Towards an evolutionary cities' approach?[J]. Environment & Planning, B, Planning & Design. 2016, (6). 1040-1051.

- [31] Florin P, Wandersman A. An introduction to citizen participation, voluntary organizations, and community development: Insights for empowerment through research[J]. American Journal of Community Psychology, 1990, 18(1): 41-54.
- [32] Wohl, Sharon..Tactical urbanism as a means of testing relational processes in space: A complex systems perspective.[J].Planning Theory.2018,17(4).472-493.
- [33] Linke C.C, Intervenção urbana temporária (Re)pensando a rua em Santana Relatório de Atividade,[R/OL] 2018, Retrieved from The Institute for Transportation& Development Policy <https://www.itdp.org/>
- [34] Bureau of Educational and Cultural Affairs of the US Department of State. “Spontaneous Interventions.” [EB/ OL]. 2012.
- [35] Lydon M. Tactical Urbanism 2: short-term action, long-term change. [M/OL]//New York City: the Street Plans Collaborative, 2012.
http://issuu.com/streetplanscollaborative/docs/tactical_urbanism_vol_2_final?e=4528751/2585800
- [36] Lydon M, Bartman D,Woudstra Ret al. Tactical urbanism vol.1: short-term action.long-term change[M/OL]//New York city: thestreet plans collaborative, 2011[2015-(9-19)].
http://issuu.com/streetplanscollaborative/docs/tactical_urbanism_vol.1.
- [37] Yassin, H. H. . "Livable city: An approach to pedestrianization through tactical urbanism." ,[J],Alexandria Engineering Journal,2019, 58(1): 251-259.
- [38] Pavement to Parks. San Francisco Parklet Manual[M].San Francisco: Version 1.0. San Francisco Planning Department, 2013.
- [39] McGuire, N . "Tactical Urbanism: A Plan for the Revitalization of Vacant and Decrepit Spaces." [EB/ OL],2018,The Equilibrium 3(1).
- [40] Linke C, C . Acidentes de Trânsito no Município de São Paulo Relatório anual - 2016. Disponível em [R/ OL],2016,São Paulo,ITDP,2016.
<http://www.cetsp.com.br/media/562061/relatorioanualacidentestransito-2016.pdf>
- [41] Gervasio Sánchez.'Esto no es un solar' adecenta sus últimos rincones antes de extinguirse[EB/OL].2010-12-13)[2021-4-29].
<https://www.heraldo.es/noticias/aragon/zaragoza/2010/12/13/esto-no-un-solar-adecenta-sus-ultimos-rincones-antes-extinguirse-116958-2261126.html>
- [42] 梁志锋. 历史遗迹建筑街区改造保护设计研究中的新思路[D].河北工程大学,2012.
- [43] 陈丽娟. 浅析城市更新中的“微改造” 实践与应用——以愚园路与江苏路为例[J].

中外建筑,2018,(04):85-88.

[44] 广州市城市更新办法[R]. 广州市人民政府公报, 2015(36):1-13.

[45] 沈爽婷. 从“三旧”改造到城市更新的规划实施机制研究[D].华南理工大学,2020.

[46] 万玲. 广州城市更新的政策演变与路径优化[J]. 探求,2022,(04):32-39.

[47] 刘雪. 战术城市主义视角下的社区公共空间更新策略研究[D].北京交通大学,2022.

[48] Waka Kotahi NZ Transport Agency. Handbook for Tactical Urbanism in Aotearoa[EB/OL].2021-08. <https://nzta.govt.nz/>

[49] Brenner N. Is 'Tactical Urbanism' an Alternative to Neoliberal Urbanism? [J]. MOMA, Post. Notes on Modern & Contemporary Art Around the Globe, 2015.

[50] Pfeifer L. The planner's guide to Tactical Urbanism[J]. Montreal, Canada Page, 2013.

[51] 魏方, 余孟韩, 李怡啸, 王向荣. 基于战术都市主义的社区公共空间更新研究——一种促进景观公平的实践路径[J]. 风景园林, 2020, 27(09): 102-108.

[52] Translink. TACTICAL URBANISM TOOLKIT[EB/OL].2020-06. <https://www.translink.ca/>

[53] 蒂文·蒂耶斯德尔[英]、蒂姆·希思[英]、塔内尔·厄奇[土]: 《城市历史街区的复兴》, [M], 张玫英、董卫译, 中国建筑工业出版社2006年版, 13-25.

[54] 陆萌. 广州状元坊街区城市形态基础研究[D].华南理工大学,2016.

[55] 满棠. 广州市越秀传统商业区尺度分析及演变研究[D].华南理工大学,2013.

[56] 杨璧竹. 广州市状元坊街区建筑类型及其演变研究[D].华南理工大学,2016.

[57] 邓舒珊,蔡萌,田银生.广州状元坊传统街区商贸空间形态演变与动力机制研究[J].南方建筑, 2017(02):72-78.

[58] Atay, K. İ. and G. E. Kut . "Formalization of Do It Yourself (DIY) Urbanism through co-production: examples from Turkey." [J]. Urban and Landscape Planning(4),2019: 1-16.

Acknowledgements

Time flies, once I just wanted to finish my thesis and graduate quickly, but now I have to leave the campus, I can't help but miss the simple and happy life. It has been seven years since I went from my high school in my hometown to Xi'an, from Xi'an to Guangzhou, and from Guangzhou to Turin.

Along the way, I've walked to Xi'an City Wall, Turin Po River, and Canton Tower, all of which I've had too many wonderful moments. It seems like yesterday when I was enjoying the chicken casserole at the entrance of the East Gate, the duck shit-scented lemon tea at the South Gate of the North District, and the various kinds of stir-fried meat at Lanza.

It took nearly half a year to finish this thesis, and I encountered a lot of difficulties in the process of writing the thesis, but fortunately they were all solved successfully, in which the students and teachers in the group gave me too much help. I have met a lot of kind, friendly and excellent teachers in my study career, especially thanks to Sun Yimin, Li Minzhi and Roberta Ingaramo for their guidance and help on my thesis. I would like to express my sincere gratitude to all the instructors and students who helped me during this time!

I would also like to thank my parents, who have always been behind me and have been my harbor forever. When I was lost, sad and encountered various difficulties, they always supported me unconditionally.

And then I have to thank my brothers. The joyful time of the university is vivid in my mind, studying together, living together, playing games together, traveling together, drying rice together, playing badminton togetherOkay, no more to say, look forward to seeing you again!