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**Research on the Community Renewal  
Model in Italy  
——Take Turin and other italian cities  
as examples**

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## Abstract

The thesis mainly carries out a detailed research on the updating mechanism and mode of Italian communities renewal, selects several typical cities represented by Turin as the research object, and systematically sorts out and summarizes their renewal characteristics and experiences. This paper firstly sorts out the different development stages of community renewal in Italy from the perspective of policy and mechanism, and extracts the renewal characteristics of each stage and the new trend in the future. Then, combined with the typical renovation cases of Turin and other cities, the measures and specific contents of community renewal are discussed in detail from four aspects of improving the quality of existing space, activating neighborhood space, improving public facilities and regenerating abandoned buildings. Finally, through the summary of the full text of the research content, the government level, community level and design level can be used for reference.

**Keywords:** Community renewal ; space improvement; neighborhood regeneration;

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## Chapter 1 Introduction

### 1.1 Research background

#### 1.1.1 Community renewal is an important issue at present

At present, many cities at home and abroad have entered the era of stock development from incremental planning, and renewal has become a topic of close discussion among major cities. And how to realize the optimal reuse of urban land and space resources is the key to solve the current urban stock development. Today's cities are facing a series of challenges brought by globalization, urban competition and structural adjustment. Since the rise of urban renewal in the 1950s, after more than half a century of renewal and transformation, more and more regional social problems in cities have become increasingly prominent: the macro urban structure has been repaired, but different regions have obvious differences; Different blocks in the same area show serious spatial or group polarization; Population migration brought about by the adjustment of employment resources leads to the abandonment of urban central areas and the impoverishment of central areas; Outdated infrastructure in old urban areas can no longer meet new demands. Traditional renewal has entered a new historical stage: the renewal of the combination of space and people is the only way to deal with the current urban problems. As a composite carrier of space and sociality, community renewal has gradually become one of the core concerns of international cities.

As the sinking of urban dimension, community renewal connects cities and regions, space and people, which is an important trend of urban renewal. In the early urban renewal (1960-1980), the material environment was the main theme. Until more than 20 years later, people gradually realized that there was an "invisible hand" between urban material and social reaction, and the renewal model with community as the main intervention object gradually entered the public's field of vision.

#### 1.1.2 Community renewal is a hot issue in China

In 2020, China is expected to start 53,000 old community renovation projects, and

community renewal has gradually become a hot topic in the field of social and urban research in China. The Outline of the 14th Five-Year Plan and the Vision of 2035 clearly points out that accelerating urban renewal should focus on transforming and upgrading the functions of existing areas such as old residential quarters, old factory areas, old blocks and urban villages, promoting the transformation of old buildings, and actively expanding infrastructure and public services. During the 14th Five-Year Plan period, it is planned to complete the renovation of 219,000 old urban communities built before the end of 2000, basically complete the renovation of old factory areas in big cities, renovate a number of large old neighborhoods, and renovate a number of villages in cities according to local conditions. In China, the community has duality: it is not only the basic unit of urban spatial structure, but also the basic unit of urban governance and grass-roots management. Therefore, the quality of the community can not only directly reflect the urban environment, but also always affect people's livelihood and concern the happiness of thousands of families. Taking the community as an important starting point for urban renewal, promoting the sinking of resources, management and services to street communities and speeding up the construction of modern communities can effectively enhance the urban governance capacity and realize the modernization of the urban governance system.

However, due to historical and social factors and other objective legacy, the work of community renewal and renovation of old residential areas in China is still struggling. The first is the imperfection of the mechanism. At present, there are some rules in the renovation of old residential areas in China. For example, Beijing recently issued a comprehensive renovation work manual for old residential areas, which preliminarily stipulates the management mechanism, rectification contents and responsible subjects, but the organization and implementation methods of specific links need to be further clarified. In addition, how to cooperate with different stakeholders and departments involved in community renewal also needs corresponding institutional support to ensure that all the work of community renewal can be carried out in a standardized, systematic and procedural way; Secondly, public awareness needs to be improved. Under the influence of the tide of public participation, the voice of public participation in community affairs management is getting stronger and stronger. Community Open Day and the establishment of residents' deliberation platform set up a stage for public participation. However, questions such as who will participate and how to participate



have not been well answered. At present, the public participation in China is still based on collecting residents' demands in the early stage, and the public participation needs to be further strengthened; Finally, the lack of planning thinking. At present, the most urgent needs for the renovation of old residential areas in China are mainly the improvement of parking, installing elevators, providing for the aged and facilitating the people. However, in the actual design process, it is usually what is missing and what is missing, and it is not planned from the perspective of the whole process. For example, due to the parking problem, most of the existing old residential areas are occupied by parking, but how should the newly-built parking spaces be allocated, rent or sell? When installing the elevator, where should the elevator be added, and how to coordinate the contradiction between the lower and upper residents. All of these need to be planned and considered at the beginning of design.

### 1.1.3 China's community renewal needs experience

Europe is the birthplace of community renewal, and there are many cases worthy of reference in community renewal, such as the New Deal and Suburban Reconstruction Project in Britain, the collaborative renewal of French marginal communities, the exploration of community public space renewal in Nordic countries such as the Netherlands, and the renewal projects such as community gardens in Germany, which bring vitality and vitality to the declining urban communities. On the whole, the construction of many European cities has basically come to an end. The future development of these cities mainly focuses on the use of existing land and the renewal of existing communities, and the restoration and improvement of urban space and urban functions can be realized by taking community renewal as the starting point.

China's community renewal is relatively late, and it has made some achievements in improving residential housing quality, optimizing spatial layout, improving land use and strengthening building regeneration. However, it also faces difficulties such as chaotic compensation for demolition, low participation of residents, too much attention to economic benefits, and lack of multi-dimensional awareness. Our country needs to learn from the experience in the way of community renewal: community renewal is not only a simple renovation of old building facilities, but also involves material and non-material renewal, including space renewal, building renewal, living environment and road renewal, and community consciousness renewal. The updating methods can be more diversified,

such as putting new elements in the original community, which can be at the spatial level or the behavioral activity level, and transforming the negative community space into the positive public space.

## 1.2 Research status domestic and abroad

### 1.2.1 foreign research status

Foreign countries (this paper mainly discusses European countries) have diverse perspectives on community renewal, which are usually combined with interdisciplinary studies such as urban planning, sociology, political science and economics. Robert Atkinson discusses the discourse construction of partnership and empowerment in "Discussion on Partnership and Empowerment in Contemporary British Urban Community Renewal". He believes that partnership and authorization are not neutral terms, but discourse structures. Therefore, the meaning given to these terms is the exercise of result power, which in turn plays a vital role in constructing the discourse environment for the operation of urban regeneration partnership. This paper emphasizes the "official" process, and constructs the renewal process and the role of community in it from top to bottom. The conclusion of this paper is that these discourse structures strengthen the existing social relations in the operation of urban regeneration. According to the investigation of some urban regeneration experiences in urban areas of three European cities: Copenhagen, London and Barcelona, Francesco Masco introduced a research developed and in progress at IUAV University in Venice. All these cities have started intensive regional regeneration process in inhabited abandoned communities and abandoned areas of factories closed recently with the support of different national plans (England and Denmark) or regions (Catalonia). In the article "The Role of Public Space in Community Renewal Strategy in Rotterdam and Dublin", Renee Van Melik and Philip Lawton made a deep research on the spirit of city authorities, because few publications directly pay attention to the spirit of city authorities. This paper compares the two cases of Rotterdam and Dublin. By contrast, public case space is considered to be necessary for urban renewal. This paper introduces how municipal authorities actively participate in improving public space to attract private investment.

In "On the Nature of Neighborhood" [4], George Galster designated neighborhood as a spatial attribute associated with residential groups, which was sometimes used in

combination with other land uses. It is also discussed that the definition of this "compound commodity" is related to the planning of the spatial boundary community. Then, it discusses a variety of characteristics related to the concept of neighborhood: durability and pricing power, relative evaluation attribute and consumption influence. He discussed how families, property owners, businessmen and local governments work together in this new context. At last, it discusses the viewpoint of community changes from different origins, and holds that community dynamics are full of social inefficiency. Antonio Achtero systematically analyzed the historical origin and subsequent development of Italian cities from the perspective of sociology in the article *Historical Origin and Development of Italian Cities*. The research shows that geographical history and its interaction explain the spatial distribution of population and its evolution with time: Italy has been highly urbanized during the Roman Empire; In the Middle Ages and modern times, the scale and location of Italian cities were seriously affected by the continuous threat of military attacks and political divisions. After that, urbanization also promoted the unification of Italy, although the largest metropolitan area has lost its development momentum in recent decades. However, the author thinks that these relatively new models are partly driven by uneconomical factors (such as higher congestion and housing costs), mainly in major cities in central and northern Italy.

Gil Pinson tried to reintroduce the issue of government into the debate on governance from the perspective of politics in the article *Political Government and Governance: Turin's Strategic Planning and Reconstruction of Political Ability*. Taking Turin's strategic plan as an example, this paper introduces these plans to revise political regulations. Under the background of this series of plans, municipal institutions played an active role in the process of diversification of supervision methods, and played a more important role in the governance process again, helping Turin to build a completely integrated political and social space. Peter Roberts combed the stages of urban renewal and put forward the principles and characteristics of urban renewal. He pointed out that as a special activity, urban renewal originates from practice rather than theory, so its theoretical and practical characteristics are highly similar. He also pointed out the main problems of the community and the sociological reasons for these problems from the perspective of cities. He believes that the change in the traditional structure of communities and families is one of the main reasons for the decline of urban community blocks. The disappearance of traditional employment resources has rearranged the living

places of urban residents, the development of infrastructure and commercial real estate, and the comprehensive factors such as environmental decline and insufficient supply of social facilities have led to the disintegration of many urban communities to a certain extent. With the disappearance of community support, social problems such as immigrant race appear, which further aggravates the instability and recession in inner city areas [7].

### 1.2.2 Domestic research status

Domestic research on community renewal mainly focuses on the community renewal policies and related cases in cities of Britain, France and Germany. Yang Jianqiang tried to give the definition and reference characteristics of community in his book *Urban Renewal in Western Europe*, and summarized the main needs and challenges faced by urban communities: improving accessibility, expanding socio-economic employment opportunities, social welfare, hygiene and health, etc. It also emphasizes that good community health can improve the quality of life and enhance residents' regional pride. In addition, he also summarized the causes and characteristics of gentrification in suburban communities, and thought that gentrification in suburban areas was a manifestation of urban centrifugal force to some extent, which made the original residents and working class become victims of urban space replacement [8]. Xin Shengxi and Li Jihuan briefly combed the background of the British community renewal and the stage characteristics of different modes in the article "From Material Renewal to Human Revitalization: The Development of British Community Renewal and Its Enlightenment to China", and based on this, summarized the community renewal trend with core resources as the starting point. Cheng Liang and Wang Weiqiang, who also studied neighborhood regeneration in Britain, combed the neighborhood policy of community renewal in Britain in the article *Integration of People and Regions-Neighborhood Regeneration Based on Regions and Its Enlightenment*, and summarized the renewal logic from community decline to poverty gathering to neighborhood regeneration. Wang Ting and Dandan Yu made a comparison between the renovation of old communities in villages in China and the renovation of marginal communities in France in the article *Collaborative Planning Path for Renewal of Marginal Communities: A Comparative Study of Renovation of Villages in Cities in China and Rejuvenation of ZUS in France*, and analyzed their commonness and refined the path of "Collaborative Community Renewal" for reference. Shan Ruiqi analyzed the mode and corresponding characteristics

of German community micro-renewal in "Mining Public Space from the Perspective of Community Micro-renewal: A Case Study of Community Garden in Berlin, Germany", and compared and combed two types of neighborhood management mechanisms from bottom to top with the case of community garden.

At present, there are few researches on community renewal in Italian cities in China, and the researches on Turin are mainly on industrial heritage and urban sustainability. For example, Fu Qian and Mu Qi, in the article Industrial Heritage Boosts Urban Transformation and Development: Turin's Experience and Enlightenment, focused on the macro-level aspects of urban functions, urban pattern and renewal of main functional plates, and introduced some ideas and experiences of Turin in reshaping the competitiveness and attractiveness of cities and promoting economic and social recovery by adopting strategies such as adjusting the layout and structure of industrial land, implanting innovative functions in cities and reusing industrial remains. In the article "Soft Sustainability: Turin's Strategy", Zhang Li analyzed the characteristics of Turin and combined with the architectural renovation works of pioneer architects, and put forward a clear inspiration that Chinese cities can learn from Turin: the sustainability of cities is not limited to the renewal of urban hardware, but should establish a strong link between the physical space of cities and the residents of cities.

### 1.3 Concept definition and research content

#### 1.3.1 Community Renewal

The word "community" originated from Latin, originally referring to close relationships or common things. Now it refers to people who live in the same area based on common values or culture, and social units that gather together because of mutual interaction. Community is divided into regional and non-regional in sociological theory. Among them, the regional community emphasizes a clear geographical or spatial category, and the community is formed on the basis of common residence and domain sovereignty. Non-regional community blurs the limitation of material space, focuses on the interaction and connection between residents, and forms a community based on the emotional ties generated by these social activities [10] (Figure 1.1). The British public sector once provided a policy definition for the community: the community is the place where people work and live covered by the urban and rural renewal plan, and the community characteristics are described from the aspects of personal characteristics (such as age,

gender, race and blood relationship), beliefs (religious, cultural and political values), economic status (income from professional housing) and skills [7]. In this paper, community is regarded as a basic unit of social space system.

As for renewal, it first appeared in urban renewal, which is used to describe the material renewal process in the decaying areas of old cities in 1960s. In the 1970s, urban regeneration appeared, which emphasized the revitalization of urban economy, the promotion of urban competitiveness and influence. In the late 1990s, with the increasingly prominent urban social problems, the community gradually received high attention, forming an urban renaissance focusing on the restoration of civil society. In Italy, renewal has always had the classic meanings of "recovery", "reuse" and "redevelopment". In 2008, Puglia District of Italy issued the "Urban Renewal Act", which emphasized that the city's appearance, social economy and people's living environment should be improved through renewal, so as to realize the revival of the city and some areas. Until 2019, lombardia, Italy, passed a decree entitled "A series of incentives such as urban and regional renewal and building restoration and regeneration". The law defines urban renewal as "a set of coordinated urban construction interventions and social initiatives", including the restoration of degraded and underutilized areas, the transformation and management of infrastructure, the improvement of green space and services, the emphasis on environmental sustainability and social resilience, technological innovation and the increase of urban diversity, and the recycling of the built environment and the reorganization of public space. The material renewal in the community is mainly to transform or improve the outdated buildings and spaces, and expand their functions to meet the new needs, so as to achieve the purpose of restoring their use. Therefore, community renewal is often characterized by small scale, short cycle, low cost and mild renewal method.

In my opinion, community renewal is the sinking of urban renewal plan, which is different from the macro-planning level and focuses on the renewal of local areas and neighborhood blocks. As the connection between urban space and social residents, community renewal is a block scale between urban planning scale and architectural design scale, paying more attention to the relationship between space and people, including architectural streets, public space, neighborhood society, regional economy, ecological environment and many other aspects. The essence of community renewal is a social intervention, and its purpose is to correct the deviation of community development

and revitalize the decaying living space. Traditional intervention is mainly led by the government and follows the national or regional urban strategic planning, which can be regarded as "visible hand"; As more social issues and public participation become increasingly strong, bottom-up renewal, which emphasizes the community as the main intervention object, has become a force that cannot be ignored, forming an "invisible hand" in the local area. With the joint intervention of both hands, community renewal has gradually become a public-private action, which requires the establishment of a set of mechanisms that can coordinate the organizational interests of all parties and fully mobilize the collective participation will, so that the community renewal work can be carried out in an orderly manner. There is no complete system to ensure the continuity and effectiveness of intervention, which has become the main obstacle to the renewal of many communities. Unsustainable renovation intervention is also the main reason for the continuous decline of the built environment.

### 1.3.2 Periphery Communities

The reason why the marginal community is explained separately is that in the field of community renewal in Italy, the renewal practice of marginal community occupies a considerable proportion and is an important part of community renewal in Italy. The concept of "marginal community" in Italy is relative to the historical central area. The transformation of contemporary cities has led to the emergence of a new central position in the surrounding areas of cities. Taking the construction period as the standard, buildings built after 1946 are regarded as marginal areas. Italy has about 43 million people living in marginal areas, accounting for more than 70% of the total population. More specifically, 15% of the Italian population lived in buildings built before 1919, 10% in buildings built between 1919 and 1945, and the buildings in marginal communities accounted for about 70% of the total buildings (2000 statistics). Therefore, the importance of renewal of Italian urban fringe communities can be seen only by the number of people and the proportion of territories involved in this phenomenon. In fact, the marginal community is the product of urban expansion during the economic boom in Italy, such as the development and construction of the surrounding areas in order to provide housing for new employees. Marginal areas are more and more complex than they seem. The word "edge" has multiple meanings: from the physical, socio-economic and cultural perspectives, it can be understood as an area far away from the city center; From a social

point of view, it is a "problematic", deserted area with apartheid and social exclusion; From an economic point of view, it is a dormitory area with poor concentration and low investment value; from a cultural point of view, it is a space without context, quality or history; From the perspective of urban design, it is a space that is unwilling or unable to be reserved by the non-city center or the main city.

In addition, the word "edge" also represents highly diversified regions and phenomena: it can be understood as the product of the outward spread of the central region of social and material decline; It can also be regarded as merging the inner area and the expanding area of the city; It can also be used as a single-function residential area for public activities and a relatively "rich", vibrant and part of suburban growth. A large number of real estate investments define the originally marginal areas as new suburban centers. The diversity of existing features in urban fringe enables us to abandon our inherent perception of it and re-emphasize its enthusiasm. In addition, the particularity of every city edge stems not only from the diversity of its available resources, but also from the diverse meanings given by residents to their living environment and the diverse collective actions of residents. The process of giving community meaning by residents has shaken the traditional definition of urban fringe areas, and urban fringe areas have been re-recognized: marginal communities can be regarded as urban areas with different heritage, memory and identity attributes, rather than the "simple" concept of deprived urban residential areas. According to this point of view, the urban fringe is not only a social exclusion and resource deprivation block, but also a "crowded place", which is characterized by specific social capital and collective identity. This view summarizes the affirmation of social dimension in local, especially in neighborhood construction, and reveals the philosophical relationship between neighborhood and local from a more planning perspective.

### 1. 3. 3 Neighborhood Regeneration

The difference between Neighborhood Regeneration and Community Renewal is that community renewal includes the transformation and promotion of urban physical environment, and its spatial regionality is strong. Neighborhood regeneration pays more attention to social relevance, which aims to repair and regenerate the phenomenon of weak MoMo between neighborhoods caused by class differentiation and racial discrimination in some communities with complex social background. It focuses on



cultivating community strength, attaching importance to local residents' emotions and emphasizing the improvement of "social exclusion". It is a renewal mode that respects residents' opinions and pays equal attention to both material and society. This approach once became the consensus of community renewal in European countries.

#### 1.3.4 Scope and content of research

This paper is mainly divided into three parts. The first part firstly combs the operational mechanism of Italy since the implementation of community renewal in 1990s, and the renewal subject, object, policy, content, participants, strategy characteristics and mechanism effectiveness in three stages, focusing on the analysis of the main roles played by the government, social organizations and residents in different renewal stages. On this basis, the main policies, characteristics and update trends of each stage are summarized. So as to gain a certain understanding of Italian community renewal policies and mechanisms. The second part starts from the perspective of architecture, combines sociology, political science and other disciplines, and focuses on 32 Italian community renewal cases represented by Turin. It can be divided into four categories, namely, improving the quality of existing space, repairing neighborhood structure, improving infrastructure and regenerating abandoned buildings, which correspond to four chapters respectively. In each chapter, how each case is planned, designed, carried out and operated for a long time is introduced in detail. The last part summarizes the experience and lessons of community renewal in Italy and provides reference for community renewal in China.

### 1.4 Research purpose and significance

#### 1.4.1 to sort out the community renewal model in Italy

Since the community renewal in Italy at the end of last century, it has experienced more than 20 years of practice and exploration, and formed a relatively mature model in terms of renewal policy and mechanism system. Especially in expanding the connotation of community renewal, promulgating relevant laws and regulations, coordinating the government, social partner organizations, community residents and other multi-stakeholder subjects, etc. For example, community renewal in Italy attaches great importance to space intervention to people-oriented public participation. By refining the

mechanism of public participation in the process of renewal, defining the role and mode of public participation, decision-making system, analyzing how to formulate cooperation treaties between government or community organizations, and studying how to mobilize the enthusiasm of public participation and ensure its participation through the system, this paper provides enlightenment for China's urban renewal model of universal participation. In recent years, although the work of community renewal and old community reconstruction in China has been on the right track, it is still in the early stage of exploration. There are still some problems, such as unclear responsibility subjects, unclear process links, difficult implementation of residents' demands, limited public participation and so on. By combing and studying the Italian community renewal model, we can sort out a clear reference context for the development of community renewal in China, and at the same time draw lessons from the problems exposed in the practice of community renewal in Italy, so as to avoid risks in the future renewal work in China.

#### 1.4.2 Summarize experience of community renewal in Italy

In addition to the enlightening significance of updating policies and mechanisms, Italian community updating has rich practical experience. These renewal cases cover the physical environment such as improvement of living environment, improvement of residential quality, renovation of public space and regeneration of abandoned buildings, and the social environment such as neighborhood relationship restoration, regional economic revitalization and community vitality recovery. These renewal practices are based on the characteristics of community noumenon, and are usually designed and implemented by community residents and local partner organizations. Therefore, these renewal projects can reflect the collective will and urgent demands of residents to a large extent, such as education, employment, medical and health care, skills training and so on, which depend on the social needs of the community. Due to the difference of social environment and system, there are few such renovation plans organized and implemented by residents spontaneously. However, this renewal of residents' collective consciousness can greatly promote social interaction, stimulate the endogenous motivation of the community and help to form a strong sense of community acquisition, identity and belonging. This kind of renewal from space to human is worth learning and studying in China.

### 1.4.3 Important and difficult points

The focus of this paper includes the following four aspects: First, the research on the Italian community renewal mechanism and the formulation of relevant policies and decrees, focusing on the analysis of the role and role of the government at different stages; The second is to study the working mechanism of the public's complete participation in all aspects of the Italian community renewal plan, how to reach the cooperation treaty with the government and local organizations and architects and planners, and what role the public actually played in the renewal process and what kind of substantive role it played; Third, in the process of Italian community renewal practice represented by Turin and other cities, the renewal strategies and case studies involved in the restoration of architectural physical space and neighborhood relations, including the renovation of public space, the restoration of neighborhood relations, and the regeneration of abandoned buildings; Fourthly, compare and analyze the social promotion and regional economic stimulation of different renewal projects, and see whether the community renewal has been realized systematically and what results have been achieved.

Although the community renewal action in Italy has been launched for more than 20 years, a considerable number of practical projects have been completed. However, there are relatively few systematic studies on community renewal and building regeneration, and the architectural data on project records need to be further explored. In the process of investigation, due to the influence of epidemic situation, the use and opening hours of travel, public space and facilities in special period are highly uncertain, which increases the difficulty of comprehensive and in-depth field investigation. In the research links such as literature search and interview, due to language barrier, there may be some deviations in the communication and understanding of some words and sentences. At the same time, the proper nouns involved in some policies and decrees need to be translated by professionals. In addition, since the outbreak of COVID-19 epidemic occurred during the investigation period, the whole country of Italy was closed, so the field investigation of public space and reconstruction cases was greatly affected. In order to reflect the actual use status of these spaces more comprehensively, some cases are supplemented by online research.

## 1.5 methodology

### 1.5.1 Literature review

Check the literature at home and abroad, understand the background knowledge of Italian city characteristics, urban renewal system, development process, policies and decrees issued by the government at the corresponding stage, master the latest practical cases of community renewal in Turin, and learn interdisciplinary knowledge such as sociology and political science, so as to enrich the reserve of relevant theoretical knowledge and the understanding of conceptual models.

### 1.5.2 Online and offline research

Through the projects under the relevant plans of urban community renewal in Turin and other cities, the field investigation was carried out from a total of 32 renewal cases such as urban public spaces, traditional blocks, peripheral areas and neighborhood communities, with the main contents including observation records, photographs, interviews and obtaining first-hand information.

### 1.5.3 Interdisciplinary analysis

Because there are many fields involved in community renewal, this paper will also analyze and compare the research objects through the cross-disciplinary analysis methods of architecture, urban planning, sociology, political science and economics.

### 1.5.4 Comparative induction

Through analyzing and comparing the commonness and difference in the horizontal and vertical directions without the research cases, the characteristics, advantages and disadvantages of different research models are summarized on this basis, so as to provide a strong argument and reference for the final conclusion.

## Chapter 2 Community Renewal Policies and Practices in Italy and Other Countries

The development of community renewal comes from the sinking of urban renewal plan to regional and local levels. In the 1970s and 1990s, many European cities set off a wave of renewal that emphasized the role of community, and community renewal officially entered the public's field of vision and gradually became an important field of urban renewal. The formation of Italian community renewal policy system is influenced by Britain, France, Germany and other countries to a great extent, showing great similarities in policy introduction, power transfer and renewal focus. This chapter focuses on sorting out the three development stages of Italian community renewal policy, summarizing the typical characteristics of different stages, and on this basis, puts forward the new development trend of Italian community renewal in the next step.

### 2.1 Main concepts and brief development of community renewal

Due to the differences in Chinese and Western contexts and social backgrounds, there are some differences in understanding the community. This section first discriminates the connotation of community in different contexts between China and the West, then introduces the community subjects that play an important role in community renewal, mainly various types of community organizations, and finally briefly combs the development process of community renewal in Europe, so as to facilitate readers to form a preliminary understanding of community renewal.

#### 2.1.1 Community connotation in different contexts

In Chinese, the word "community" is originally an "exotic product". The community form in China can be traced back to the basic organization form of collective production (Jingtian system in Shang and Zhou Dynasties), and changed with the evolution of the system and mode of urban construction (Lifang system in Tang and Song Dynasties). Block is a very common community form in cities in Chinese history, which evolved from the Lifang system in Tang and Song Dynasties. In the north, the traditional block is

an "alley-courtyard" system, which can be traced back to Yuan and Qing Dynasties. This kind of system is characterized by an inward courtyard surrounded by single-storey houses, and the main commercial facilities are along the main streets. From the founding of New China in 1949 to the 1980s, the unit compound was the most typical community form in this period. The unit compound is built and managed by the work unit, and the house is distributed to the unit personnel as a part of social welfare. Unit compound is characterized by mixed use of workplace, housing, education, culture and other supporting facilities. In balancing work, housing and reducing commuting, the unit compound is an ideal community environment. Since the housing reform in 1980s, commercial residential quarters have become the main form. Commercial housing community is a typical closed community, which is managed by neighborhood committees and maintained by property companies. In addition to housing, communities usually have public buildings and residential squares for public activities and cultural functions.

In Europe, community development is regarded as a participatory and constantly changing dynamic process. Therefore, the discussion on the origin of community in the European context is more complicated. For simplicity, this paper understands community as "a collection of neighbors sharing a space environment and people with the same identity or interests", that is, "local community". There are many large-scale events affecting communities in Europe, such as the formation of the European Union. In particular, the Second World War had a great impact on the development of local communities in Europe. For example, in Norway, after the war, people had a strong and widespread common understanding that people in the same place should work together to rebuild their homes. The experience during the two world wars itself may also promote the formation of a sense of belonging in European local communities: people are more dependent on each other because of their hard life. Large-scale events such as economic crisis, climate change and trade war still affect local communities today. A well-organized local community is of great significance to the happiness and quality of life of nearby residents. European initiatives focusing on community development, such as the European Community Development Network (EuCDN, 2014), put forward that an "underdeveloped" or dysfunctional European community must lack participatory and equality-oriented standards.

In addition, there are several important factors that affect the operation of

communities in Europe: the elderly, local bars, cafes and community centers. In a well-functioning community, the non-economic use value must be higher than the transaction value. The former is usually measured by the time and energy that some people in the community spend benefiting the whole community. In Europe, such roles are often played by the elderly. Local bars and cafes are the focus of local crowds, which is very important to maintain the popularity of the community. A community center that organizes collective activities from time to time is a Petri dish for a community to form collective memory and cohesion.

### 2.1.2 Community subjects involved in community renewal

Community renewal involves many subjects, including local government (and related public departments), residents, owners and merchants, social institutions (including schools and other educational institutions for skills training), developers and various community organizations represented by residents' committees. Among them, the indispensable subjects are the government, residents and community organizations. Community organizations connect the government upward and coordinate residents downward, which is an important lubricant and bridge connecting upstream and downstream in community renewal. The understanding of community organizations is different between China and the West.

In China, the common types of community organizations include neighborhood committees and industry committees, both of which belong to grass-roots mass autonomous organizations. Residents' committees are elected by residents and are responsible for handling residents' daily affairs, community safety, public health and conflict mediation. Industry Committee is responsible for collecting the opinions of owners and supervising the operation of property management companies. Under the current urban governance system in China, community organizations are usually under the jurisdiction of grass-roots government agencies (street offices). In recent years, under the background of "big government, small society" to "small government, big society" in governance transition, more resources and authority are inclined downwards, thus street offices gain more power, and at the same time, neighborhood committees and society are given more space for self-management.

In Europe, various forms of community organizations represented by "residents' associations" and "community cooperatives" play an important role in ensuring citizens'

participation in community public affairs. These community organizations are relatively independent of the political system, and their roles are more like "partners" of the government. They convey the needs and aspirations of local residents to municipal decision makers, and promote equal dialogue between public administration and society with an attitude of actively solving various community challenges. An important work content of community organization is to create community public space and organize and maintain related activities. Usually, community organizations receive financial support from the municipal authorities, and then use the space of local schools or libraries to carry out community activities, including various celebrations (such as National Day, Christmas or Midsummer celebrations), neighborhood gatherings, fairs and flea markets, sports activities, etc. Most community organizations are managed by local community volunteers, who represent the interests of many families related to community buildings or public spaces. The core management of community organizations is the board of directors, which is composed of members who are active in community affairs every year. In addition, community organizations have an unwritten participation rule: living in a block means participation to a certain extent, and this customary rule is helpful to shape community identity and maintain public order.

### 2.1.3 Brief development course of community renewal in Europe

Community renewal, as the sinking of the macro dimension of urban renewal, first appeared in the European urban renewal plan in 1970s. At that time, the urban renewal proposed for the first time to renovate the concentrated blocks and improve the urban environment by carrying out community actions and improving community capacity. The funds in this period mainly came from public sector allocation and a certain proportion of private investment. Later, in the 1980s, the renewal began to emphasize the role of local autonomy: encouraging communities to help themselves, with limited help from the state. The participants began to emphasize the cooperation of private institutions, which was led by the state or local government before. In the renewal of building environment, large-scale sweeping reconstruction projects are still the main ones. Until 1990s, community renewal entered an unprecedented historical stage: community became the main field of urban intervention, policies and practices began to tend to a more comprehensive perspective, and public-private cooperation was the dominant way to complete renewal. In terms of capital, the proportion of public, private and social funds



is relatively balanced. Compared with the last decade, the scale of the project in this period began to shrink, and more attention was paid to the renovation and upgrading of the site environment, the protection of regional characteristics and humanistic characteristics, and the concept of sustainable development was introduced in the renewal. Since the 21st century, community renewal has reached a new height. Public participation has become the main body of renewal, supplemented by various types of social organizations and departments, while the government takes a back seat and plays a regulatory role as a collaborator. In terms of funds, it continues the composition of the previous stage and is further transparent. Almost all the sources and uses of funds will be publicly published in the project official website. Pay attention to the rise from space intervention to human participation, and emphasize the repair of social relations, especially for marginal communities with complex social background, racial discrimination and class exclusion; Community rejuvenation of economic, cultural, educational and other social resources in the revitalization area has become the theme of renewal in this period. The focus of renewal has shifted to community micro-renewal projects with small scale and low investment, and the micro-renewal of organic growth has become a new trend.

The external motivation of community renewal is to curb the further decline of existing block communities. The common manifestations of decaying communities are divided into two aspects: in physical environment, the main manifestations are aging buildings, imbalance between housing supply and demand, abandoned green landscape, backward infrastructure, and a large number of abandoned industrial and commercial spaces. In terms of social form, the main manifestations are economic malaise, high unemployment rate leading to deterioration of housing conditions, crowded living space, population outflow leading to further decline in housing prices, gathering of low-income groups, further breeding of high crime rate, and the community gradually becoming a poor gathering place due to the "broken window effect". The internal motivation of community renewal includes social, economic and political levels: the social level is to increase employment opportunities, improve living environment and conditions, and thus alleviate the class contradiction between the rich and the poor; At the economic level, improve the regional investment efficiency, relieve the government's financial pressure and revitalize the regional economy; At the political level, the center of gravity sinks to improve the efficiency of grass-roots governance, promote public participation and

realize democratic self-management.

## 2.2 Community Renewal Policy and Practice in Some European Countries Affecting Italy

In the second half of the 20th century, with the large-scale urban renewal in Europe entering a new period, the renewal of regional and precise community dimension gradually became the mainstream. Many countries have launched revival policies for local communities one after another, among which the representative ones are New Deal for Community (NDC) in Britain, ZUS community integration plan in France, neighborhood management system in Germany, etc. Their common point is that they all pay attention to the combination of community sociality and space, and consciously guide the public to participate in the community renewal and transformation plan to varying degrees through the government. The renewal policies of these countries typically represent the policy and theoretical practice of community renewal in Europe, and also have a profound impact on the development of community renewal in Italy.

### 2.2.1 UK: Neighborhood Empowerment, Resource Trigger

Since 1960, Britain has experienced more than half a century of renewal practice. At first, it was an extensive renovation of "big demolition and big construction", which was completely led by the government. In this stage, the renovation strongly depended on the government's financial allocation, so as to attract the openers to participate in the renovation and renewal of the decaying blocks in the inner city. Until the financial crisis broke out at the beginning of the 21st century, in order to relieve the central financial pressure and avoid political risks, the government consciously pushed more responsibilities to the local authorities [12], and actively introduced third-party forces (local private enterprises, departments, NGOs, etc.) to provide financial and resource assistance, forming a community-based local company partner organization (LEP), which became the main decision-maker and executor of community renewal at this stage. With the decentralization of government power, the role of government has changed from leader to funder, and gradually withdrew from the stage of community renewal. Therefore, the community can gain more autonomy. For example, it can make more targeted neighborhood planning according to the actual needs of the region, and put forward comprehensive plans for employment, medical care, education and other issues in the

community. Residents, schools, volunteers and other social forces participated in the community renewal, and gradually developed from neighborhood cooperation to neighborhood empowerment system [13]. Different from the traditional sense of "public participation", the neighborhood empowerment system emphasizes the legitimacy and necessity of citizens' direct participation in the management and implementation of community affairs, and it is not only the residents' rights but also their obligations to manage the community independently. From neighborhood participation to neighborhood management, community self-governance ability is enhanced through a series of empowerment measures to ensure that residents can break objective limitations and fully participate in community regeneration construction. On the source of funds, the "Neighborhood Work Fund", which is mainly composed of local basic grants and renewable funds introduced by the market, provides economic support.

The sinking of power brings a free and open institutional environment to local communities, and promotes the innovation of renewal mode from bottom to top [14]. There is a community renewal model with education, medical care and other social and people's livelihood concerns as the core resources, triggering multi-party cooperation. For example, Weston College-style community renewal takes educational resources as the starting point, and by setting up comprehensive community colleges in decaying old communities, it can trigger various benefits such as personal learning, employment opportunities and community promotion. This project is supported by the local security foundation, and LEP is responsible for decision-making and supervision, which is an active exploration for the community to improve social problems from the perspective of space construction. However, this model, which is triggered by a single function (education) and becomes a complex community hub with multiple functions, has great limitations, which are manifested in the fact that the professionalism of teachers' resources and the traditional evaluation system limit the possibility of diversification, and that this bottom-up renewal project is difficult to coordinate urban construction, education and other multi-sectors at the same time [14]. Therefore, this model of community renewal triggered by core resources needs to be further explored and improved in combination with practical problems.

### 2.2.2 France: "Contract" collaborative update

The large-scale community renewal in France began at the end of the 20th century,

and focused on the renewal of sensitive urban areas ("ZUS") [15] with problems such as the decline of space environment and social exclusion. In terms of spatial nature and social attributes, ZUS area is similar to urban villages in China to a certain extent. Similar to other European countries, the importance of local forces in community renewal has also been emphasized in a series of urban policies for local revival launched in France. However, it is worth noting that, unlike Britain, the directives issued by France clearly define that the central government and local collective are two parallel concepts [15], and they do not constitute a subordinate or subordinate relationship. The government, local organizations and community residents have reached a cooperative relationship by signing a "contract". This kind of "contract" cooperative relationship breaks the traditional pyramid structure of "government-organization-residents", which can not only reduce the political pressure of the government on the community level, but also liberate the local self-governance ability; It is also conducive to the third-party social forces to coordinate the problems of community living environment, economic environment and social environment from a more comprehensive perspective; And from the ecological chain, it ensures that the grass-roots residents enjoy equal status in the proposal and decision-making of community renewal affairs. In addition, a community "Council" system has been set up, so that residents who were originally bystanders at the hearing became the protagonists of expressing opinions and demands, and professional support staff such as community planners became listeners. The maximization of residents' participation in the process of community renewal can be ensured through the reversal of subject and object.

This model of "separation of powers" gives the local and the masses great autonomy. Due to the lack of macro guidance and supervision from the upper level, local organizations need to maintain a high sense of trust, and residents need a strong sense of self-management, otherwise the community will easily become a hunting ground for some capital groups to gain benefits.

### 2. 2. 3 Germany: Neighborhood Management, Spatial Micro-renewal

Similar to the UK, the community renewal in Germany started from the government-led demolition renewal. After that, due to the unification of Germany and Germany, the reduction of financial funds led to decentralization, and the multi-party cooperation relationship gradually formed. Among them, the most representative policy is the

neighborhood management system in Berlin community. Neighborhood management, as the link between the upper-level government and the grassroots, is the transition of self-management of the community by the decentralization of government agencies. But its essence is still top-down: the government takes the lead, selects the areas that need to be updated according to the macro urban planning, guides and controls the direction of community renewal, and has the final decision-making power for the renewal proposal at the local level. The core organizer of the neighborhood management system is the neighborhood management working group, which is neither affiliated to the government nor different from the grassroots, and is equivalent to an officially authorized third-party organization. Its main responsibility is to provide funds for community renewal projects, that is, the role of "investors". The working group works directly in the community, facing the street with open and transparent French windows, and notices of various activities are clearly visible [16], creating an office atmosphere close to the people. The actual executor of the neighborhood management system is the distribution Committee, which is composed of community residents, social organizations, local associations and other groups representing various interests, among which local residents account for at least half of the total [16]. Neighborhood management funds mainly come from EU special funds and financial allocations from governments at all levels. The organizational model of neighborhood management project is as follows: the neighborhood management working group collects proposals from the public extensively, invites experts and scholars to conduct appraisal meetings, and the residents' distribution committees vote collectively. After the proposals are passed, they are reported to the government for review, and the project is contracted to a third party for implementation. The working group provides financial support. The neighborhood management project is comprehensive, which involves social issues such as community image, neighborhood culture and neighborhood relations, besides the improvement of living environment and public space.

After 1990s, with the development and maturity of community self-governance, the bottom-up renewal mode has gradually become a new trend. However, due to the limitation of funds and personnel in spontaneous organization, this mode is often carried out in the community with small scale, less investment and short cycle, thus forming the community micro-renewal mode. The objects of micro-renewal are usually community entrances, Little Square gardens, street landscapes, green spaces, etc., and most of them are public space renovation designs. A representative case, such as the renovation of the

garden in Princess Community, was originally an idle street corner public space, and the residents spontaneously transformed it into a shared garden through mobile simple devices [17]. This renewal method with high participation not only stimulates the vitality of the community and promotes neighborhood communication, but also conveys the renewal concept of green sharing and creates an ecologically sustainable community image.

#### 2.2.4 Norway: Self-mobilization and Neighborhood Mutual Assistance

Different from the thinking of "power sinking and community autonomy" adopted by other European countries in community renewal, in Northern Europe, where democratic consciousness and citizenship are highly developed, grassroots residents form a community self-management model of neighborhood mutual assistance through self-mobilization, also known as Dugnad phenomenon.

In Norway, Dunard has existed as a social phenomenon since the 13th century [18]. Now Dunard is usually used to describe a kind of public voluntary work done with others, which benefits individuals, families, neighborhood social organizations or charitable organizations. In the early days of Dunard, it was usually manual work to improve the community environment or maintain neighborhood relations. Today, however, this concept covers a wider range of social activities, including various forms of voluntary contributions under the background of schools and cultural institutions, as well as mutual assistance activities beneficial to friends, family and neighbors. It is often given in the form of time, such as cleaning up the community environment or cleaning buildings; Or in the form of preparing food or gifts, which can be sold for the public interest; It can also be to provide professional knowledge or resources (such as building materials for building playgrounds), and all actions are free of charge. Dunard is both social and temporary, such as painting the neighbor's house. If it's the latter, neighbors usually return with a dinner or make a verbal promise in the future as a favor.

Therefore, to a great extent, the formation of Dunard is based on social mutual assistance in neighborhood relations, which is restricted by invisible social norms and rules. As the residents in the same community will subconsciously form such a set of values: those who participate in Dunard can gain higher social prestige and respect from people, which can be considered as a social constraint at the moral level. But for new

residents or outsiders in the community, this is also a kind of invisible exclusion. Those who fail to make sufficient contributions within a certain period of time may never really integrate into the community structure. In addition, Dunard is also related to the concept of self-mobilization. Under the condition that the municipal authorities do not have enough financial resources to meet the needs of the community, the residents "carry out community actions" through self-mobilization and unity. From the perspective of democracy and joint decision-making, politicians and decision-makers will be influenced by the opinions of these residents in Dunad to a great extent. In a word, Dunard is an important factor in Norwegian society, which plays an irreplaceable role in community building and ensuring citizens' participation in community affairs.

### 2.3 On the Development Stages of Community Renewal Policy in Italy

Influenced by countries such as Britain, France and Germany, Italy's community renewal shows great similarity in policy and development level. Under the influence of European urban renewal tide, Italy has launched a series of community renewal plans since 1980. According to the main policies in different periods, the renewal and development of Italian community can be roughly divided into three stages: the exploration period of policy change, the multi-partner cooperation period and the regeneration period of public participation.

#### 2.3.1 Stage 1: the exploration period of policy change

The general feature of this period is that community renewal, as a product of the change of community dimension driven by urban renewal, shifts the renewal area from the historical center to the marginal area, and the renewal mode is government-led. The main source of funds is state and local financial allocation, and the main object of renewal is physical space environment.

In 1990, Italy did not form a clear community renewal policy, and the renewal measures at the community level mainly came from the regional projects of urban renewal and some relatively independent and discontinuous experimental renewal plans. But at the same time, other European countries, such as Britain, France, Germany and so on, have already appeared mature community renewal theories and policies. Therefore, the early community renewal policies showed obvious outward reference and exploration,

and all showed a common tendency: focusing on the promotion of community physical space environment.

The initial renovation is mainly concentrated in the historical central city, and the renovation measures are mainly to repair the existing buildings in the historical blocks. At the end of the 20th century, the rise of the de-industrialization movement slowed down the overall growth of Italian cities, and resulted in a large number of post-industrial abandoned areas and vacant buildings in the urban fringe areas. These new available land and space have attracted the interest of real estate developers. In this context, the Italian authorities proposed to shift the focus of renewal from the historic old city to the marginal areas. Improving regional competitiveness has become a new goal of community renewal policy, which is manifested in improving the physical space environment of the community at the entity level, and the main objects of transformation are housing and infrastructure, so as to enhance its attractiveness to external investment and strive for a new position in the context of European cities. The central government selects renewal areas according to macro urban planning, and local governments carry out renewal work in qualified communities. National policies and local laws and regulations are implemented at the same time, but they are still in a period of change, and a clear policy system for renewal has not yet been formed. All renewal plans in this period were uniformly allocated by the national housing budget, but according to relevant laws and regulations, these financial subsidies must be used for housing renovation and maintenance of public infrastructure. A few local renewal projects can obtain private funds and EU special funds. Due to the obvious inclination of the policy to the physical environment, the renewal programs implemented during this period have maintained an obvious MoMo for the neighborhood social relations [19].

Although the government has maintained the absolute right to speak on the renewal plan, it has never found a balance point to coordinate the relationship between the central and local governments. Influenced by Britain, France, Germany and other countries, it is an inevitable trend for the central government to delegate power to local governments. On the one hand, it can alleviate the central political and financial pressure; On the other hand, for the marginal areas with relatively complex social background and population composition, local governments and some local community organizations have better understanding of the actual needs and thus have better execution ability. In view of these areas, the government has launched projects such as the Urban Restoration Plan (PRU),



the Neighborhood Contract (CdQ) and the European Union Urban Plan (Urban1.0), etc. The common point is to pay attention to the neighborhood social relations and the cooperation of multi-departments and local forces. From single action to multi-party co-construction, the role of government has been redefined, and the multi-party partnership system has gradually formed.

### 2.3.2 Stage 2: Multi-partner cooperation period

The general characteristics of this period are: taking "integration" as the principle, focusing on improving physical space and repairing social relations. The government has changed from a leader to a manager, and third-party organizations such as local institutions have become the main force of renewal, which has played an important role in promoting community self-management and cross-platform collaboration among people, materials and capital.

Italy has experienced about ten years of legislative and practical exploration, and has achieved certain results in improving the physical space environment of the community. However, due to the one-sided pursuit of improving the competitiveness of regional entities, the social problems have become increasingly prominent: the depression of local industries has led to the unemployment of a large number of residents, the accumulation of poverty and the formation of class differentiation, and the problems of racial segregation, social exclusion and neighborhood MoMo brought by immigrants are gradually disintegrating the community environment of "recovering from a serious illness". In this context, the authorities realize that local organizations with high regional relevance can play a more active role in the renewal process of such communities. Therefore, local governments have introduced a series of integrated renewal schemes, with the theme of integration and negotiation. The aim is to give full play to the role of local forces, and to make a new attempt in the formulation and implementation of community policies on comprehensive issues such as community housing, employment, economy, education and medical care by introducing local enterprises, public organizations and service agencies.

Similar to countries such as Britain and France, the transformation from single action to multi-party consultation essentially redefines the role of local authorities. In fact, they no longer play the role of real decision-makers, but conduct experiments as organizers to study the interactions among various subjects in the process of participating in decision-

making. This experimental "local partnership system" is a form of public partnership organization aiming at inter-agency coordination and cooperation, and a form of public-private partnership that allows increasing social and economic resources and personal skills. Its essence is the interaction between multiple community renewal related actors and the game between multiple stakeholders introduced by local governments to enhance the self-governance ability of communities [19]. Specifically, in the field of community renewal, the cooperation between different functional departments and public and private partners can promote the mutual circulation or exchange of public and private resources to a certain extent; The cooperation between public partners mainly refers to the cooperation between institutions across levels and platforms. It should be made clear that, as "foreign aid" for community renewal, all partners openly express the availability of their resources to community public affairs by signing cooperation agreements with local governments, and assume equal responsibilities for the renewal projects they participate in. At the same time, the agreement also gives the third-party partner organizations the "right to participate in the discussion of community affairs", that is, they can participate in the formulation of local renewal policies, have voting rights on project proposals, and obtain a considerable share of project management and execution rights by increasing the proportion of input resources.

Due to the involvement of social forces such as partners, community renewal has shifted its focus from the central to the regional level. Local governments can formulate more targeted local policies and project plans according to the feedback and suggestions of partner organizations, and the regional relevance of community renewal policies is significantly improved. However, with the growth of local independent management rights, the phenomenon of bureaucratic capitalization has become increasingly obvious, and more and more updated policies and projects have become a tool for the minority bourgeoisie to make profits. A new round of social contradictions is on the verge, and the call for public participation has become stronger and stronger.

### 2.3.3 Stage 3: Public Participation Regeneration Period

The general characteristics of this period are: the awareness of democracy at the grass-roots level is awakened, the enthusiasm of public participation in community renewal is unprecedentedly high, and various public participation systems and tools are formed under the impetus of local authorities. From public participation to public

management, bottom-up community self-regeneration and the shaping of identity have become the main goals.

In 1996, the World Resources Institute made a study on the outstanding problems and challenges of cities around the world, and the results showed that in every country, citizen participation is the guarantee of its public policy and community prosperity [7]. Influenced by the trend of bottom-up renewal in European cities and the popularity of citizens' awareness of the right to participate in public affairs according to law, Italy has set off a upsurge of public participation in community renewal. There are two internal causes. First, with the improvement of the basic environment of the community and the restoration of social relations, the cognitive awareness and action ability of the grassroots residents have been greatly improved. Some residents with high self-awareness emerged, such as lawyers, teachers and other people with strong will to participate in community affairs. And some residents, such as the elderly group, have the willingness to organize neighborhood activities and transform public space spontaneously for their own needs; Second, the local authorities realize that with the downward power, the local partner organizations are expanding constantly, and the social contradictions with the grassroots people are intensifying day by day. In order to ensure the balance of power of all parties (mainly restricting the further growth of local partners) and to carry out local democratization reform in line with the trend of the times, local governments actively advocate and organize the public to participate in community renewal in various ways.

In recent years, in Bologna, Ferrara, Genoa and other cities in Italy, the practice of citizens participating in community public space construction based on resident status is quite popular. Through the initiative of reusing existing public goods and community space, they regenerate new public places according to the renewal plan. Citizen participation associations and public institutions have activated public participation networks, and are trying new tools, such as collaboration agreements, innovative regulations, participation laboratories, collaboration maps, community forums and so on. Like the cooperation agreement initiated by Bologna municipal government, these tools have been widely used. From the social point of view: from general administrative regulations to unwritten civil customs, the democratic genes of each community have different forms of expression, so it is necessary to put forward diversified ways of participation. From unifying standards to adapting to local conditions, it reflects respect and tolerance for different community personalities.

In order to maximize the effectiveness of various public participation systems, it is necessary to define "effective participants", that is, "capable" executors [19]. Instead of simply being told what to do, he can clearly explain why and how to do it. For example, when he needs to be responsible for the updated proposal, he doesn't need to cite authoritative experts for argument, but understands that this is an independent decision made according to the actual situation and demands of the community itself. From public participation to mass management, Italian community renewal has experienced a transition from participation in planning field (including consulting decision-making) to management field. Does it represent the functional and instrumental evolution of citizen participation? Or is it a remedial measure taken by the public administration to "make up" the decrease of available resources? There is still doubt about the meaning of this change. However, as far as the result is concerned, it is really developing towards the increasingly mature model of democratic shared responsibility.

It is noteworthy that Italy believes that conflicts arising from public participation should not be "silenced" [19], but be regarded as a part of public democratic expression and an important link of mass participation, communication and coordination. These conflicts directly expose the contradiction between the residents' real needs and other related groups, which is the direction of community renewal in the next stage. It should be emphasized that in the process of public participation, the public administration department must play an active role in facilitating the people, establish a resident participation network, promote the flattening of the participation process with a supportive attitude rather than supervision, and not strictly restrict the operation of each link.

#### 2.3.4 General situation of community renewal practice in Turin in recent years

Turin used to be an important industrial city in northern Italy. Since the mid-1990s, Turin implemented the strategy of de-industrialization transformation, a series of urban transformation and community regeneration actions represented by the Urban Restoration Plan (PRU) have been carried out. At present, the renewal practice of Turin has been included in the case study of the European Union.

The historical evolution of community renewal in Turin can also be summarized as three generations:

The first generation of renewal is based on the "Spina2.0 regional regeneration plan", which mainly intervenes in the space of the historical core area (urban trunk area), aiming at solving the industrial legacy of the city and completing the transformation of de-industrialization. The practice in this period includes the regeneration of OGR in the former railway workshop, the renewal of industrial areas along railway tracks as supporting facilities for the Winter Olympics, and the renewal of Susa Railway Station Square, etc.

The second generation of renewal focuses on returning to the socio-economic environment, focusing on the regeneration of neighborhood space network through social intervention, so as to repair the broken social structure and revive the local economy. The updated object extends from the area of the first generation Spina 2.0 plan, and the representative policy is PRU restoration plan, which takes seven typical blocks with complex social background as restoration objects, aiming at improving neighborhood relations through social activities. Community renewal in this period mainly played a role in four aspects: first, by redeveloping existing buildings, they were regenerated into public spaces for community social activities; The second involves economic and commercial development, encouraging the establishment of new businesses in the region and promoting the allocation of funds; The third point focuses on social welfare, such as community education and personal development, skills upgrading, etc. The fourth is to emphasize guiding public participation and strengthening communication. For example, the neighborhood space maintenance manual is formulated to enhance residents' awareness of the maintenance of historical buildings living in the 19th century and the protection of architectural heritage. The practical cases in this stage are mainly the series of Neighborhood Home Network.

The third generation of renewal is based on the Urban 2.0 Plan and the UIA Joint Urban Campaign of the European Union. By formulating a clear cooperation treaty between the government and local organizations, public intervention becomes the leading factor of urban renewal, and abandoned land and buildings are transformed into "urban public spaces", that is, spaces owned and maintained by communities. The aim is to promote social integration, community cohesion, business recovery and job creation, thus breaking the cycle of poverty and marginal communities. Case practice in this period includes spontaneous regeneration of Turin Olympic Village and co-construction of community center.

See figure 2.1 for the distribution of urban plans and corresponding projects at different stages.



figure 2.1 Distribution of Main Practical Projects of Community Renewal in Turin

## 2.4 Practical methods and development trend of community renewal in Italy

### 2.4.1 Feature 1: Community Center Hub

Community Hub is an important tool to improve the physical space environment of community. In Italy, community center is a relatively vague concept, which is usually regarded as a social space in the real world and has two sides. On the one hand,

community centers put the relationship between people and communities in the first place. Community centers accept everyone's ideas and needs with great social inclusiveness, and their personal specialties and skills can also be expressed here, and new emotional ties and community sense of belonging can be generated through the gathering of residents. Through the collision of daily social activities, the opportunities for mutual communication are multiplied, and the imagination of the future is also socialized: the community center virtually becomes a collective social network resource. On the other hand, community center associates community and space from the entity dimension. Residents and residential areas, behavior and architectural space correspond to each other. Coexistence between public and private spaces, buildings and open spaces, and ornamental and functional public landscapes. Therefore, the community center can form an open and pluralistic spatial transformation, and it is also a process of activating and reusing existing resources. Therefore, community center is proved to be a tool for community renewal, because under the collective guidance, residents and community organizations can activate and shape their living environment, and on this basis, establish emotional connection and regional identity, and form a spiritual bond for using and maintaining community space.

Community center has three major elements: place, object and behavior. Places correspond to the spaces that produce community centers: many places have developed new functions as community centers after renovation: old farmhouses, former public baths, market stalls, community Little Square and street corner parks. Although these places are very different, they are one of the structural elements that activate the process of community and social rejuvenation. The object refers to the participants in the community center, including residents, owners, volunteers and social organizations; Behavior refers to the type of activities carried out in community centers. The cooperation between non-profit business model and community center endows these spaces with different functions and finds economic sustainability in various services and activities. Community centers usually follow the following design principles:

Abandoned and regenerated: As the window of community rejuvenation, the community center aims to revitalize the dilapidated marginal areas, regenerate the abandoned or idle space and return it to the community as a generator to accommodate community renewal and residents gathering activities.

Mixed: Community center is a mixed space, which provides a variety of services

and functions at the same time. Participants have different social identities. Community center combines social welfare with community culture and existing space. For example, the community garden "greenhouse" located in Castilla block, Bologna, is close to the city center and kindergartens, and the summer is full of activities and parties.

Open and informal: the community center is an open and informal space, which can make the community center get the widest participation and give residents the most free and relaxed atmosphere to participate. And form an informal form of community self-management, a place where residents hold informal talks regardless of race and class.

Create value: Community centers should be places to create social value (sometimes they can also create economic value). For example, many community centers set up "Young Market Laboratories", which provide incubation space for these local start-ups to work together and promote community employment.

#### 2.4.2 Feature 2: Community organization system

Community organization refers to a non-profit third-party organization that obtains certain participation, execution or management authority by investing its own resources or funds in the process of community renewal, such as local project foundations, innovative art associations, social welfare institutions and other public departments. Community residents can also form community management committees spontaneously. In European and Italian cities, community organizations are establishing their status in various institutional forms and becoming key participants in the process of community renewal. The difference between these organizations of different natures lies in their role in specific areas, and they promote the development and regeneration of community assets by carrying out various activities.

Community cooperatives, as an international model of community construction, originated from Utopian community [20]. In the last decades of the 20th century, with the crisis of welfare system, the increasing demand for social protection and diversified development, community cooperatives aimed at giving full play to the main role of citizens appeared. Many of these initiatives are promoted by civil society associations and voluntary organizations, which often integrate vulnerable groups into the labor market through the management of cooperatives and provide public services such as social education and health care. The emergence of these new actors is accompanied by a series of organizational innovations, including the transformation of associations and



cooperation models. In Europe, Italy is one of the first countries to move in this direction. The definition of community organization emphasizes the importance of collective initiative, which is promoted by a group of citizens who participate according to their own needs and wishes and contribute to the development of the community [22]. Melpignano Cooperative, for example, is a renewable energy public utility collective organized and operated by community residents spontaneously, which consists of about 2,000 residents and 138 volunteers from local government, innovation association and engineering department of saarento University. The funds obtained through community cooperatives are used to promote the regeneration of urban space, such as improving public parks, renovating roads, providing school bus services, and building school canteens.

Community social enterprises intervene for the interests of communities or citizens that are not concerned by public administration departments by continuously producing goods and services related to local needs [23]; It plays an important role in geographically disadvantaged areas that are difficult for the public sector to involve. The development of community social enterprises benefits from the process of asset socialization, which is realized by combining public resources, voluntary work and private donations, and by involving local actors in the process of business activities and governance. For example, the Bolondi City Laboratory has a total investment of 54 million euros, which has contributed to the reuse of 154 buildings, covering more than 169 cities, provided funds for 71 community enterprise projects, and regenerated about 100,000 m<sup>2</sup> of space. Its specific operation process is that after the renovated buildings are determined by the municipal authorities, they are entrusted to community social enterprises through public bidding. These organizations include, but are not limited to, non-governmental organizations, religious organizations, humanitarian foundations, research centers and university institutions, etc., and these organizations propose new renewal plans, such as social inclusion and new technology experiments, youth work services, training and entrepreneurship, preparation of exhibition space, socialization and reception, etc.

From local social movement to community organization, this kind of form in Italy began in 1970s, which was related to the social movement in 1968. The social movement at that time was a kind of political mobilization, which involved the struggle of political affairs in some countries. In recent years, some social movements have tried to "illegally" occupy the space where municipal abandoned buildings provide cultural public services

for the community [24]. For example, the community public green space regeneration project in Green Pepper Island, Milan, developed into a fierce mass protest movement because the masses were dissatisfied with the government's expropriation of public gardens for the development of real estate projects. After that, community organizations came forward to coordinate and signed a space use agreement with the municipal government, completing the transformation from "illegal" occupation of public land to legal use, which is the embodiment of residents' spontaneous will.

From the operating rules of community organizations, it is obvious that there is a lack of a clear regulation to define their activities. Similarly, the supervision and incentive system of these community organizations needs further exploration. It should be emphasized that these systems should not focus on the supervision of community organizations, but promote the emergence of new forms of community organizations by improving their operation methods. In order to fully mobilize social resources, guide the work of community organizers and help us define social organizations as "community organizers".

#### 2.4.3 Feature 3: Public Collaboration Regulations

From the above "illegal" social movements, it can be seen that there are obvious legal gaps in community governance. In the process of citizens' participation in improving or maintaining the public places where they live, the acts of transforming parks, using recycled buildings and other public places are usually illegal under the current legal provisions. Therefore, it is necessary to perfect the legal system and give citizens the legitimacy to maintain and repair urban public goods (including space and facilities).

In 2014, Bologna passed the Regulations on Cooperation between Citizens and Urban Public Goods Care and Renewal (referred to as Public Collaboration Regulations), which became the first regulations and administrative procedures in the world that outlined how cities and citizens cooperated in the management of urban public places. And launched the "Urban Public Goods" project, so that citizens can properly care for and use the urban public spaces in Bologna and its surrounding areas, such as abandoned green spaces and abandoned buildings. Cooperation regulations define the cooperation rules between citizens and stakeholders (including the municipal government): cooperation agreements can be designed and signed by one person, informal groups, communities and non-profit organizations. The law also encourages the establishment of

community organizations for urban co-governance, such as community cooperatives, community foundations and collective consortia. Active citizens (that is, social innovators, entrepreneurs, civil society organizations and knowledge institutions who are willing to work for the public interest) can carry out the design process together with cities. Urban public space mainly includes public activity venues, urban green spaces and abandoned buildings or areas. Importantly, this regulation provides for the transfer of technical and financial support from the municipal government to citizens. It promotes citizen action in five categories: social innovation and collaborative services, urban creativity, digital innovation, collaborative communication and promoting collaborative tools and practices common to cities. Since its adoption, Bologna has signed more than 180 cooperation treaties. It quickly gained wide attention and continued promotion in Italy, and many Italian cities, including Turin and Milan, have participated in it. Bologna is also called "the city of cooperation".

#### 2.4.4 New trend: from community renewal to community innovation

After more than 30 years of community renewal, Italy presents a new development trend with the comprehensive development of informationization, population aging and ecological sustainability. The concepts of smart community, barrier-free community and flexible sustainable community have become new renewal directions, and Italy is trying to move from community renewal to community innovation.

Smart cities and smart communities are the fruits of Internet globalization, and the era of the Internet of Things is coming. The fourth industrial revolution brought new ideas and provided technical support for the realization of digital intelligent community. Through program recognition and data capture, the behavior of ordinary individuals can be upgraded to group characteristics, that is, to obtain public value: such as the subconscious needs and tendencies of the public. By building a community wide area network model, that is, starting from the physical space where residents are located, extending to the potential space of mobility development, new community operation ecology such as enterprise, service and resource integration can be established in the network. Barrier-free community reflects the importance attached to humanistic care, especially in Italy, where the degree of aging is high. The establishment of barrier-free community is not only barrier-free to physical space, that is, barrier-free to ensure dignity and human rights under the condition of ensuring the normal accessibility of specific

people, but also a community with great social inclusiveness. At first, the flexible community is oriented by ecological environment, and advocates the renewable measures of natural resources in the community, such as community gardens, gardens, greenhouses, etc., to realize the sustainability of man and nature. However, with the emergence of social emergencies represented by the COVID-19 outbreak in recent years, flexible communities began to emphasize the coping ability of communities when they were hit by uncontrollable factors and the rapid resilience after heavy losses.

## 2.5 summarize

This chapter first gives a brief overview of the development process of community renewal, and then gives a basic introduction to the typical policies and theories of other European countries that influence the community renewal in Italy. Then focusing on the renewal policy and mechanism in Italy, this paper combs the theoretical policies and development stages of Italian community renewal from three stages: policy reform exploration period, multi-partner cooperation period and public participation regeneration period. On this basis, it summarizes the outstanding renewal characteristics and future development trend of Italian community renewal in each stage. Starting from the next chapter, this paper will discuss the measures and contents of community renewal in Italy in detail through the concrete research of urban practice cases.

See fig. 2.3 for the distribution of practical cases studied in this paper.



Figure 2.3 Distribution of Italian community renewal practice projects involved in this paper

## Chapter 3 Improve the quality and comfort of the existing space in the community

After combing the stage of community renewal in Italy, we can see that the focus of the early stage of community renewal in Italy is to improve the environmental quality of the existing space in the community and improve the living comfort. Specific measures include renovating community public space, transforming and utilizing surplus space, integrating outdoor activity space, and improving street space vitality and street facade style.

### 3.1 Renovation of community public space

In this section, community public space refers to the relatively large and concentrated space in the community, which can be used to carry out activities of a certain scale, such as celebration and democratic voting, such as community central square and square in front of community church. Community renewal in Italy begins with the transformation of public space. From the perspective of urban planning in the first stage, the renewal focuses on the improvement of public space environment in the core area of the historic old city, such as the renewal of the slow-moving system along the Turin Po River. In the second stage, under the background of urban deindustrialization transformation, a large number of abandoned industrial areas and unfinished construction sites located in marginal communities have been rectified and utilized, such as the abandoned sports venues in San Benado block of Milan. This trend of functional replacement is more obvious in marginal communities with relatively complex social background, and the improvement of public space quality becomes the first step to improve the overall environment of the community.

#### 3.1.1 Present situation and problems of public space

In Italy, public space is inseparable from residents' daily life. The pleasant Mediterranean climate in four seasons creates natural conditions for the full use of outdoor public space, from the open-air theater, Colosseum and bazaar in ancient Rome

to the square garden widely distributed in the streets and lanes nowadays. This is a place where social activities take place, where people talk, socialize and exchange information and articles. With the shift of the focus of urban development, the migration of population and the outflow of resources, some once bustling public spaces have gradually declined, and the space quality has also deteriorated, showing that the site is dilapidated, weeds are overgrown, fountains and other facilities are depressed, greening is declining, garbage is piled up, and it has gradually become a logistics space for parking or loading and unloading goods (Figure 3.1)



Figure 3.1 Declining public space  
(photo by author)

### 3.1.2 Increase site flexibility and attach importance to space experience

Public space is a place where people gather and social behaviors take place, which can directly reflect the vitality of the community. To improve the environmental quality of community public space, we must first understand the basic elements of a popular public space.

A public space that can attract residents to stay here, besides meeting the basic environmental factors such as traffic accessibility, field safety and space comfort, the most important thing is flexibility, that is, it can allow all kinds of people, men, women and children in the community to use it together, and all kinds of activities can take place at the same time. In order to improve the flexibility of public space, the renewal method can be taken to divide the public space into dynamic and static areas by means of flexible interface, and set up the place elements where the behavior activities take place in the corresponding areas. For example, Maggiore Square in Bologna (Figure 3.2), a semi-outdoor coffee seat is set along the side of the architectural arcade to form a private communication space; A gallery pavilion is placed in the middle of the square, and the L-

shaped square is divided into two squares (Figure 3.3): the big square faces the main street in a pocket shape, and is provided with lively elements such as public furniture and fountains, which is defined as a staying space, and a public game festival will be set up here on holidays. The Little Square part leads to the residential area by the porch, which serves as the corridor space and the transition space between the movement and the static.

For the community, a successful public space should be a place where residents can enjoy happiness, or at least be comfortable, which can be measured by space experience. To create a good sense of space experience, in addition to having a comfortable physical environment, positive events should be introduced. For example, in the Elephant Square of Scampia Community in Naples, under the space of the former city hall colonnade, through the introduction of open community teaching, drama, community image art, food DIY and other curriculum activities, it brings multiple sensory experiences such as sight, hearing and taste, gives full play to the positive mediation role of public space, and brings new social opportunities and happy space for some disabled children in this district.

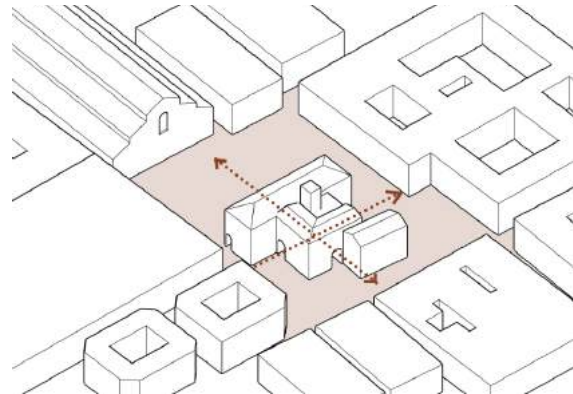


Figure 3.2 Spatial Form of Maggiore Piazza      Figure 3.3 Spatial Connection of Maggiore Piazza (picture by author)

### 3.1.3 Create public landscape and transition to urban space

Public space is the main window for community residents to contact with nature. Introducing green into public space and creating public landscape will not only help to build ecological community, but also play the role of landscape healing in public space. A study in International Journal of Environmental Research and Public Health analyzed the related data about mental health, depressive symptoms, anxiety and stress, and the results revealed the correlation between green and health. The study also conducted a cross-sectional study of more than 2,500 residents in 229 cities around the world, showing



that less than 10% of urban residents living in green space (tree canopy) are more likely to show symptoms of depression, stress and anxiety. For example, a poor man lives in a poor suburb, but the suburb passes through the national forest. Compared with a rich man living in a rich suburb, the former is more likely to be happy, and has nothing to do with the quality of architectural space. Public space, as a part of an urban ecosystem, allows residents to immerse themselves in natural elements and enjoy green landscape even in urban areas, which is very beneficial both physically and psychologically.

Gaspaloto Square in Padua Old Station is a good public green practice. Although the area is close to the city center (once the abandoned courtyard of the city hall building), it has been abandoned for several years. The local population structure is highly differentiated, with the majority of the elderly over 65 years old and young immigrants. In order to find a place to socialize and get together in the neighborhood, some residents spontaneously formed community associations and actively cooperated with local community cooperatives to carry out bottom-up renewal exploration. The original plan was to provide the most vulnerable people in the community, such as lonely old people, with a space to chat and socialize, so as to reduce loneliness. The site is enclosed by the municipal building and the station building to form a complete courtyard. Because the bottom of the building is an overhead arcade, the courtyard space has good accessibility with the city streets. In this case, the abandoned station square is divided into green area, exhibition area and leisure area by setting a square green landscape grid in the site (Figure 3.4): an urban garden of about 380m<sup>2</sup> has been regenerated, forming urban agriculture. At the same time, booths and retail stalls are set up in combination with the platform height difference to provide space for local business and employment. With the gathering of popularity, Gaspaloto Square has developed into a venue for street sports and parkour for young people with its superior location near the city center. It has become a recognized public space with creativity and citizen participation in the region, and it has also become the link between community and city life.



Figure 3.4 Comparison of Gaspaloto Square before and after renovation (picture by author)

## 3.2 Reconstruction and reuse of surplus space

Community surplus space refers to the unused space in the existing external space of the community, which is scattered in every corner of the community and has not been developed or fully utilized. Reconstruction and reuse of surplus space is an optimization and upgrading of the existing resource structure of the community, which can create more hands for community renewal under the limited land conditions.

### 3.2.1 Present situation and problems of surplus space

The "surplus" is relative to the main space (public square, outdoor activity field), which is characterized by small volume, irregularity, scattered distribution and strong flexibility. In this section, according to the use degree of surplus space, it is mainly divided into two categories: those still in use but not fully utilized for some reasons are called negative spaces, such as old warehouses and old factory areas. Unused space is idle space, such as community corner space, space under viaduct, roof space, etc.

The advantage of passive space is that it is only temporarily dormant, but it has space conditions that can be activated and utilized, such as basic building components, spatial scale, site flatness, traffic accessibility, etc. Its disadvantage is that the original space is highly fixed or the building structure is difficult to adjust, which will limit the development of renewal work. It is suitable for renewal projects that need complete space and intervention measures to introduce activities. The advantage of idle space is that it is just like a blank sheet of paper, and there are more possibilities for creation within the scope permitted by site conditions. Its disadvantage is the lack of available building

foundation, which needs to start from scratch. It is suitable for renewal projects with low requirements for space integrity and mainly for site design and external devices.

### 3.2.2 Activation and utilization of negative space

It is a common way to activate and reuse negative space by introducing positive community behavior. For example, Pepe Cape Verde, located in the suburb of Milan, is a typical spontaneous regeneration project. This space used to be a shed for building materials. With years of vacancy, it has gradually been abandoned into a space where various waste materials are piled up. Until one year, when the outer wall separating the shack from the residential area suddenly collapsed, the residents took the opportunity to discover new available space, and started the process of building the community back garden spontaneously. In 2010, Milan municipal government wanted to expropriate the land for the development of real estate projects, which instantly aroused strong dissatisfaction among residents and launched a series of community protests. In 2012, in order to apply for rights protection, residents spontaneously set up a community renewal association, and by collecting signatures, they put forward a request for renting the venue to the Milan municipal government, and finally obtained the government authorization and signed an agreement to restore the community space.



figure3.5 isola before

(fig by: <http://isolapepeverde.org>)



figure3.6 isola after

(fig by: <http://isolapepeverde.org>)

Since the legalization of space use, Pepe Cape Verde has rapidly developed into a community laboratory. Through gardening practice, the land of about 1830m<sup>2</sup> was improved, and a self-sufficient garden of about 500m<sup>2</sup> was formed. The building inside the hut has also been restored and used as the office and conference room of the community association. Through repairing the leaking part of the roof of the greenhouse

and adding solar photovoltaic panels, an open play area of more than 400 square meters has been created for children. In addition, in order to facilitate the organization of community gatherings, gardening exchanges and other activities, the residents also built a large wooden platform with tables and chairs, thus completing the community shared garden that condensed the wisdom and strength of the residents. Since its establishment, the Pepe Cape Verde region has been self-sustaining, without local institutions paying any fees. The organization and maintenance of the garden are completely managed by the association: the organization of space and activities comes from the collective contribution and voluntary service of residents. Up to now, Pepe Cape Verde has developed from a community garden into a community center integrating education, training, elderly care, secondary market and other thematic activities, and has also become a benchmark for residents to build and maintain community space spontaneously and form a strong sense of community identity and cohesion. At the same time, it is also a classic case that urges the government to support space authorization from bottom to top.



figure 3.7 garden before

( fig by: <http://isolapepeverde.org> )



figure 3.8 garden after

( fig by: <http://isolapepeverde.org> )

### 3.2.3 Idle space giving function

By giving new functions to the original idle or vacant space to meet the new needs of the community, the utilization rate of the existing space can be effectively improved, such as the rooftop garden in Turin, which is updated from the unused roof of the building and transformed into a community garden. On the roof of a boat-shaped building in the Ozane block of Turin, there is a roof vegetable garden spontaneously regenerated by residents. This building was once an important sheet metal foundry in Turin, and was later held by the block and used as a student hotel. The complex consists of several



buildings and adjoining courtyards, which are arranged between the streets in the form of triangles.

Now, this building is combined with the courtyard to form a community cooking school, and a restaurant is opened. The community garden is just above the dining room: with green roof technology, stairs, railings and sidewalks have been built, surrounding the 150m<sup>2</sup> garden, and the roof space of 300 m<sup>2</sup> has been regenerated. On the opposite roof, there is also a beekeeping farm with beehives. The honey produced and the vegetables in the garden are used to prepare the dishes in the restaurant. Since its opening in May 2016, the garden has been opened to the public in various public places, holding schools, training courses, children's workshops, self-built workshops and other activities. This project originates from the cooperation among non-profit organizations, public institutions and enterprises, and shows how community roof garden can be used as a means of urban regeneration and social innovation. By means of residents' cooperation, the roof was transformed into a vegetable garden, creating new social space and employment opportunities (part-time opportunities such as children and the elderly), adding a fresh "0 km" vegetable supply mode, and triggering microeconomics in the neighborhood. This way of updating the originally idle roof space with functions not only improves the space utilization rate, but also creates the internal cycle of courtyard economy and opens up a new industrial model for community renewal.



Figure 3.9 Turin Roof Garden  
(fig by: [www.ozanam.ortialti.com](http://www.ozanam.ortialti.com))

### 3.3 Space integration of outdoor activities

To distinguish it from the public space in 3.1, the outdoor activity space discussed in this section refers to the open space for outdoor exercise activities such as culture, sports and entertainment (excluding the public space in 3.1). In Italy, the community outdoor activity space has the following characteristics: it is usually enclosed by residential buildings, which are closely related to residential buildings. The site area can be large or small, distributed freely, and can be arranged centrally or linearly. There are always exercise equipment, exhibition venues, outdoor furniture with interactive behaviors, architectural sketches, etc. Sometimes micro-topography is set according to the site conditions.

#### 3.3.1 Present situation and characteristics of outdoor activity space

Italian citizens' outdoor activities follow the principle of proximity, mainly taking walks, walking dogs, taking children and other activities with weak intensity. Therefore, the outdoor activity space in the community is usually divided into two categories: the first category is mainly the community concentrated green space or the green space between houses, which is surrounded or crossed by trails or bicycle lanes. The characteristics of this kind of activity space are clear movement, and the streamlines of staying and walking do not interfere with each other. However, the problem is that there is a great demand for site area and greening conditions, which are common in large-scale communities with sufficient land use, such as newly developed urban communities or communities reconstructed by relying on urban parks. In the second category, amusement parks are the main ones, and local landscapes are used to enrich the spatial level. This kind of space is characterized by small area and flexible layout, which is often combined with community centers, community kindergartens and other buildings.

In recent years, under the tide of reconstruction and reuse of abandoned industrial areas, a trend of changing industrial space into community activity venues has attracted more and more attention. From the perspective of transformation potential, industrial structures have the spatial characteristics of large span, high rise and high height. Due to historical reasons, they have accumulated rich place memories and retained many architectural structures with obvious industrial colors, such as trusses and steel columns and steel beams. Although rusty, it has become a community card in some marginal areas,

such as Dora Park in Turin.

### 3.3.2 Intensive combination of sports and entertainment space

Under the background of the shortage of urban development and utilization space and land resources, it is a new renewal trend to intensively integrate outdoor activity space. This is also a further attempt to optimize the structure of community resources and allocate them efficiently. This section will analyze several typical cases of intensive renewal of activity space in Turin.

Cafasso Park (Figure 3.10) uses the linear space crossing the block to divide the site into three sections:

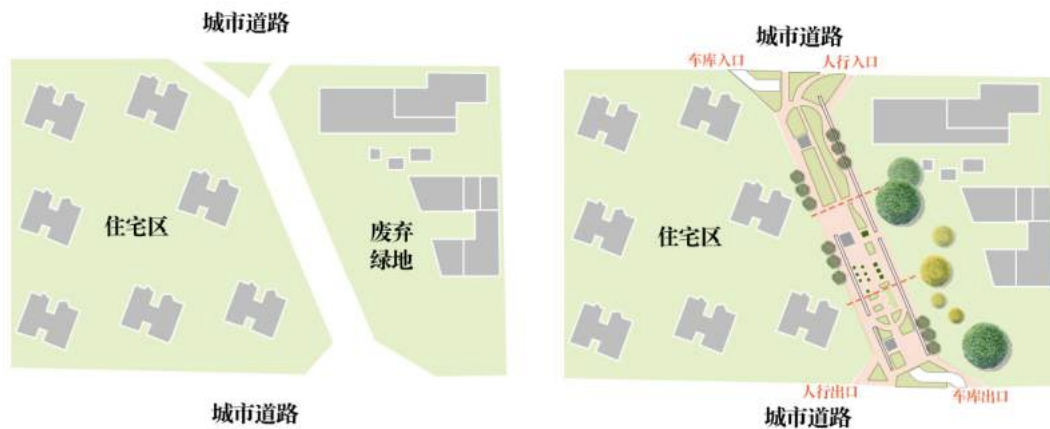


Figure 3.10 Comparison of Cafasso Park before and after Renewal  
(picture by author)

The first section welcomes the flow of people on the main road with a locally enlarged entrance space, and plays the role of buffering speed and relieving the flow of people by setting a variety of curved paths. The second space variation leads from the open side to the residential part on the west side, and becomes the entrance hall of the residential building. The east side is guided into the quiet garden with small green space. In the third stage, outdoor activities facilities are arranged in a dot matrix way to form a simple maze to attract children to play in this space. Cafasso Park sewed up two originally quiet areas, and provided a place for community crossing and exercise activities in a limited space, thus forming a popular place in the community.

Fusata Community Park is a typical case of intensive integration of community facilities and resources by using outdoor activity space. Before the renovation, it was a green land with overgrown weeds. After the renovation, the park retained the farmhouses

in the original site, and added two new residential buildings, which formed two courtyard spaces by enclosure (Figure 3.11). The farmhouse reserved in the middle connects the north and south courtyards in the form of a corridor. The courtyard on the north side faces the street directly, showing the public an open and welcome attitude with slightly raised terrain. Combined with the height difference of residential buildings, the north courtyard is provided with the micro-topography of the hillside, and children's amusement facilities are arranged accordingly. In addition, the North Courtyard is also used as the entrance square of the community supermarket, and the intensive combination of various resources and facilities endows this space with high richness and extroversion. In comparison, the south courtyard is more private and static. Space layout is mainly based on walkways and promenade seats. The south courtyard is mainly enclosed by the old residential buildings, and the contrast between the red and white building facades of the old and new residential buildings also implies the different spatial attributes of the two courtyards. On the first floor of the building facing the south courtyard, transparent floor-to-ceiling windows are used instead of thick solid walls (stone walls are still reserved on the second floor), which are used as community activity centers and community culture exhibition galleries.

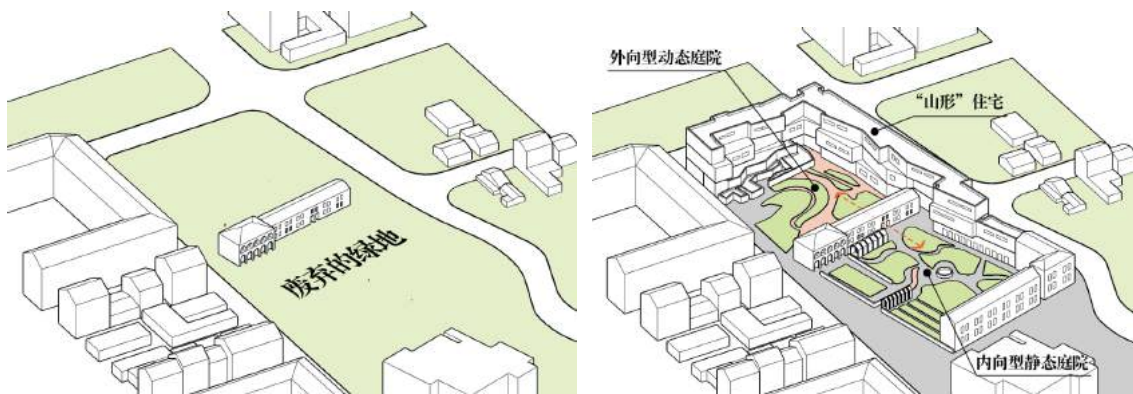


Fig. 3.11 Comparison of Forsata Community Park before and after renovation  
(picture by author)

Page Park, located in Tuo block, Varpula, has regenerated a community activity space integrating community green space, bicycle greenway, children's playground and cultural activity field. Page Park before renewal is located at the boundary of urban industrial zone and residential zone, which is an abandoned urban brown land. The renovation work takes advantage of the site characteristics, and regenerates the industrial legacy into outdoor activity space, which is organically engaged with the residential space



(Figure 3.12). Different from traditional houses, the Varpula block is the representative of the exploration of new houses in Turin. At the early stage of community planning, it was emphasized that the residential construction should be completed with the least residential area, and more sites should be reserved for residents' activities. Under this design concept, Page Park can get the largest land. The whole community park is perfectly engaged with the trapezoidal residence in an approximate L shape. A playground with slight topographic relief is set on the side close to the residential area, which is equipped with gymnastic balance beams, tire swings, climbing nets and other activities. The design of "embracing" the playground in the residential building is like "parents embrace babies", which is not only convenient for children to carry out activities nearby, but also conducive to the formation of community supervision. With hundreds of invisible eyes "staring" on the residential building, parents can safely go home to prepare ingredients at meals. (Figure 3.13)



Figure 3.12 Comparison of Page Park before and after renovation  
(picture by author)



Figure 3.13 Children's Activity Site

Figure 3.14 Industrial Structures in Page Park  
(photo by author)

The northwest side of Page Park is a railway track, which was once an important industrial storage and transportation center in Turin. Now it has been transformed into a modern culture studio incubator, a place where various street cultures and artists gather. The renovation also fully exploited the characteristics of this site, and transformed an industrial building warehouse on the north side of the site into an activity venue for the public to participate in artistic creation. The enclosed part of the original building was demolished, and the industrial structure of truss steel columns was retained, forming an open Little Square with a roof. There are basketball courts and outdoor roller skating rinks on the east side. Every weekend, it can become a place where teenagers gather: skateboarding, cycling, graffiti creation under the initiative of artists, etc. At night, there will be lighting concerts, which are full of people and crowded with people, and become the most popular space in Page Park (Figure 3.14). As far as possible, the site layout should be far away from residential buildings to avoid unnecessary interference.

### 3.3.3 Set up interesting furniture parts to stimulate community creativity

In addition to the intensive integration of outdoor activity space, some venues are limited, or some community corner spaces can be updated by setting interesting outdoor furniture or creative parts, which can not only optimize resources to reduce costs, but also improve the use efficiency of the space. For example, in the "Wood Floor" project of Xinjiajia Park and community, the creativity of corner space is activated by setting interesting sketch components in marginalized spaces (Figure 3.15). The interest of these outdoor furniture components lies in the fuzziness of architectural ideographic expression: no one has clearly defined its purpose or use method, and the fuzzy design gives a variety of possibilities for the interaction between space and site, and at the same time stimulates the unlimited creativity of community residents for the use of space.

New Gaga Park is a renewal project initiated by community residents, which is promoted by the municipal government and built by residents together with 16 students from all over Europe. Existing plants were renewed and preserved to optimize resources and reduce costs. Twenty kinds of Ginkgo biloba planted in this area were used to complete landscape configuration, so as to ensure the sun protection in summer and the

warm light passing through in winter, and to form a strong visual impact effect in autumn. In terms of spatial processing, the diversity of space is determined by dividing different districts, and various functions are adapted by the components with distinctive features: from sitting space to stage space, from exhibition area to city living room, from toys to gymnastics equipment, from green space to playground, sparrows are small and complete. In addition, the designer also invites interested residents to choose how to use their own parks, so that residents can enjoy the fun brought by ergonomics, instead of instilling the use function into the public (Figure 3.16).



Figure 3.15 Outdoor Furniture  
(fig by :www.saundsa.com)



Figure 3.16 Interesting Use  
(fig by :www.saundsa.com)

位于卡尔达地区的“社区木地板”项目也是一个置入创意元素激发社区创造力的案例（图 3.17）。该更新旨在向长期荒置的高架桥下部空间赋予有意义、可用的功能。通过不规则地布置六块“木制地毯”装置的来增加 2,000 平方米空地的丰富性，并提供不同的空间形态，给人们创造来这块地的原因。社区木地板既可以跨越使用，可以用作相关躺椅，长凳的组合，也可以用作供儿童在该公共空间躲藏，攀爬和创新玩耍的道具（图 3.18）。



Figure 3.17 Outdoor Floor  
(fig by :www.saundsa.com)



Figure 3.18 Interesting Use  
(fig by :www.saundsa.com)

### 3.4 Street space elevation style improvement

As the external boundary of the community and the business card displayed to the outside world, the street has a relatively contradictory duality. From the perspective of community sense of territory and security, the street side of the community should be kept closed and complete. For example, the traditional Italian courtyard-style blocks are quite closed to the outside world, and only the doors for the internal residents can enter the courtyard. This kind of layout shows obvious community introversion. However, from the use experience of street space, the basic business of most communities depends on street space: coffee shop, tobacco shop, pizza shop, ice cream shop, grocery store, etc., which requires streets to show certain extroversion. A vibrant and active open street can show the vitality of the community, thus helping the community to obtain more opportunities and resources for development.

#### 3.4.1 Present situation and problems of street space

The quality of street space in community is often influenced by the facade of buildings along the street and the richness of street space. According to the broken window effect, a decaying street is a negative signal sent by the community to the outside, which often indicates the declining trend of the area. Due to the national policy, the facade of buildings along the street in the old city can usually be well protected and repaired. However, for the marginal communities with complex social background and lack of resources, the street space without commercial activities often becomes the generator of logistics transportation, street vagrants and even crimes. To restore the quality and vitality of this kind of street space, we can improve the architectural style along the street and increase the richness of street activities.

#### 3.4.2 Architectural style in harmony with the environment

From the street facade, Italian cities have strict laws and regulations on the street facade of main streets. For example, the location, proportion, size and style of window grilles need to strictly follow the unified principle of the block. Thanks to this, the facades of some buildings located in the main blocks in the community are well controlled, forming a relatively coordinated street style. When repairing the dilapidated streets, attention should be paid to the coordination of existing environmental styles. However, this does not mean that it can only be changed as usual. Some hidden methods can be



used to weaken the sense of existence when updating the design, so as to highlight the style and quality of the main buildings as a background. For example, the new residential building in Page Park (Figure 3.19) has a low-key beige facade, a modern and concise window opening, and no redundant decoration. Although it is a high-rise building, it does not destroy the integrity of the environment. Or adopt the theme color consistent with the environment, but innovate in architectural form. For example, the new residence in Fusata Community (Figure 3.20) adopts the exterior wall color matching that echoes the old building, and the rooms are divided by vertical white walls, emphasizing the rhythm of the new facade, and the old and new dialogues complement each other.



Figure 3.19 and 3.20 Simple and low-key elevation and Coordination with the old environment(photo by author)

### 3.4.3 Make good use of lively elements to brighten streets

In addition to keeping in harmony with the environment, for some marginal areas where there is no obvious street style, instead of repeating the monotonous facade, it is better to boldly try to use lively and beautiful elements to brighten the street space, such as the "color graphic" block in Turin.

The renewal goal of the block is to create a "comfortable place", and the design concept comes from citizens, visitors, residents, businessmen and children in the block. They hope to find a "suitable place" in public spaces such as streets to socialize or play outdoors. Driven by this demand, in 2020, local art institutions will cooperate with residents to create a new business card for the block through public art, that is, the original gray road surface will be painted with bright three primary colors, and the color sequence will change with the road, thus implying different functional areas and directions (Figure 3.21). In addition to horizontally coloring the roads, the project also painted vertical signs

(road signs, billboards, shop blinds), leaflets and posters, giving the originally dull streets a vibrant street appearance and dynamic atmosphere. "Color image" street stimulates people's creativity, expression and participation in all directions: people finally find a place where they can rest, chat, chase games, make new friends, kiss each other and eat ice cream. The project is also actively promoted in conjunction with social platforms to attract many foreign tourists to punch cards. The new business cards of "Color Street" have effectively improved the influence of the block and stimulated the vitality of the community from inside to outside.



Figure 3.21 Turin Graphic Theme Street(fig by:www.frizzifrizzi.it)

Besides changing the street appearance through artistic creation, it can also brighten the street by putting lively elements into the facade of buildings along the street. For example, some young communities use green, yellow and other bright color veneered tiles with high saturation to decorate the outer wall of the street, and colorful interfaces add a lot of brilliance and vitality to the silent and deserted streets under the sunshine (Figure 3.22). In addition, the fresh and simple balcony space full of life flavor can also effectively improve the street quality: simple railing patterns, neat doors and windows, a retractable awning, a set of gardening potted plants and coffee stands in a space less than 2 square meters, and then enjoy the afternoon sunshine by drinking Italian concentrated on a quiet weekend, and the comfortable life atmosphere is on the paper. These balcony units are partially protruded or obliquely embedded, forming a rhythmic rhythm on the facade of the building. During the outbreak of COVID-19 outbreak in Italy, people could

not travel at home because they were restricted. The balcony space facing the street once became the main place for residents to socialize, relieve loneliness, fight against the epidemic and form cohesion. Social activities on balcony, concert on balcony, lighting the balcony in the late night to illuminate the city and other theme activities full of the times have attracted much attention.



(a) green tiled outer wall;



(b) coffee seats on balcony



(c) concave and convex balcony



(d) simple and lively balcony

Figure 3.22 Lighting streets with active elements(photo by author)

### 3.5 Summary: the space environment has been improved, but the neighborhood problem has become increasingly prominent

After upgrading the existing space in the community, the living environment of the residents has indeed improved. However, due to the unilateral pursuit of physical renewal at this stage, ignoring the social neighborhood problems, social problems such as neighborhood MoMo and class estrangement have become increasingly prominent, and become the main renewal tasks in the next stage. .

## Chapter 4 Activating Neighborhood Structure and Promoting Social Communication

After initially improving the spatial environment of the community, the focus of community renewal has shifted to the repair of neighborhood relations and showing concern for more social issues, such as the renewal of social welfare, education and learning, employment opportunities, economic revitalization and other fields. The specific renewal measures are mainly carried out from the following three aspects: inserting a co-construction community center to improve residents' awareness of participation; Build neighborhood home and repair neighborhood structure; Optimizing neighborhood micro-space and promoting social interaction.

### 4.1 Insert in a co-constructed community center

In order to repair the estranged neighborhood relationship, considering that most marginal communities have complex social background and population structure, Italy first tries to build a space for neighborhood communication in existing communities and set up a series of activities that can create neighborhood cross-class and cross-ethnic communication. Co-built community center emerged as the times require, and became an important carrier to repair neighborhood relations and strengthen community self-identity and self-management.

#### 4.1.1 The Origin and Characteristics of Co-construction Community Center

In an era of shortage of urban resources, crisis of trust in politics and disintegration of social ties, the emergence of community center marks the transformation of traditional thinking mode, urban lifestyle and market value production mechanism. Community center mixes all key areas of the city: local development, community rejuvenation, citizen welfare and cultural creation. The emergence of co-construction community center is the spatial product of the transformation of Italian community renewal from the first stage of policy exploration to the second stage of multi-partner cooperation.



Different from the traditional community center which is funded by the municipal government or local authorities, the co-construction community center is a bold attempt of community self-management, which emphasizes the full expression of the rights of residents, community owners, businesses and other stakeholders. Under the organization of the Community Renewal Committee, residents and other groups participate in the regeneration, maintenance, operation and daily management of the community. Co-construction community center opens up a substantial space for the expression of collective appeal. This kind of renewal is based on the goal of co-production and co-governance, which overcomes the traditional authorization from higher authorities and takes the way of residents' participation to rethink the realization of community welfare. Therefore, co-construction also needs a strong motivation to attract neighbors to participate, such as informing residents in advance of the improvement of living environment and the improvement of neighborhood happiness that can be achieved after renovation, and making the participation process as fun as possible. Whether the process is spontaneous or organized, the progress of co-construction depends on the communication and trust between neighbors and the consensus reached through interaction.

One of the advantages of the co-constructed community center is that everyone pays something (whether physically or financially, such as sharing idle furniture), and the individual cost is shared by the public, so the co-constructed renewal can minimize the individual cost; Another outstanding feature is that in the process of residents' cooperation and participation, people from different social classes, different ages, different races and different specialties contribute to the community renewal and construction, thus forming a new community of interests virtually. The emergence of this new group sews up the differences and barriers brought about by the social background to a certain extent, and contributes to the formation of community cohesion.

#### 4.1.2 Main types of co-constructed community centers

According to the spatial characteristics and social uses of co-constructed community centers, they are mainly divided into four categories: local reconstruction, mixed regeneration, social inclusion and regional rejuvenation.

On-the-spot transformation emphasizes "proximity" in distance, which mainly refers to the space regenerated in or around the community, which can interact with the

community. For example, the Castellino Community Center in Rome, which is a community cultural museum not limited to specific physical space, focuses on reappearing the relationship between residents' living space and place memory. This is a regeneration experiment in which the local government authorizes the museum association to organize the residents of nearby communities to participate. The design relies on the scattered ancient Roman ruins in the block, and the residents make a number of tour paths according to their own emotional cognition, site memory and spatial behavior habits, and set up corresponding space elements along the way: display walls, galleries, public furniture, etc., thus constructing a free-flowing community museum that transcends time and space restrictions, which is also a kind of community sharing cultural resources, respecting ecological environment and protecting on the spot.

The focus of mixed regeneration is "mixing", which means mixing various functional spaces into a large space to ensure a greater degree of space openness, and to meet the diverse needs of residents and accept different groups at the same time. For example, the "Young Market Lab" in Venice has reconstructed an abandoned building by recycling the materials used in the Venice Architecture Biennale, providing a mixed space for discussion and exchange, skills training and exhibition demonstration for the community.

Social inclusion refers to the space for providing social services to different groups in the community and promoting the occurrence of new welfare modes. For example, Exme Community Center, located in one of the poorest neighborhoods in Cagliari, is a day center spontaneously regenerated by residents to promote social inclusion, prevent and treat neighborhood problems such as youth maladjustment. It represents another attitude of community inclusion: people of different ages can find their own "exclusive space" here. For example, young people can create music here, while teenagers study, doodle and play together. For that elderly, there are music room where they can rehearse, libraries and classroom where they teach how to use computers.

Regional revival refers to community co-construction projects with the help of community organizations and the participation of residents and volunteers, with the main purpose of creating employment opportunities, restoring local economy and reviving the community. For example, the network park community incubator in matera, this renewal project comes from the cooperation between the urban movement and local residents, and transforms an old building located in a historic district into a community joint office

incubator. This is a 4-story building with a total area of about 880m<sup>2</sup>. Residents and local volunteers have partially renovated and redesigned the building structure, providing a creative employment space for freelancers and young people who are starting businesses near the community. It is worth mentioning that this renewal project provides great convenience for residents in the community who need to find remote office places nearby in the context of COVID-19 epidemic.

#### 4.1.3 Typical case of co-construction community center

In the actual update, many co-constructed community centers do not have a clear classification, and often reflect the above four dimensions at the same time. This section selects two typical practical cases of comprehensive community centers to further analyze how to strengthen community identity and realize community renewal through residents' co-construction.

The first case is the INStabile Portazza Community Center in Bologna, which originated from a bottom-up community initiative of residents: a group of local residents who met each other through social interaction in the neighborhood took an independent action and spontaneously restored the former city hall which was abandoned for more than 30 years. With the support of community associations and street architects' associations, community residents have extensively carried out participatory co-design, which lasted for 6 months and involved about 200 citizens and 30 local organizations. This action defines the restoration goal of the building, focusing on three themes: regional culture, community welfare and employment opportunities. This abandoned building is located between two residential buildings (Figure 4.1), with a total area of about 700m<sup>2</sup>, including three staggered floors (Figure 4.2), two underground sports spaces and related equipment rooms, and a main entrance connecting the community garden (Figure 4.3). The first floor is partly combined with the community square and transformed into a semi-enclosed space for children's activities and exhibitions (Figure 4.4). The restaurant located on the second floor has been transformed into a large auditorium and a series of flexible office spaces, which are used as community offices, training classrooms and libraries (Figure 4.5). The designer's original conception is to create a space where people get together, a flexible and inclusive space, and a space where residents' collective consciousness is strengthened in social interaction. This renewal conception needs to be realized through a slow process of self-regeneration.

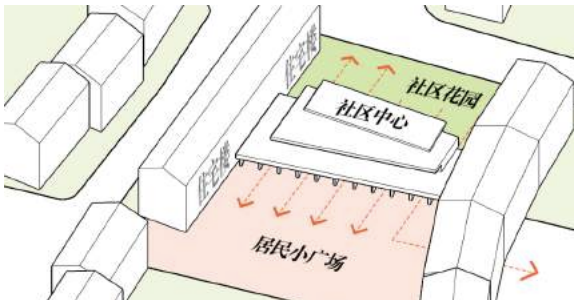


figure4.1 INStabile Portazza  
(picture by author).

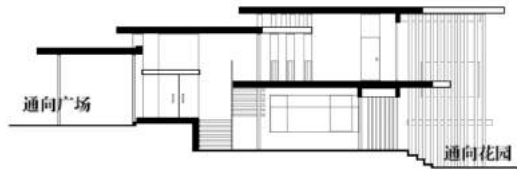


figure 4.2 section  
(picture by author)

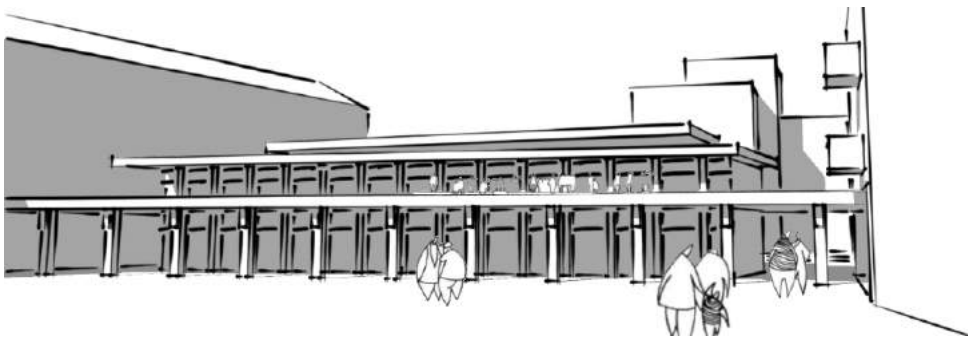


figure 4.3 main entrance  
(picture by author)

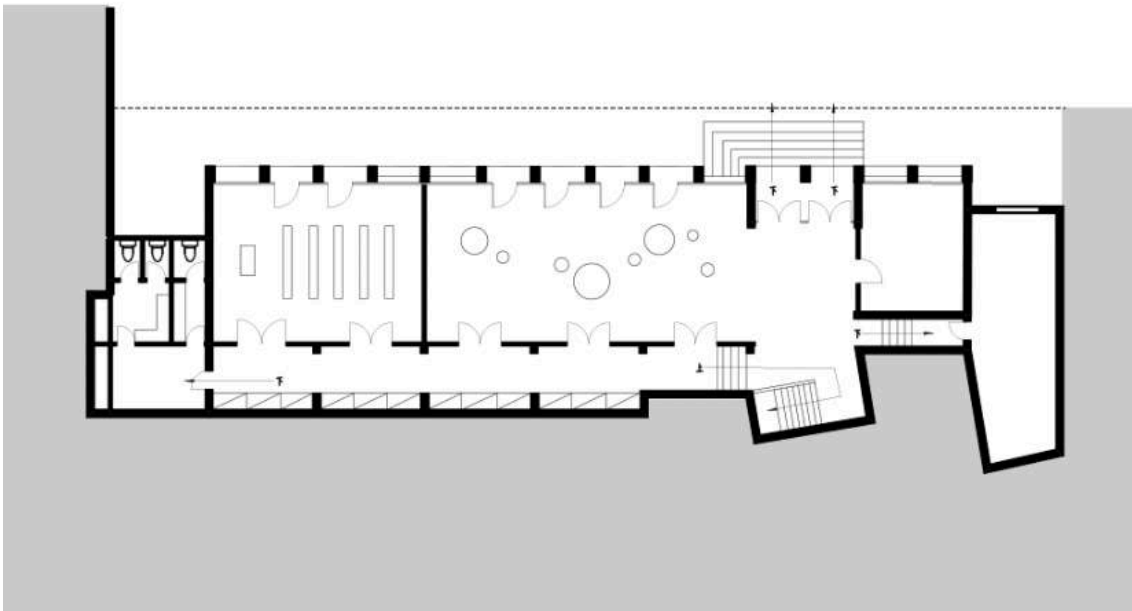


figure 4.4 ground floor  
(picture by author)

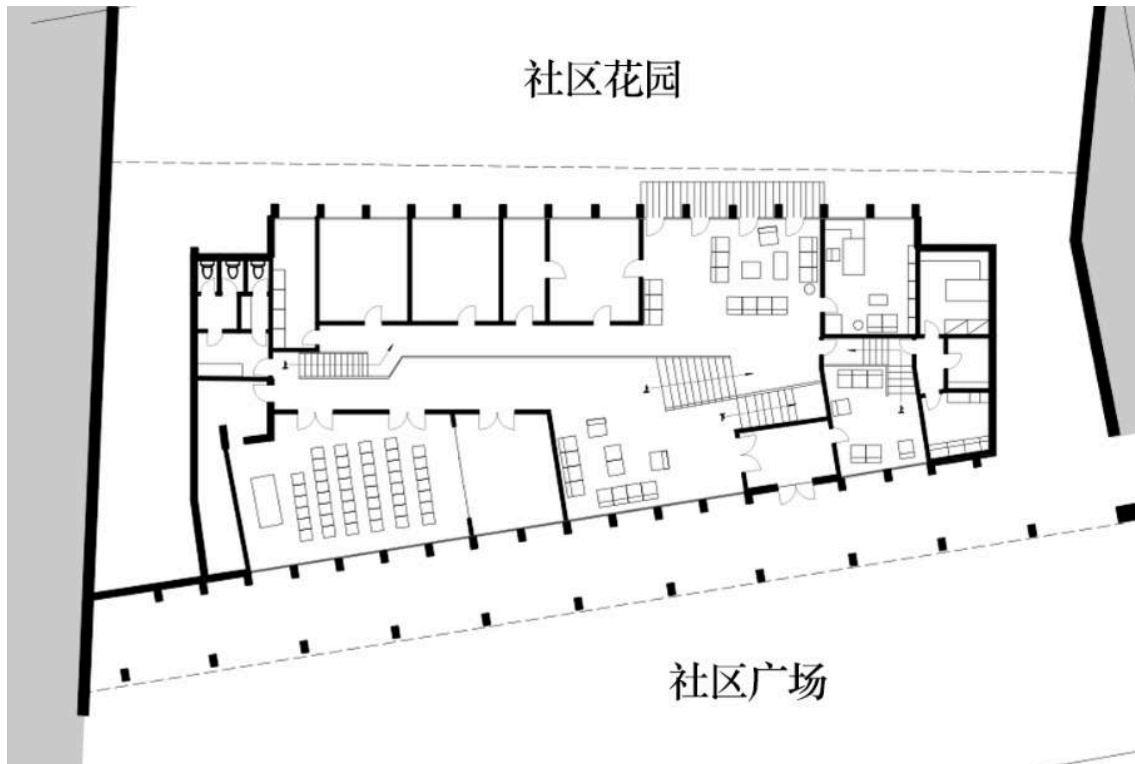


figure 4.5 first floor  
(picture by author)

The second case is Messina Community Center in Palermo. This project emphasizes the unique marine memory of the region as the suture point of neighborhood relations, and promotes neighborhood communication by organizing residents of seaside communities to participate in the construction. This building was once the mechanical warehouse of Marine Corps in Messina in the late 19th century, including the courtyard space with a total area of about 1200m<sup>2</sup>. (fig. 4.6) has been updated as a community center including garden, outdoor courtyard, library, office, educational activity space and multifunctional demonstration space which can accommodate up to 100 people (fig. 4.7). It is mainly open to children and young mothers in the community, and provides a place for children to concentrate on homework, manual activities and play for families with children in summer. During the COVID-19 outbreak, every resident was locked in his own home, and the community center cooperated with local educational institutions to carry out online interactive training courses for children to tide over the difficulties.

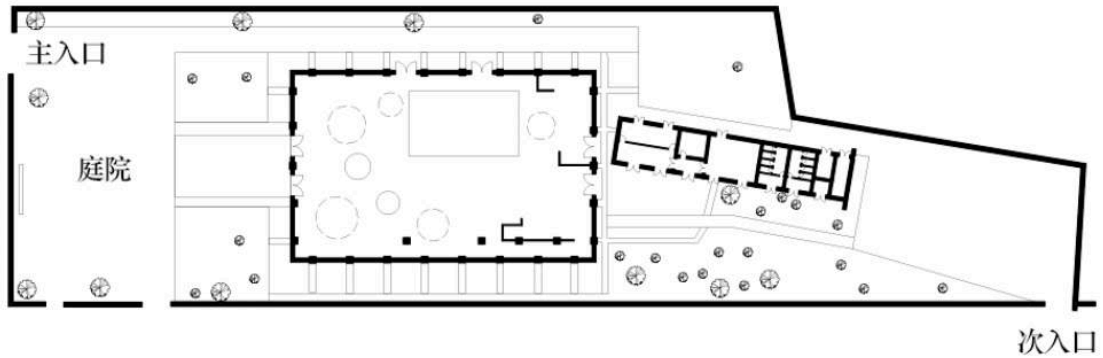


fig 4.6 Plan of Messina Community Center  
(picture by author)

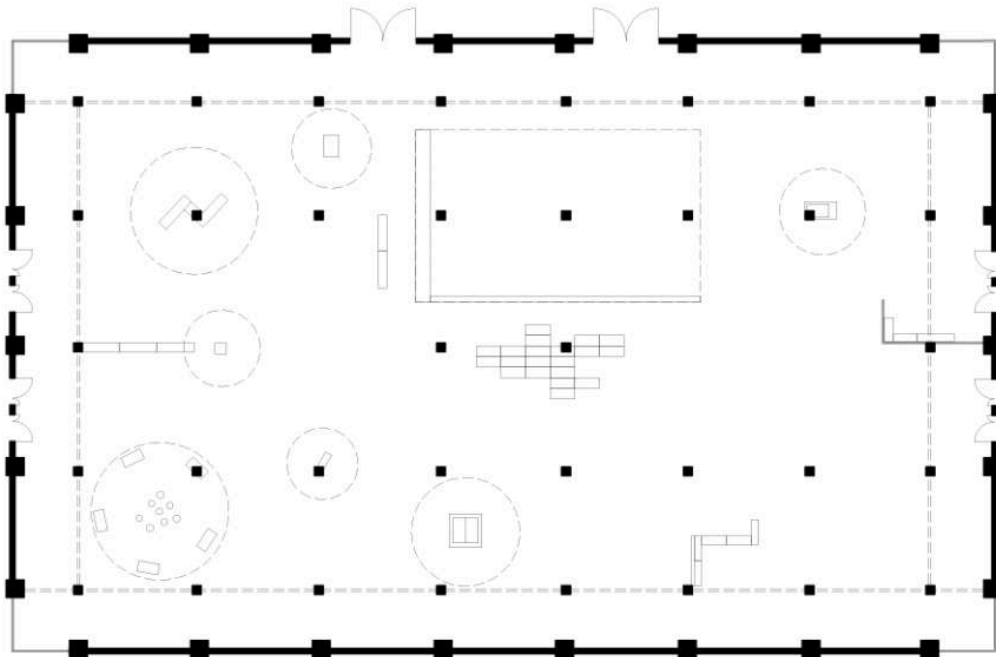


fig4.7 Ground floor of Messina Community Center  
(picture by author)

Messina Community Center is now operated by a non-profit community association, which was established in 2014 and consists of a group of designers, researchers, educators and artists who love Palermo and its ocean. The association is dedicated to the management of museums and related cultural and educational activities, and organizes young mothers in the community as volunteers to carry out a series of activities to promote neighborhood communication: informal teaching activities, concerts, exhibitions,

urban exploration, workshops and public meetings in the community, involving topics of collective concern: citizenship, art, education, marine science, immigration, environment, site creation, etc. This is a space open to all people in the community, and a space where multiculturalism and creativity gather. This space replaces commercial activities by providing cultural, educational and tourism activities, and promotes education dissemination and social responsibility by active civic activities. The renewal goal of Messina Community Center is to eliminate educational poverty, provide cultural experience and create a community with shared resources, including space, land, interpersonal relationship and ideological skills. Based on the collective memory based on regional characteristics, the museum promotes local development through active civic actions, which is called "human regeneration" by local scholars.

## 4.2 Constructing Neighborhood Home Network

The "Neighborhood House" in Turin has been transformed from abandoned and idle public buildings (such as old farmhouses, idle public facilities, former factories or warehouses), creating a place where citizens can hold meetings, share hobbies, attend courses, participate in cultural activities and actively express their civil rights. The renovation and maintenance of the neighborhood house covers an area of 12000m<sup>2</sup> of public space, of which 5,000m<sup>2</sup> of open space is used for social and cultural exchanges. At present, the Neighborhood Home Network has nine project members, and each project has different space types, service themes and community support. As a matter of fact, neighborhood homes are mainly distributed in marginal communities which lack social integration, gather poverty and have relatively weak welfare system. The essence of the neighborhood home is to create a social space of neighborhood for communities with severe social division and neighborhood isolation, and to achieve the purpose of repairing neighborhood relations through inclusive social activities.

### 4.2.1 Origin and Characteristics of Neighborhood Home

In the mid-1990s, Turin was in a crisis: the lack of urban management led to community estrangement, resulting in serious social conflicts between new and old residents. The municipal authorities decided to intervene and promote the symbiotic relationship between local institutions and citizens in Europe. As a result, a series of interventions have been created, including the "Edge Restoration Project" since 1997,

which updated the physical environment and social dynamics of the city. Between 2007 and 2013, the authorities took the lead in organizing residents to regenerate some public spaces, and connecting urban centers with marginal areas through civic activities. Since 2012, these spaces have been named after Case del Quartiere, and have been officially used as community cultural laboratories to carry out community service, public courses and personal skills workshops. In addition, the authorities collected and organized activities of many associations and informal groups, which created social opportunities in the neighborhood and provided available community space. Neighborhood homes are mainly realized through cooperation among public departments, banks and private foundations, social organizations, relevant associations and citizens.

In order to create a more intimate neighborhood social space in the community, the reconstruction planning of the neighborhood home usually has the following characteristics:

From the architectural level, these updates mainly focus on some abandoned and unused public buildings: old farmhouses, old public facilities, old factories or warehouses. The process of updating space, changing social roles and related organizational structures are not the result of careful design, but the result of "gradual evolution" and "social interaction". In the process of "old buildings" adapting to "new demands", some repetitive phenomena will be found: extroversion space, customizable space and internal space which can ensure users' safety frequently appear. In fact, the "new" type is composed of flexible and temporary space, which can also guarantee privacy and security in public environment. This adaptability shows that when a specific activity is carried out in a specific space, the availability of the space will be adjusted according to the activity characteristics. Nowadays, this change is also related to the different connections between each building and its environment (Figure 4.8): sometimes neighborhood homes act as social network nodes for community empowerment initiatives, and sometimes they are containers for hosting local activities.



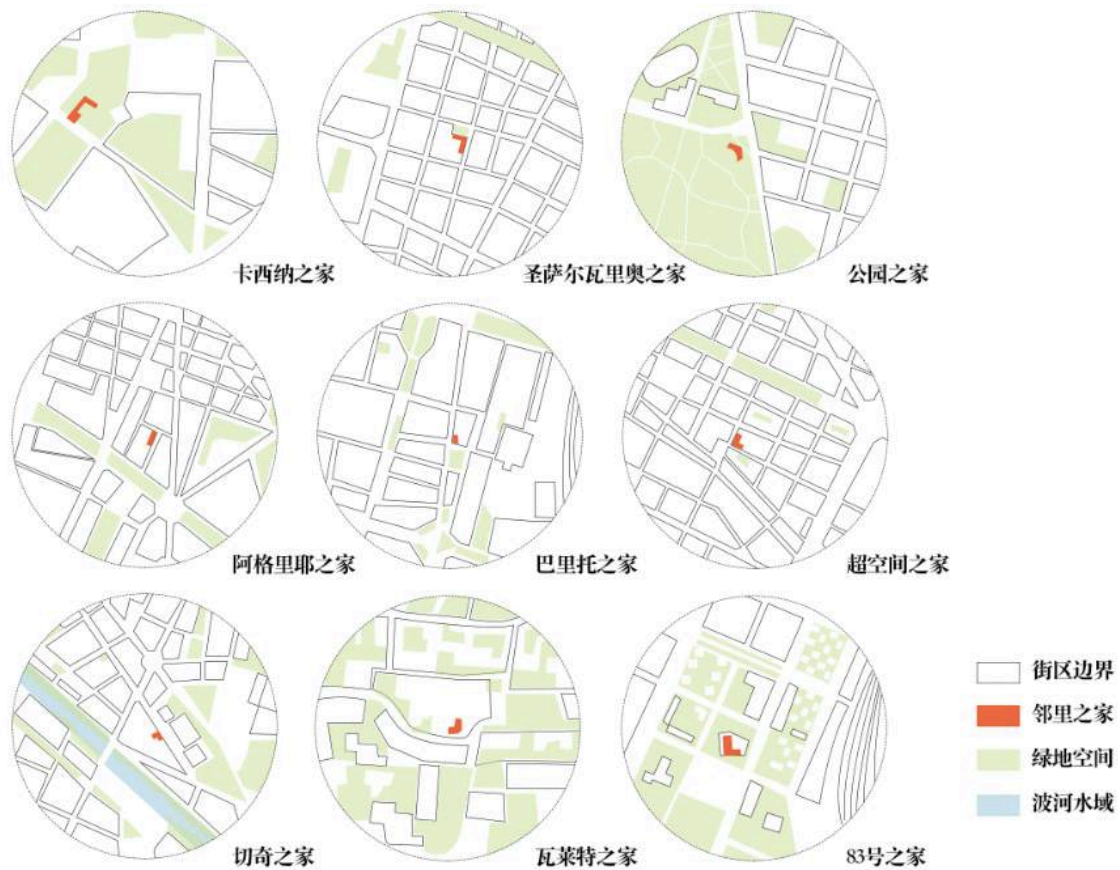


fig 4.8 The block boundary form of different neighborhood homes  
(picture by author)

From the social level, neighborhood home is a Petri dish to promote neighborhood communication and stimulate community cultural creation. Active social organizations can discover social needs and set renewal goals. The initiatives of many institutions, groups and citizens can create opportunities for people to meet and collide with each other. Neighborhood homes provide "rental" places for associations and informal groups, and also provide specific support and services for activities; The establishment of neighborhood homes is conducive to the continuous generation of new neighborhood initiatives, collaboration, networks, services, activities and required resources, and forms a very harmonious relationship between designers and implementers. In addition, neighborhood homes should maintain an inclusive structure in terms of proposals and cooperation; Give full play to the pivotal role of the relationship between the city and the neighborhood, so as to respond to the needs of the neighborhood and integrate community resources, including the strength of social enterprises, voluntary associations, informal

groups and the professional skills of ordinary citizens.

It is worth noting that although both neighborhood homes and community centers are activity spaces for residents to regenerate in the community, unlike the latter, which advocates stimulating citizens' awareness of self-management and participation, neighborhood homes emphasize the restoration of social relations and the regeneration of neighborhood culture.

#### 4.2.2 Constructing Neighborhood "Network" from Point to Area

Neighborhood home network is a solid community network composed of nine neighborhood homes. Neighborhood network is a local network, which is a good practice for the municipal authorities to make social innovation and community rejuvenation by gathering available houses near Turin according to the actual needs of Turin. Neighborhood Network is committed to making citizens the protagonists of community cultural life and promoting projects and services that can improve the quality of life in Turin. In 2012, under the impetus of Turin municipal government and local enterprises, the managers of neighborhood homes reached a consensus and a neighborhood network was established in order to better promote the sharing of regional neighborhood resources and the exchange of experiences instead of the competition between scattered and independent individuals.

After the formation of the neighborhood network, in order to better coordinate and manage the nine neighborhood homes, under the leadership of the municipal government and local community organizations, the neighborhood network launched the Neighborhood Declaration, which is ten normative design principles. On the one hand, the Declaration describes the current situation of each neighborhood home; On the other hand, it represents a way of working: a common map, which can be used as a blueprint for the neighborhood home to draw its own growth path. At the national conference of "Living in a House, Living in a Neighborhood" held in Turin in 2016, Neighborhood Network shared its own experience with European communities, including how to manage common commodities, actively explore the expression of citizenship, promote the production of neighborhood culture, the development of social technology and local influence, and the resources of neighboring countries.

### 4.2.3 Example of Casa del Quartiere

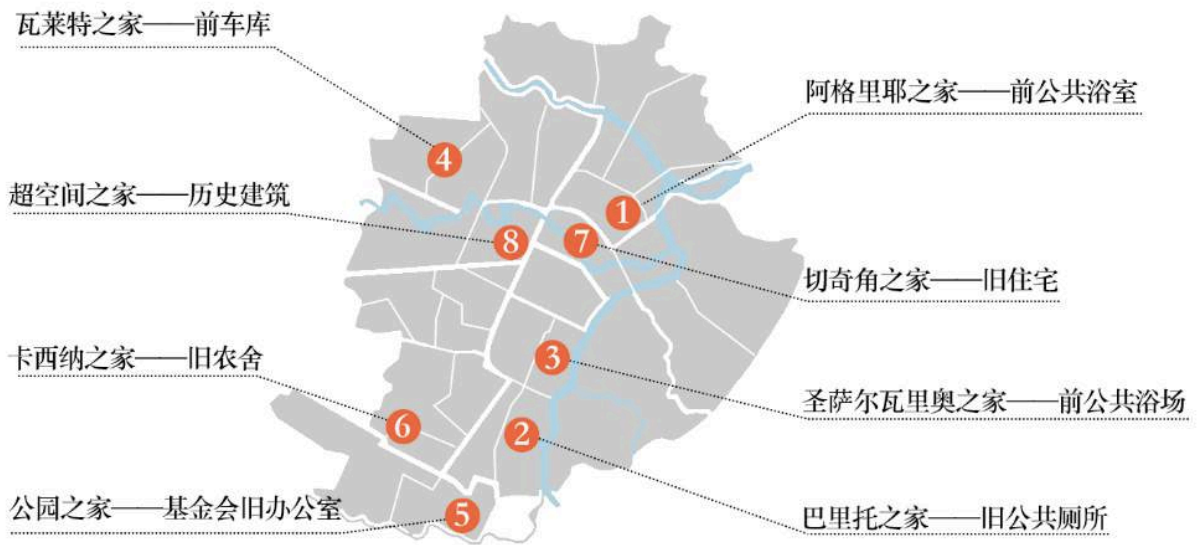


fig 4.9 Distribution of Neighborhood Home Network Members  
(picture by author)

At present, the distribution of eight neighborhood homes that constitute the neighborhood network is shown in Figure 4.9 (the ninth one was withdrawn later), and they were transformed from different building types:

Have a plenty of public bathroom renovation, such as the neighborhood home in Gerye Street. A Gerye House skillfully regenerates the abandoned public bathroom, giving full play to the advantages of large bathroom space and smooth ceramic tile inner wall (Figure 4.10), creating a music space with excellent sound quality and reverberation effect, and becoming the best place for community concerts and holiday celebrations (Figure 4.11). For the small space in shower room with many partitions (Figure 4.12), update and make full use of its continuous and sufficient wall surface and a small number of windows or high windows, and arrange it as a grid gallery, and use the abandoned pipeline facilities above to fix lighting pipelines or hang artworks. This updated design not only makes the best use of everything, but also creates a wonderful experience of "Bathroom Art Museum" (see Figure 4.13).



fig 4.10 bathroom before  
(fig by:www.casadelquartiere.it)



fig 4.11 bathroom after  
(fig by:www.casadelquartiere.it)



fig 4.12 shower before  
(fig by:www.casadelquartiere.it)



fig 4.13 shower after  
(fig by:www.casadelquartiere.it)

Some are reconstructed from abandoned garages on the ground floor of residential buildings in marginal communities, such as Vallette House. This project shows the social inclusiveness of the neighborhood in a marginal community with a strong industrial background. Le Oualett block was once a gathering area of the working class, which was formed in the 1950s, when the Italian industrial center of gravity shifted to the north on a large scale. Therefore, Le Oualett is a lively community with relatively rich public resources, but the community pays too much attention to the distribution of industrialization mode of production materials and lacks necessary public life service facilities and social space for citizens. With the acceleration of urban de-industrialization, a large number of young forces and social resources have flowed out, and Le Oualett has gradually become a soulless sleeping city. Today, about 12,000 people live in Le Oualett, and these residents have a strong sense of belonging and a strong desire for self-salvation. Under such a social background, in 2013, a community garage abandoned for nearly 20



years was regenerated by the community cooperative and the local cultural center. Vallette House provides all residents with available social space, equipment and access to professional and skilled personnel. Vallette House is also a place where community plans and activities can be expressed, and it becomes an incubator for the whole community to promote cultural production and social innovation. (Figure 4.14, Figure 4.15) Vallette House is an inclusive and enthusiastic meeting place, a warm space to actively experience the community atmosphere, an innovative space open to groups, associations and individuals, which can receive the proposals of all citizens, and is a laboratory where ideas collide.



fig 4.14 Sunshine Dining Table  
(fig by:www.casadelquartiere.it)



fig 4.15 neighborhood tea  
(fig by:www.casadelquartiere.it)

San Sal Vario House is also a very popular space in the neighborhood network, especially its courtyard space. The regeneration of the San Sal Vario House began in 2003. In order to improve the quality of life (including social, economic, environmental and cultural fields) in the San Sal Vario block in Turin, local authorities established the San Sal Vario Local Development Bureau, which is composed of 27 associations and entities of various types. The agency proposed to establish a multi-functional center in the neighborhood as a strategic action of the neighborhood: to create a neighborhood home with cultural and community space, and a citizen's laboratory to carry out cultural, artistic and social activities. St. Sal's Vario House is an open and pluralistic space and a place for citizens to exchange activities. St. Sal's Vario House was transformed from a historic building built before the 20th century. During World War II, the building was partially damaged by two artillery shells and then abandoned (Figure 4.16). The original renewal idea of St. Sal's Vario House is to return more than 1000m<sup>2</sup> of public space to the neighborhood. The reconstructed building mainly includes two floors above ground

(about 500 m<sup>2</sup> in total) and courtyard space (470 m<sup>2</sup>). Among them, the courtyard (Figure 4.17) and terrace space (Figure 4.18) will organize residents' performances, community dinners, public games or outdoor exhibitions every weekend or important holidays, which will become the most important space for neighborhood communication (Figure 4.19). In terms of capital maintenance, St. Sal Vario House is responsible for its own profits and losses: the funds come from the profits of economic activities (the rent of the cafeteria sales department); Users' cost sharing of housing space and services; The remaining commercial use of the house space (space rental for birthday parties and private activities); Donations for projects and activities directly related to neighborhood home activities.



fig 4.16 courtyard before  
(fig by:www.casadelquartiere.it)



fig 4.17 courtyard after  
(fig by:www.casadelquartiere.it)



fig 4.18 Roof Terrace  
(fig by:www.casadelquartiere.it)



fig 4.19 terrace activities  
(fig by:www.casadelquartiere.it)

In addition, with the promotion of the influence of the neighborhood house and the expansion of its coverage, a neighborhood house has been regenerated in the park at the strong suggestion of Turin residents, which is affectionately called "the house in the park" (Figure 4.20). Different from other members in the neighborhood network, the Park

House humbly crawls on the green space with the attitude of embracing nature, and is ingeniously integrated with the slightly raised terrain. The roof part of the Park House can be used as the extension space of the park, while the first floor part is engaged with the park green space in a semi-arc way, which divides a "safe haven"-style space (Figure 4.21), giving the originally completely open park a certain degree of privacy and becoming a great place for residents to have family gatherings, picnics and couples to have a rest and chat.



fig 4.20 casa nel parco  
(fig by:www.casadelquartiere.it)

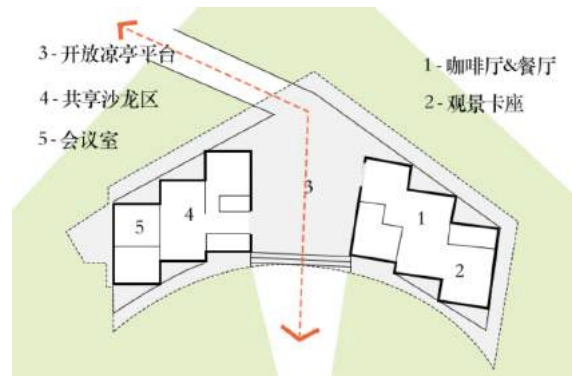


fig4.21 ground floor  
(picture by author)

Among the nine existing members of Turin Neighborhood Network, the most representative and influential one is cassina House. Cascina, which means "farmhouse and country house" in Italian, represents a mode of transforming abandoned houses in marginal areas. Cassina House in Turin opened in 2007 with a total area of 2500m<sup>2</sup>. The renewal of cassina House emphasizes the coexistence of protection and innovation: the historical architectural features of the old farmhouse are preserved and skillfully integrated with modern technology to form an open space for the current and future life of the community. The renovation of farmhouses should respect the site environment as much as possible, and adopt environmentally friendly materials and passive shading technology according to the standards of environmental sustainability.

Cassina House has been transformed into five parts: foyer, hall, barn, villa and courtyard. The main entrance of the building is a high-rise double-layer glass space with a direct view of the external courtyard. The logo system of the reception area composed of various characters and patterns is hung over the foyer, which plays a guiding role in the foyer. After passing through the foyer, enter the double-storey Tonggao Activity Hall, which is the main space for the neighborhood house to hold public activities (Figure 4.22, Figure 4.23), surrounded by the children's play area and the room for storing tables and

chairs and other equipment. The mezzanine upstairs extends around the central hall and is connected to all other floors of the structure by stairs and walkways. The second floor is the original living space, which is used as an incubator for community studios and creative projects after renovation.

Part of the barn was transformed into a cafeteria (Figure 4.24) and a multi-functional room. The old barn, the best preserved part of the old farmhouse, has been restored. The original arched ceiling is retained at the bottom of the barn, which forms a hint of the past memory of the dining room space. The restaurant faces the neighborhood residential area and the courtyard with entrances and exits, which can directly reach the courtyard, villas and barns. The other part of the first floor was updated into a large salon space for community meetings, friends gathering, parent-child manual work, skills learning and other activities (Figure 4.25).

Part of the villa was transformed into an ecological museum and an administrative office. This three-story villa was once an ancient 17th century building. But up to now, the subject is in a state of serious decay, and the renewal of this part is the "original core" of the whole project. Therefore, the 17th-century architectural style of the façade was preserved, and the damaged part was wrapped with a two-layer wooden grille skin. Now the first floor of the villa is the ecological museum, and the second floor is used as the administrative office of cassina House.

The redevelopment of the inner courtyard endows cassina House with important community value. The courtyard space is not only a "container" that can enhance architectural elements, but also a background for various community activities in the neighborhood house. Courtyard is composed of space enclosed by L-shaped buildings, which serves as a place for community gatherings, outdoor restaurants and collective activities. Two ancient mulberry trees on the south side of the courtyard are preserved, forming a large area of shade in summer, and leaves in winter give the building sufficient light. (Figure 4.26, Figure 4.27)



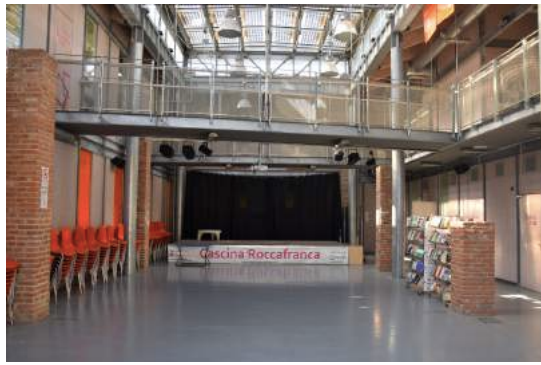


fig 4.22 Hall



fig 4.23 lecture in the hall



fig 4.24 canteen in granary



fig 4.25 hand workshop



fig 4.26 courtyard



fig 4.27 flea market

Since the opening of cassina House, it has created a very high social influence. According to the "Neighborhood Network Statistics Report" in 2019, in 2019, cassina House was reported by about 167,000 articles; A total of 262 cultural activities, 513 social activities, 123 courses and workshops were organized, and 38 management support volunteers, 187 volunteers and 125 partner organizations from management service associations and organizations were convened; There are 13,000 followers on Facebook, 800 followers on Instagram, and 5,000 followers on the mailing list; 39 operators and 178

people between cassina House, cafeteria and children's area benefited from various forms of income activities, resulting in a total economic benefit of about 1,025,000 euros. It can be seen that cassina House has played an important role in community rejuvenation and economic revitalization.

### 4.3 Optimize neighborhood microspace

In the renewal attempts to repair neighborhood relations in Italian communities, many renewal measures for neighborhood microspaces are also worth learning from. Neighborhood microspace refers to the space in the community which is closely related to the daily behavior and activities of the neighborhood, but has a small area, such as the entrance of the community and the alley between two residential buildings. This kind of spatial renewal is characterized by small project scale, less investment and short cycle, but due to its precise policy and strong pertinence, it can often play an important role.

#### 4.3.1 Improving negative energy space with micro-landscape

Improving community negative energy space with micro-landscape is a common way to optimize neighborhood micro-space, such as community greenhouse renewal in Sylar. This project is located in Casti Nione block of Bologna. With the joint participation of local government, art foundation and residents, a long-abandoned neighborhood vegetable field will be regenerated into a community greenhouse (Sylar Greenhouse). By creating the ecological micro-landscape between neighbors, the space of neighborhood communication and the media of community sustainable ecological environment regeneration have been formed. Greenhouse in Sylar is a renewal project with rich significance and uses, aiming at stimulating the emergence of new job opportunities, new professional cooperation, social relations and new inclusive space. Therefore, community greenhouse is a community business model with strong social responsibility. Similar to urban agriculture, this microeconomic model has created new work forms and social value distribution. The community greenhouse renewal project has received a total investment of 500,000 euros from the foundation and the district government for site regeneration and project operation. As a coordinated community project, a community shared space was created within two years: 250m<sup>2</sup> of land was transformed into a platform for promoting environmental regeneration and ecological sustainable development. Returning the abandoned green space to the community is not only a shared

space for cooperation, exhibition, training, activities and incubation of start-up enterprises (Figure 4.28).

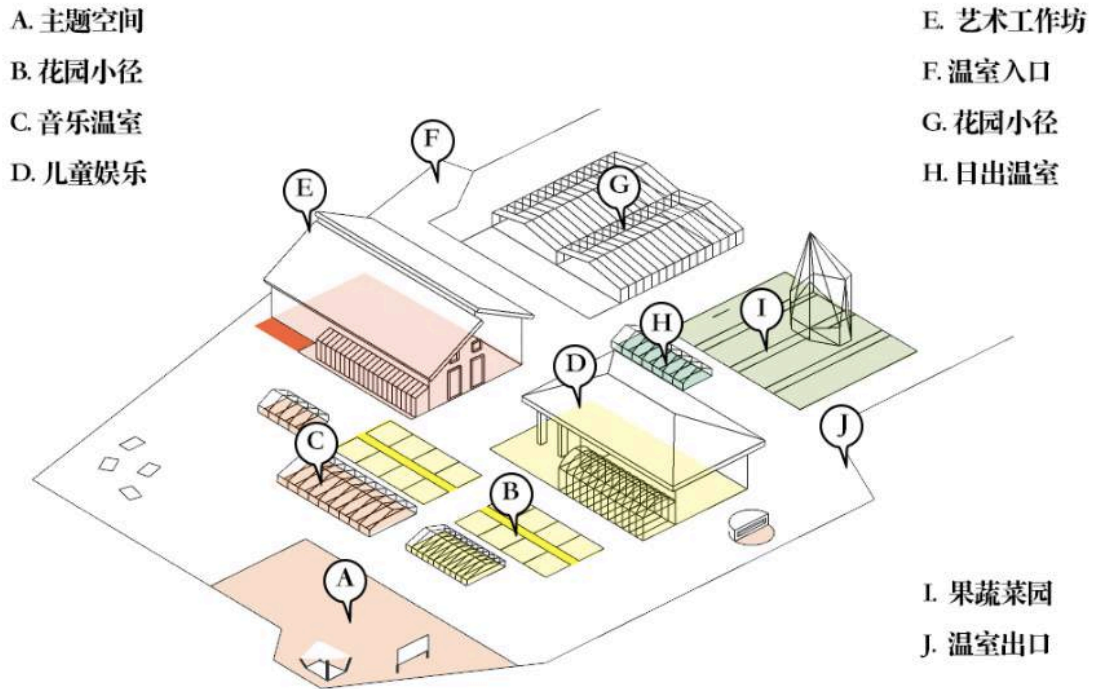


fig 4.28 diagram of functional zoning  
(picture by author)

The outdoor garden of Sylar greenhouse is a popular external space for residents after renovation. By placing creative planting structures, such as verandah, diagonal support bars, light and wind-blown sunshade components, etc., it adds practicality and hierarchy to the originally tedious space (Figure 4.29). The external garden becomes a place for residents to enjoy the cool party, and can also hold small open-air concerts in the neighborhood, summer lawn music festival, lawn banquet, garden exhibition, etc. (Figure 4.30), which is a green ecological space for the neighborhood interaction of young and old people in Xian Yi.





fig 4.29 outside garden  
(fig by : [www.leserre.kilowatt.bo.it](http://www.leserre.kilowatt.bo.it))



fig 4.30 summer music  
(fig by : [www.leserre.kilowatt.bo.it](http://www.leserre.kilowatt.bo.it))

Except for the external garden space, the greenhouse building is built by modular devices, covering a total area of 70 m<sup>2</sup> and divided into two buildings. The interior space of the first greenhouse is not fixed and divided, but movable tables, chairs, furniture and projection equipment are mainly arranged for multi-person meeting, exhibition and discussion. The second greenhouse is "community dining table", which creatively adopts aquarium table and soilless culture technology, trying to realize the sustainable concept of "aquaponics" (Figure 4.28). A dining table element composed of 12 small windows "ponds" is designed by the principle of connectors, and small fountains are interspersed among them to form a small-scale flowing water landscape, which has the artistic conception of "flowing meandering water and drinking and writing poems" (Figure 4.29). At the same time, it also conveys the hard-won sustainable concept of thinking about the source of drinking water and thinking about every meal.



fig 4.31 Aquaponics pool  
(photo by Lorenzo Brando)



fig 4.32 ecological table  
(photo by Lorenzo Brando)

### 4.3.2 "stick in a needle " micro-design stitches the neighborhood boundaries

There are also some boundary spaces that are easily overlooked, such as the partition walls of adjacent blocks or the entrance of the back street of the neighborhood. Because of the remote geographical location, this kind of boundary space often only plays the role of limiting the field, but if it is skillfully updated and designed, it can play a certain role in promoting neighborhood communication in different regions.

In Pisinola, Naples, there is a case in which artists and residents use art installations to renew the boundary of the declining land. The site was originally a planned subway station, but it was shelved due to some social reasons, and now it has become an unfinished traffic site, just like a scar running through the block, which divides the originally integrated block into two and gradually alienates the neighborhood. At the beginning of the renovation work, the organizer actively called on the local community to participate in order to enhance the sense of identity of the renovation measures. The goal of renewal is to transform Pisinola Station from a retired traffic space into a community-recognizable place, a participatory art gallery, an extended laboratory for contemporary language experiment and dissemination, and a platform for dialogue with nearby neighborhoods, so as to connect citizens with their communities. In this renewal project, art has become a window to reflect and understand contemporary society.

The first renovation project selected a wall facing the street. After observation, artists found that on these degraded concrete walls, they often found some words written by residents expressing hope and redemption (Figure 4.33), which inspired them to display slogans in the form of hollow masks on the existing footprints of residents. These slogans expressing the desire for redemption not only awaken citizens' awareness of community maintenance, but also regard painting signs as an expression, which is not constructed in the form of art, but declares a dramatic social situation and a strong will to overcome this situation. Organizers let children write colorful words, draw pictures and press fingerprints in a fantasy shape (Figure 4.34), without any competition or personal affirmation attempts, and happiness is a catharsis artistic gesture of collective participation; This dense texture forms the base, which can be coated with a layer of white paint, so that the outline of phrases created by children can be revealed, revealing the words "FIORI TRA LE SPINE", and this community declaration wall was born, symbolizing the common willpower of community residents and the desire to revive the

community (Figure 4.35).



fig 4.33 Graffiti Wall before  
(fig by: INU edizioni)



fig 4.34 Children in participation  
(fig by: INU edizioni)



fig 4.35 Graffiti Wall after (fig by author)

In the second project, an easily overlooked entrance space in the back street of the community was selected. In order to enhance the recognition and guidance of this space, the organizer created a visual illusion that the space overlapped into a plane in different dimensions through an interesting visual dislocation (Figure 4.36), which aroused the active participation of observers, including the main body in the device itself, because the perception of space was determined by the interpretation of symbols by observers (Figure 4.37).

In the wall graffiti "Culture is the Only Wing of Redemption" (Figure 4.38), the multi-plane geometry covers every side of the space, as if it were drawn on a cross-dimensional plane between the observer and reality. However, the actual operation is very complicated, because perspective correction is needed. The basic geometric figure of letters appearing in the final image is deformed along the surface of real space by



geometric method based on central projection. This illusion can be summarized as the transformation of two-dimensional images on one or more surfaces arranged freely in space.



fig 4.36 details  
(photo by: author)



fig 4.37 vision in entrance  
(photo by: author)



fig 4.38 words "Culture is the only wing of redemption" (photo by: author)

In this way, the superposition of planar devices in three-dimensional space enlarges the features of deformed images and perceived images. The architecture in the real three-dimensional space becomes a background that conveys complex information and hints, and becomes the canvas of artistic creation. In fact, for observers, visual deformation is the exploration of different dimensions of space, and its function is to generate strong curiosity, which will provide a new way to look at space. This spatial implication is "enhanced" by introducing deformed symbols. The real world is not what you see. Don't be deceived by illusion. It is full of philosophical meaning.

#### 4.3.3 Integration of Neighborhood Courtyard Space

The layout of traditional enclosed houses in Italy forms a lot of courtyard spaces

inside the block, and it is also one of the common renewal ways to effectively integrate and utilize the courtyard spaces. Such as the courtyard community school in Naples. In the densely populated Spanish neighborhood of Naples, the local UNICEF and community organizations have transformed an abandoned building into a productive and creative Montecalvario community. This project comes from an important local urban revitalization plan, aiming to bring all social classes together. Therefore, education has become the driving force for inclusion and integration and the birth of new entrepreneurs. In this project, a kindergarten and a primary school, as well as a fine arts institute, handicraft workshop, bookstore, bar and student apartment are organized by integrating two courtyard spaces. All the encounters and social activities are carried out in these two courtyards, one is the static courtyard with green landscape as the main part, and the functional space of the static area such as teaching, research and office is organized; Another courtyard forms a playground for young children through colorful floor covering and exaggerated modeling facilities. The two courtyards are connected by the bottom arcade, which has good spatial mobility. (Figure 4.39)



fig 4.39 spaces intrgrated by courtyard (fig by : [www.foqusnapoli.it](http://www.foqusnapoli.it))



#### 4.4 Summary: The neighborhood structure has been repaired and the demand for public services has increased

The existing neighborhood social structure has been repaired by placing co-construction community, building neighborhood network and optimizing neighborhood micro-space, and the contradiction of social interaction has been alleviated to a great extent. Residents communicate with each other frequently through community renewal and neighborhood protection, and their mutual connection, trust and dependence are increasing day by day. Residents' sense of participation, identity and belonging gradually deepened. It has positively stimulated the active development of social activities such as business, employment and education in the community. Forming a good neighborhood atmosphere will help to improve law and order and reduce the crime rate in the community. However, with the improvement of the frequency and level of cultural and social activities, the community's demand for public services has gradually increased, and improving public facilities has become the renewal goal of the next stage.

## Chapter 5 Improve public facilities and enhance community livability

With the improvement of community living environment and the consolidation of neighborhood relations, residents have developed new demands in the fields of culture, education and commerce, and put forward higher requirements for public facilities. Existing public facilities have problems such as unreasonable distribution, mismatched functions and imperfect services, so they need to be updated to meet the new community needs. This chapter will analyze from four aspects: systematic integration of cultural facilities, complex utilization of living facilities, increase of commercial infrastructure and improvement of barrier-free facilities and equipment, and study how Italy can enhance community livability by improving public facilities.

### 5.1 Systematic integration of cultural facilities

After more than 20 years of renovation and development in Italian cities, the community infrastructure has been initially upgraded. However, with the idea of optimizing resource structure deeply rooted in people's hearts, system integration and complex utilization of various public facilities have become the main renewal direction in this period. This section will focus on the systematic integration of cultural facilities in the community.

#### 5.1.1 Common types of cultural facilities in communities

Italy is the birthplace of Renaissance: as early as ancient Rome, there was a tradition for citizens to watch performances in the open-air theater, and the church-like buildings represented by Milan Cathedral and the Cathedral of Our Lady of Flowers once became the business cards of many cities. Even today, cultural facilities still occupy a large part of the public infrastructure in Italian cities and play an irreplaceable role in maintaining the normal cultural activities of the community. In the community, the common types of cultural facilities mainly include community churches, community theatres, community libraries, study rooms for community students, and some community centers with cultural

exchange and education functions. What these cultural facilities have in common is that they are open to all residents in the community and are places to meet the cultural needs of different types of residents.

### 5.1.2 Distribution and Characteristics of Cultural Facilities

In terms of location distribution, community churches are usually located in the core space of the community. Italy is a typical religious country, and nearly 90% of the residents have daily needs to go to church to pray and worship. It is in this ideology that countless dazzling church buildings were born. Therefore, the primacy of community churches is self-evident in terms of spiritual needs and material space. Different from the exquisite Gothic cathedrals located in the historical core area of the city, the cathedrals in the community are usually more modern and simple, and pay more attention to practicality and efficient use of space in the interior design. Because it is no longer limited by the traditional facade scale and mountain flower style, it also has higher flexibility and freedom in the expression of church facade and modeling.

For example, the Redeemer Jesus Chapel located in Dante Livio Bianco block in Turin (Figure 5.1). Finish the facade treatment in a clean way, and focus the vision on the roof by overlapping elements. The main facade of the church is just like a modernist painting, without stained glass windows or statues, but mainly with the blank space of red brick walls, which is completed by comparing the artistic modeling of metal wires with the materials and colors of glass and brick walls (Figure 5.2). Simple without losing details, the overall tone of the church is in harmony with the community style (Figure 5.3). The interior space is not decorated too much, but attracts people's attention to the top through the design of high windows. The ceiling uses intersecting exposed concrete modules to create a dense feeling of "dark clouds pressing the city to destroy it". In this atmosphere, only the bright cross altar in front becomes the direction of redemption (Figure 5.4). In the community, the community church is often designed together with the square in front of the church. Unlike the solemn and sacred church space, the square in front of the community church often becomes an important place for residents to gather and celebrate.



fig 5.1 church elevation  
(photo by author)



fig 5.2 church details  
(photo by author)



fig 5.3 community culture facilities  
(photo by author)



fig 5.4 inside space  
(photo by author)

Community libraries are mainly divided into two types, one is the public library funded by the municipal government, and the other is the public library funded by community organizations and private foundations. The main difference is that the former is often located in the central area of the city, and it is mainly built in some historical protected buildings. The latter is usually combined with the urban renewal plan or the experimental action of community rejuvenation. In some marginal communities, it is obtained by transforming and regenerating some abandoned buildings or spaces. In terms of function configuration, the library will be taken as the core to do appropriate extension, and courses such as joint office and skills training will be added, such as the Gintsburg Community Library in Turin.

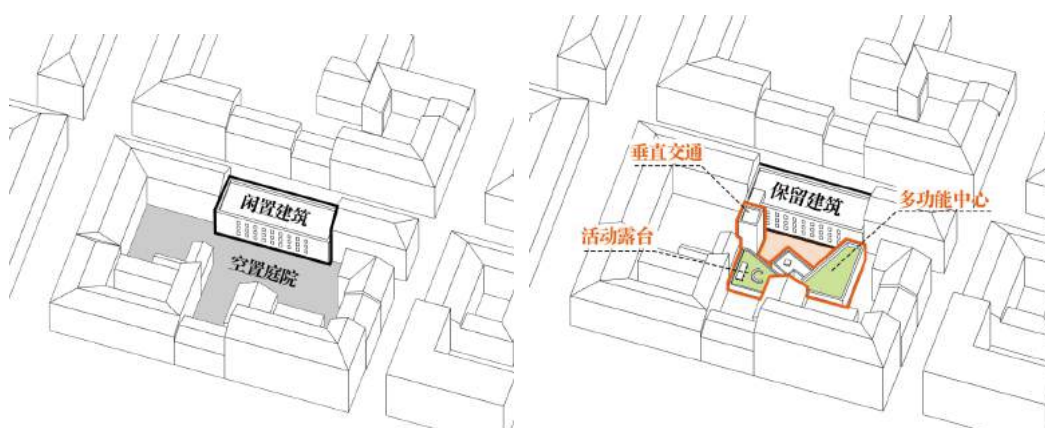


fig 5.5 library before  
(picture by author)

fig 5.6 library after  
(picture by author)

Gintsburg Community Library is located in a typical Italian "Hui"-shaped closed block and transformed into an idle elderly center in a local community hospital (Figure 5.5). Due to the adjustment of local industrial structure, the block was classified as part of the plan of Turin University Town in the late 1990s, and a large number of students moved into the block. Because the university management system is different from that in China, Italian college students can't usually live on campus and the school is closed during non-class hours, so college students must seek the space outside the school where they can learn and communicate. The municipal government noticed this obviously rising local demand, and then cooperated with community organizations and foundations to reclaim the idle elderly centers in hospitals, transform the accommodation part into student apartments, and regenerate the public part into community libraries. The total area of Gintsburg Library is 1500m<sup>2</sup>, and the city terrace is 140m<sup>2</sup> (Figure 5.6). There is also a cultural center in the building, which is dedicated to serving citizens and associations, including a joint office space, conference center, roof garden and an outdoor space with tables and chairs, with 44 rooms for people to study, work, rest and play. Nowadays, Gintsburg Community Library is considering joining edisu (Italian Students Association) as a public study room for students. The municipal government can also recover the unused property, thus providing a useful neighborhood space for the university system and community. This new way of regenerating the old-age care center into a community library not only adapts to the new needs of the community with new functions, but also brings great social benefits to the whole block and realizes the transformation from a decaying block to a young school district.

### 5.1.3 "Packaged" system integrates cultural facilities

Under the renewal trend of optimizing the allocation of spatial resources and improving the use efficiency, the systematic integration of cultural facilities in a "packaged" way has become the renewal direction of many communities. The advantage of this kind of "packaging" integration is that it can not only improve the effective utilization rate of space, facilitate the resource sharing and coordinated management among cultural facilities, but also facilitate the daily use of residents, save the journey and time to travel back and forth and enhance the accessibility of various facilities. This section will take three communities in Turin as examples to introduce three integration modes of cultural facilities based on the characteristics of site elements.

The first mode is the common integration with block elements, such as fiori block in South Milla (Figure 5.7-a). Divide three complete rectangles in a regular square field, and arrange church space, outdoor exercise field, community green space and community library (learning center) among them. Because the fiori block in South Milla used to be the industrial family area of Fiat Auto Factory in Turin, in the early regional planning, it showed obvious grid characteristics in land division, and residential buildings were distributed in linear strips and balanced. Based on this site characteristic, it is very suitable to adopt the integration mode of block elements.



(a) block elements                      (b) linear elements                      (c) circle elements

图 5.7 三种整合方法 (picture by author)

The second mode is integration with linear elements, such as Dante livio bianco community (Figure 5.7-b). The site takes the community church as the center, extends to the residential area through the front square, and connects the community residents' activity square, the front square of the church and the outdoor small theater in series from north to south with an oblique path running through the square. These external spaces

correspond to cultural centers and community theaters in turn. Community learning center and kindergarten are also connected at the intersection extending to residential area in front of the church square. In this site, "X"-shaped linear elements are placed to connect the originally distinct plots, forming a cultural facility group with high permeability and accessibility.

The third mode is the integration of circle elements, such as Oualett community (Figure 5.7-c). The group adopts a circle-surrounding mode, integrating the activity venues, cultural facilities, sports venues and commercial infrastructure from inside to outside. In the site design of Oualett community, the community square is the center of the circle, which surrounds the cultural facilities such as community church, neighborhood home, post office, community office and cultural center to form the middle level; On the outermost side, living facilities such as parking lot, football field, basketball court, supermarket and community market are arranged clockwise. Various types of public facilities and sites are systematically integrated in a center-surrounded manner. The advantage of this method is to improve the utilization rate of the site, and at the same time, to make a reasonable division of the spatial characteristics of different facilities, such as residents' Little Square and markets, which are arranged in the space facing the main streets; While outdoor exercise venues and other spaces that need to occupy a large area and privacy are arranged on one side close to residential areas.

## 5.2 Composite utilization of living facilities

The material foundation determines the superstructure, and the most basic function of the community is to meet the normal living and living needs of residents. In order to create a convenient and livable community living environment, complete and convenient living facilities are essential evaluation indicators. Under the background of increasing shortage of urban resources in Italy, it is the direction of community renewal to make comprehensive use of various living facilities and improve space utilization efficiency.

### 5.2.1 Distribution and characteristics of basic living facilities in community

From the perspective of food, clothing, housing and transportation, the basic living facilities in the residential community include vegetable market, supermarket and parking lot. Community hospitals will be set up in a few communities, but considering that most

Italian residents get medical treatment through family doctors, medical facilities are not included in this paper.

Among the above three types of basic living facilities, the vegetable market is one of the most flexible facilities with the longest history, the widest coverage of the community, and is an open community public space for all citizens, which embodies extremely high social inclusiveness. As the market space was initially formed as early as the barter exchange period, the earliest market space originated from the trade behaviors of citizens in public space, such as commodity exchange and private trading, and then gradually evolved into a large-scale and formal market. Therefore, the market space usually appears in an important position in the block, such as the intersection of the community and the main road of the city, or the intersection where several streets intersect, which is partially expanded to form a bazaar square. Italy still retains the living habit of "going to the market", and the market in each block community usually only opens in the morning, and the collection and consolidation work begins at 12 noon.

There are two types of supermarkets in Italy. The first is the most widely distributed supermarket chain such as Carrefour. Almost every block will have one or two small Carrefour-like convenience stores. Such supermarkets are small in area and usually only have 2-3 bays. The total business area (excluding the warehouse) does not exceed 100 square meters. However, Carrefour, as a European supermarket chain, sells goods at high prices, which are usually mainly consumed by white neighborhoods or middle class. Another type of supermarket is a large supermarket mainly distributed in marginal communities, also known as a cheap supermarket such as Lidl (Lidl) supermarket. This kind of supermarket is popular in marginal communities with its price close to the people, high cost performance and abundant commodity types, and it is also the main shopping place for many immigrant communities. This kind of building is characterized by only one floor, which often occupies a large area on the corner or street.

Parking space is mainly divided into underground garage and above ground. This paper mainly discusses the above ground part. The above-ground parking lots are mainly open-air parking lots, and few communities with rich space resources will set up above-ground garages. For example, the first floor of an overhead community library is used as a semi-outdoor garage with a roof in Fiori block of South Milla. However, during the investigation, the author found that for local residents, instead of parking their cars in the garage space intact, residents prefer to park their cars directly under the house or on both



sides of the road. Therefore, trying to alleviate the problem of parking occupation in the community by increasing parking space can not achieve good results.

### 5.2.2 Organize block space with open-air market

As discussed in the previous section, the market space, especially the open-air market, plays a very important role in the daily life of Italian residents, and is one of the most frequently used public spaces for residents, which stimulates many social behaviors of meeting and communicating by purchasing. The space layout of outdoor market is flexible, often at the boundary or intersection of different blocks, which becomes an important space for the transition between community and urban streets. This section will take three typical open-air markets in Turin as examples to introduce how different forms of market space organize block space and sew community boundaries.

Porta Plazzo, located at the junction of the historic old town and the marginal community in Turin, is the largest open-air bazaar in Turin and the market space with the highest traffic volume. Due to its special geographical location, it is mixed with local Italians and a large number of immigrants from other countries, such as refugees from China, some African countries and the Middle East. The hypermarket area has accepted residents of different backgrounds and races with high social inclusiveness and has become one of the largest immigrant neighborhoods in Turin. In terms of spatial form, the hypermarket is located at the intersection of two urban core trunk roads, which is the gateway for marginal communities to enter the main city. The renewal of hypermarket space is also part of the Urban Renewal Plan (PRU) launched in Turin in 1997. From the perspective of urban texture, the whole store space presents a very complete octagon, which forms a bright contrast relationship with the surrounding houses (Figure 5.8). Two urban roads crossing it are divided into four spaces, and a theme building is set in each space. Among them, the two buildings on the north side occupy the whole site in this area with a relatively stretched plane, and become two large-scale indoor stores. From west to east, there are food retail market and fresh food market. On the south side of the hypermarket, two C-shaped buildings reserve enough outdoor market space for the plaza (Figure 5.9).

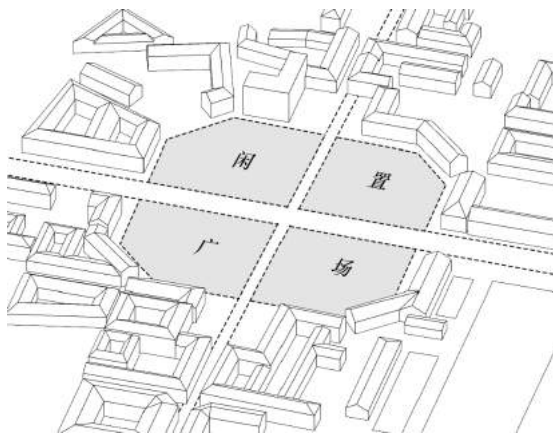


fig 5.8 Porta Piazza before  
(picture by author)

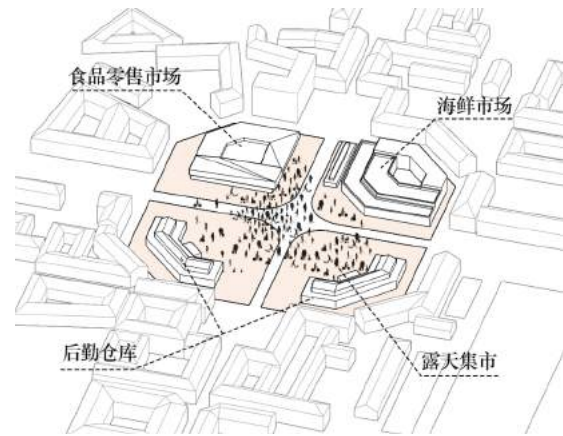


fig 5.9 Porta Piazza after  
(picture by author)

Before 12: 00 a.m. every working day, residents from the whole city are gathered here, among which black immigrants and Middle Eastern refugees account for the majority. There are also spontaneous divisions in the sales space of the market: leather products such as clothing, bags and shoes are mainly sold on the west side, while fresh vegetables and fruits are sold on the east side, thus realizing the division of food and articles, wet and dry. Such zoning is not only beneficial for merchants to sort out goods and residents to purchase and select, but also avoids the risk of food cross-infection. The sales devices in hypermarkets are mainly composed of movable sales vehicles with retractable awnings. Under the sunshine, the colorful and row-by-row sales vehicles and the bustling crowds in the market show the infinite vitality and vitality of the region. (Figure 5.10)



fig 5.10 Porta Piazza in business  
(fig by: www.unisg.it)

Foroni Market, located in Milabari District of Turin, is located in a dense residential area, forming a butterfly shape between two buildings with sharp corners cut off, and constantly extending its tentacles around the butterfly center, spreading almost to the whole block (Figure 5.11). Different from the centralized and open space formed by supermarkets in the historical planning period, the Foroni market is located in the community, not directly adjacent to the urban road. Therefore, from the attribute point of view, the latter has community introversion, that is, it mainly covers the residents near several adjacent blocks. In addition, in terms of spatial form, Foroni market belongs to the recycling of existing corner space.

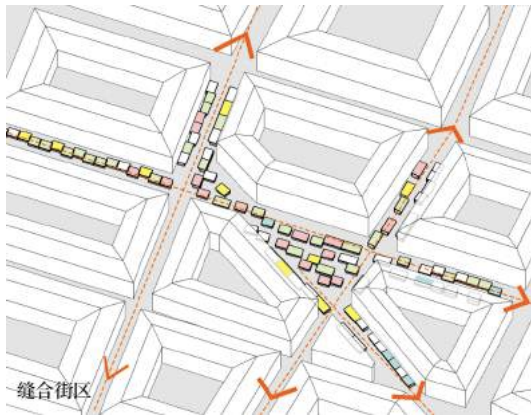


fig 5.11 block stitched by market  
(picture by author)



fig 5.12 triangle market  
(picture by author)

Through the dynamic, persistent and closely related function of placing in the open-air market, it can not only facilitate the daily purchase of residents in the neighborhood, improve the livability of the environment, but also create new social opportunities in the neighborhood. Milan Bari District is also one of the mixed residential areas of immigrants in Turin. People of different ethnic backgrounds live in dense neighborhoods, lacking a window to open social exchanges. Because these immigrants have different language, religion and cultural background, it is difficult to promote communication through neighborhood home, which is based on neighborhood relationship and common cultural hobby. Therefore, returning to the simplest and most primitive trade behavior is an opportunity to open the gap between people and promote social interaction. More notably, the butterfly-shaped Foroni market, as a breeding space from the inside of that block, plays a very good role in repairing different blocks separated from each other and

strengthening the regional relevance (Figure 5.12).

The Cincinnato market in Turin is a typical case of transition between community life and urban space. The market is located in the middle section of a linear city park, which happens to be the window to open the boundary between the east and west residential areas (Figure 5.13). This area is a marginal community developed by the outward expansion of cities in the industrial background, so there is great similarity in the social background of residents, with the working class in the nearby industrial area as the main part, mostly white Italians. Because it is far away from the city center, the land resources in this area are abundant, and urban parks and landscape greening are abundant. The living facilities are mainly large discount supermarkets distributed in the corner of the block, which are planned early. With the increasing trend of aging residents in industrial areas, the living demand of buying food nearby becomes stronger.

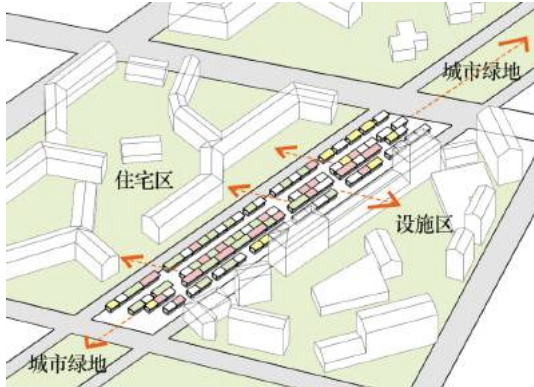


fig 5.13 market extent greenland  
(picture by author)



fig 5.14 citizens in shopping  
(photo by author)

Driven by this demand, the municipal government decided to return some urban parks to the citizens for use as community markets (Figure 5.14). Thus, a peculiar phenomenon of a community market appears in the continuous urban green belt. This is also a positive feedback of the dynamic interaction between urban space and residents: in the early days when industrial residential areas were initially formed, in order to improve the environmental quality of marginal areas, rich urban green space was planned and built, and it could also be used as a diversion preparation space for the subsequent block development. With the change of population structure in residential areas, new demand trends begin to emerge, and these early planned urban reserved lands play a role in providing available space and land to meet the new social needs.



### 5.2.3 Composite utilization space: time-sharing or vertical

Although the open-air vegetable market can organize the community space well, it can stitch up the neighborhood. However, for some neighborhoods with tight land use and high building density, or small communities, in order to facilitate residents to buy food nearby and take into account the efficient utilization rate of space resources, there is a trend of complex utilization of space. The main utilization methods are time-sharing and vertical utilization of space.

Time-sharing space is often used as parking lot or garage space after the market closes. For example, Gianfranco Market in Turin is a small-scale market with a roof located in the community (Figure 5.15). The space is arranged by 3x5 square modules, and each module has a pillar supporting a 12mx12m roof unit, forming a flexible market space with an open bottom. It will be used as a community public parking lot after 12 o'clock on weekdays and on weekends. Within the market, parking spaces are divided according to the number of retail stalls, which is convenient for residents to use parking spaces orderly and efficiently (Figure 5.16).

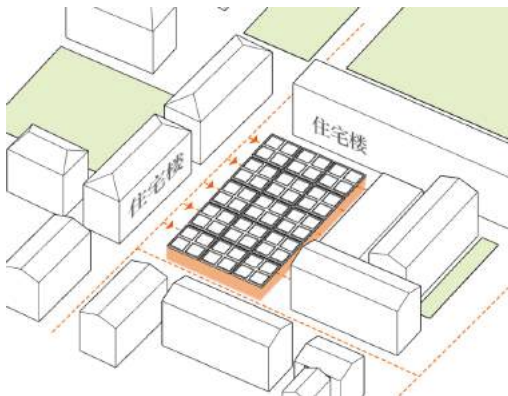


fig 5.15 domestic time-sharing  
(picture by author)



fig 5.16 parking after market  
(photo by author)

The same practice is very common in Turin, such as Crispi Square Market. The market is located at the junction of the community and the main road of the city, and the east and west spaces are expanded locally at the entrance of the block, which are used as the market and parking lot respectively (Figure 5.17). The market space is supported by dendritic steel structure with folded roof, forming a large space with bottom circulation. After the market closes, both sides can be used as parking lots (Figure 5.18).

In addition to time-sharing utilization, vertical utilization of facility space is also common in Turin, such as using the idle roof of a cheap supermarket with a large area as

a public parking lot. Because these large-scale cheap supermarkets are usually located in marginal communities and even suburban areas, residents who go to purchase often need to drive and purchase a large number of necessities. Therefore, large supermarkets that do not have the conditions to set up underground garages often need to occupy a larger floor area. Therefore, in areas where land resources are scarce, the practice of transforming the roof space of the supermarket into a parking lot by building a ramp along the supermarket (Figure 5.19) appears. Under limited conditions, the use of vertical direction improves the effective utilization rate of space and effectively solves the residents' demand for lack of parking space (Figure 5.20).

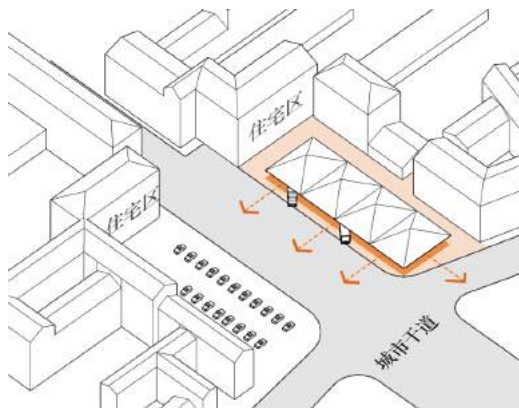


fig 5.17 extravert time-sharing  
(picture by author)



fig 5.18 Umbrella structure  
(photo by author)



fig 5.19 roof as parking entrance  
(picture by author)



fig 5.20 vertical sharing  
(photo by author)

### 5.3 Increase business infrastructure

To distinguish it from the bazaars and supermarkets in the living facilities in the

previous section, the commercial infrastructure discussed in this section mainly refers to the space that provides residents with functional needs such as catering, retail, leisure and daily travel in the community. Such as coffee shops, dessert shops, pizza shops, newsstands and tobacco shops selling bus cards. The commercial infrastructure in the community is mainly distributed in the street space, so it is of great significance to stimulate the vitality of street space and create a good community business card. In addition, some appropriate commercial infrastructure can also provide space for neighborhood exchanges, and more importantly, it can directly and effectively promote local employment and economic recovery.

### 5.3.1 Common basic business types and distribution in community

Among the common basic business types in the community, restaurants are the most widely distributed and frequently used by residents, especially cafes, which are all over the streets and lanes of Italian cities, and large and small squares and gardens can be seen everywhere. Under the background of Italian coffee culture, "Coffee Socialization", a social mode with strong Italian style, was born. On a busy morning or leisurely afternoon, the cafe is always full of community residents or external visitors. Since the shops are opened in the community, most of the people who patronize daily know each other well. Coffee shops are usually set up on street corners or nearby areas with free space, which is convenient for placing leisure tables and chairs along the street outside. Sitting in a pleasant, cool and comfortable street, drinking coffee and chatting on the street, and spending a pleasant afternoon like this is the normal state of Italian non-working hours. In winter, when the outdoor temperature is low, the interaction with the external space can be maintained by setting up a glass box-type greenhouse and a heater outdoors. This kind of coffee social space also adds a lot of popularity and vitality to the originally silent streets.

In the evening, coffee shops close, and all kinds of pizza shops and bars light up the night scene of the city. Young people who are busy with work and study during the day appear in the streets and become masters of street space at night. Different from the scattered layout of coffee shops, slightly noisy commercial and entertainment facilities such as bars are often arranged centrally, and are located in the urban-facing areas of the community, away from quiet residential areas as far as possible.

Newsstands and tobacco shops are mainly distributed at street intersections or near

bus stations and subway stations, which play the role of consulting and asking for directions. Newsstands are usually set up at the center of roadside or fork road, and are arranged together with public spaces such as community parks. Most of them are green metal caravans. In addition to selling newspapers and magazines, some newsstands also sell coffee and bread, and set up awnings in front of newsstands to arrange tables and chairs to form an outward swing space, which can also gather popularity and add vitality to streets.

### 5.3.2 Introduce the mixed mode of "business+"

In the renewal attempts of some Italian communities, more and more attention has been paid to the mixed development mode of business combined with a new function. The specific combination of new functional types should be based on the actual needs of the community.

For example, the Barila Laboratory in Turin is a typical case of "Business+Community Center". The project was regenerated from a 900-square-meter abandoned printing factory, and was originally intended to build a cafe and Jane restaurant for residents to chat and meet. With the rising popularity, more and more residents gathered here, which gradually gave birth to new social and activity needs, and Barila Lab came into being. Based on the original coffee shop space, Barila Laboratory has gradually developed into a comprehensive multi-functional community laboratory that provides the public with such topics as catering service, shared kitchen, conference space, joint office, manual workshop, rehearsal performance, jazz dance school, etc. (Figure 5.21). The goal of Barila is to integrate business and production activities, and combine them with the service to citizens and gathering space, focusing on sociality and the construction of residents' group relations. The renewed theme of Barila laboratory is social production and self-production. Barila Studio produces goods and provides services, but also emphasizes resource recovery, self-repair and resource replacement (Figure 5.22). This mode of combining business with community activities is realized by cooperation between community cooperatives and business associations. Barila Laboratory is operated by a cooperative engaged in urban renewal and local development. This organization is composed of architects and social workers, who work in an integrated way and integrate different professionals into a system; Handle the business management of community center space (cafeteria, course and activity space). Cooperatives are



committed to promoting the expression of citizenship and ensuring the positive social impact of projects and initiatives in the neighborhood in the form of solidarity and encouraging citizens' participation. And through experimental cooperation between associations and public institutions, community laboratories are managed. The management content includes social bars in the community and social and cultural activities organized by residents.



fig 5.21 Barila Laboratory  
(fig by: [www.viabaltea.it](http://www.viabaltea.it))



fig 5.22 activity room from factory  
(photo by author)

Lorenti Jiao flea market in Milan is a representative case of "business+culture". Lorenti Jiao Market was born in a regenerated municipal market, which is the combination of life center and multicultural neighborhood. In addition to the commercial function of retail market, Lorenti Jiao Market also fully combines the needs of community culture, and has set up skills training classes for immigrant mothers, Italian classes, immigration service desks, study and chat spaces for young people, and "staying behind" spaces for children after school and social leisure spaces for the elderly. It has both commercial, cultural and social responsibilities: it completes a combination of benign innovation, and realizes the "platform" for communication between Milan blocks and social interaction of local communities. Based on the openness of the whole people, cultural co-production, community self-promotion and value redistribution including economy, Lorenti Jiao Market has made an exploration to create a new community welfare model. Jiao community in Lorenti hopes to redefine the market space as "open-air laboratory", so that residents, public and private institutions and regional networks can obtain and generate local social and cultural resources in it, and promote the internal circulation of community skills, goods and services.

### 5.3.3 Using commercial facilities to revitalize community economy

At the beginning of renewal, many communities will give priority to how to create employment opportunities. Different from other public facilities, the biggest feature of commercial facilities is that they can increase employment opportunities and bring new economic growth points to local areas, and play a role in community economic recovery to a certain extent. For example, in the mixed immigrant residential area near Turin Hypermarket, the employment problem of a large number of refugees or illegal immigrants has always been a stubborn tumor in this area. By embedding basic businesses such as grocery stores, repair of mobile phones and small household appliances, and meat shops in this area, it can increase employment and stimulate the economic recovery of the neighborhood to a certain extent.

## 5.4 Improve barrier-free facilities and equipment

With the global aging trend becoming more and more serious, Italy, which has already entered the ranks of aging countries, has a new trend of building barrier-free communities in the concept of community renewal. Perfecting barrier-free facilities is not only to provide convenience for the elderly, but also to show humanitarian concern for vulnerable groups such as the disabled, and also to show the social tolerance of the community.

### 5.4.1 Focus on improving barrier-free parts

In the external environment of the community, it is necessary to focus on improving barrier-free parts, including height difference treatment of road sidewalks, building entrance ramps, blind road design and barrier-free details, such as paying attention to the clear width of wheelchairs and barrier-free signs.

During the author's actual investigation, I noticed that there are many small details of integrating barrier-free design into life in Italian cities. For example, in the elevation difference treatment of roads and sidewalks, in order to facilitate the convenience and smoothness of getting on and off buses from the platform for the elderly or wheelchair people, the ground height of the platform (that is, the height of sidewalks) will be consistent with the height of the entrances and exits of buses or trams, so as to realize smooth transition without elevation difference. Avoid the phenomenon that some old

people stumble or wheelchairs can't smoothly travel from vehicles to sidewalks. In addition, it is worth noting that in Italian urban public transport vehicles, no matter buses, express trams or subways, barrier-free exclusive seats with the same size as general wheelchairs will be set up near the doors and equipped with corresponding locking devices. When wheelchair passengers travel alone, the driver will specially assist them to complete the seating operation, such as fastening the seat belt in the exclusive seat and fixing the wheelchair device. Moreover, wheelchair seats will be specially set up in public spaces such as community centers and students' study rooms. A certain number of barrier-free parking spaces will be set up in street parking spaces, with eye-catching barrier-free signs.

In addition, the author also observed that in the design of blind roads, unlike the practice of setting blind roads in the middle of sidewalks in China, blind roads in Italy are usually arranged close to one side of buildings. It appears frequently at street corners or forks, which plays a role of reminding and guiding. In the street space with continuous wall surface, the blind road design will guide the blind to the wall surface, and then the blind road will disappear and no longer occupy the sidewalk resources. This way of letting blind people walk along the wall not only ensures the safety and smoothness of blind people's passage on the sidewalk, but also saves public resources.

In the practice of community renewal, the renewal of barrier-free environment is an urgent need to improve in many old communities. For example, the regeneration experiment of Ferry Street Space in Mandova realized the regeneration of street comfort by improving the barrier-free design of intersections (Figure 5.23).

Ferry Road is the main traffic trunk line in St. Benedetto's block. Before the renovation, it had a wide asphalt lane with discontinuous small-sized sidewalks. The driveway is 7-10 cm lower than the entrances of sidewalks and buildings on both sides of the road, and has a greater height difference with the arcade on the first floor of the building, which brings great inconvenience to some elderly residents or barrier-free people. The regeneration of Ferry Street aims to improve the use efficiency of Ferry Road and surrounding space by various behavioral ability groups, and increase the accessibility and attractiveness of the block. Specific update concerns include accessibility of physical environment, comfort of light and vision, real and perceived safety, street furniture and green landscape, building place spirit, functional use and behavior, spatial flexibility and temporality.



fig 5.23 Ferri via before and after  
(fig by: INU edizioni)

The design of the new road system is the most delicate link in the whole renovation. The renewal design gives priority to the reconstruction of pedestrian zone, which weakens the leading position of roadway on the premise of ensuring normal traffic. The renovation of sidewalks restores its historical role as a community social and commercial living space based on the design principle of "people-oriented". The update selection is guided by integrating three flexible scenes, namely, the vehicle passing scene as the urban trunk road, the pedestrian daily life scene in the community street and the bicycle riding scene. The design should also take into account the priority of pedestrians during the weekly market activities, gatherings and other festivals. The width of the updated lane has been compressed to 7 meters, which can spatially imply or prompt drivers to pay attention to deceleration when passing, and make room for walking and riding. The height difference between the updated vehicle lane and sidewalk has been reduced to 1-2cm, and the height difference between the arcade ground plane and the road has been solved by assuming the necessary ramps for the sidewalk. The whole pedestrian zone can now be easily accessed by more residents (including barrier-free persons, pregnant women, the elderly, etc.), and can be used for bazaars and other temporary activities specially for pedestrians. To some extent, Ferry Road has become a spatial attribute closer to Little Square, rather than a street. Now it can be used as a community meeting and gathering place for residents. The renewal of Ferry Street has improved the interface of public use and changed the relationship between cars and pedestrians. Although the updated garage space is

compressed, it creates a space that is convenient for residents to reach and increases public furniture.

The updated walking area is integrated into the design of street furniture, thus improving the accessibility of walking space and ensuring enough parking and turning space for wheelchairs. By selecting floor materials suitable for different types of users, customizing furniture sizes and adopting conspicuous general signs and other details that can be directly perceived by the human body, the space comfort of the walking area can be improved. For example, more durable and lower maintenance cost materials are selected on the floor of the walking area, which provides a safer use environment and prolongs the usable period. Paving stones are used to avoid overheating and glare caused by solar radiation. In the renewal of utility poles, new public lighting is used instead of outdated stringers, and soft lampshades are used to avoid interference to street users. The newly planted landscape green plants play the role of purification and anti-pollution, and are fixed by columnar tree pools, so as not to interfere with pedestrian and vehicle traffic. The fragrant herbs in the jar remind people of the monastery garden, adding color and fragrance to the street (Figure 5.24). These renovation measures improve the street environment and space quality (improve thermal comfort, air pollution, water circulation, etc.), and form a fresh and natural atmosphere in the community, making the street space more comfortable and pleasant. (Figure 5.25)

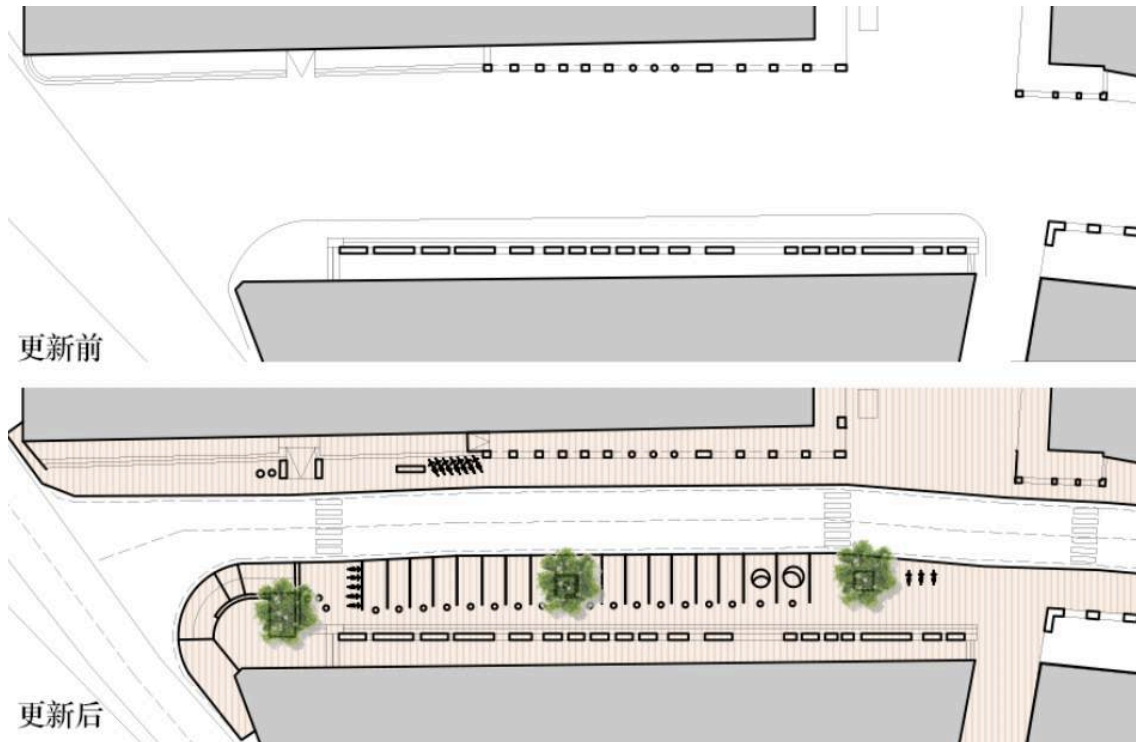


fig 5.24 walk system before and after  
(picture by author)

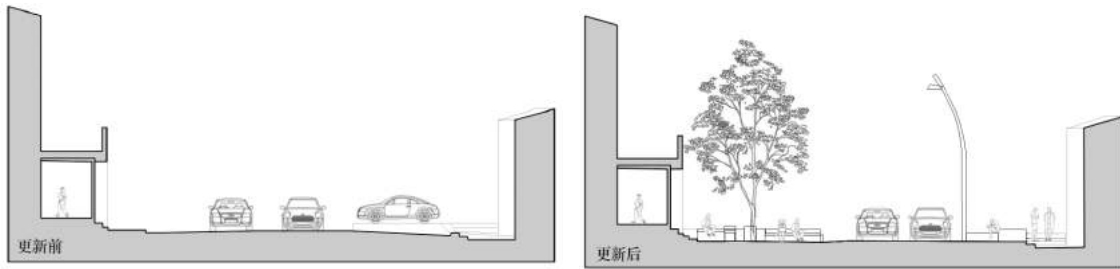


fig 5.25 via section before and after  
(picture by author)

#### 5.4.2 Install barrier-free equipment on old buildings

In addition to barrier-free design of key parts of community external environment, installing barrier-free equipment on existing residential buildings and built environments is also one of the common renewal methods in community renewal. This renewal method is particularly important for old blocks and some built environments that cannot be systematically renewed due to space or site conditions, and it is very effective for improving the convenience and accessibility of such spaces.

It is a common practice to install elevators on existing houses in old communities to realize the renewal of built environment. In recent years, the renovation of old residential areas in China has also carried out the work of installing elevators. Due to the limited construction conditions of existing houses, the installation of elevators can only be done on the outer wall, and a vertical traffic space can be inserted into the stairwell. Materials with high transparency, such as steel frame and glass, are usually used for the additional parts to ensure that the lighting of the residential indoor and corridor traffic core is not blocked (Figure 5.26). In addition, the color selection of the added part should be kept in harmony with the appearance of the house as far as possible, and the light and transparent visual effect should be compared with the thick wall surface of the house (Figure 5.27). However, because the newly installed elevator can only lead to the platform part of the original stairs, it cannot directly realize the zero height difference.





fig 5.26 elevator with consistent elevation  
(photo by author)



fig 5.27 translucent elevator  
(photo by author)

Similar to the installation of elevators, adding new materials and light weight to the old environment can not only keep the overall harmony and unity with the environment, but also realize the interesting comparison between the old and the new through the comparison of materials and weight. This practice is widely respected in Venice, a "water city" with weak accessibility. Because waterways permeate every street in the city like capillaries. Although it brings the unique romance and space interest of Shuicheng, it also poses a great challenge to the barrier-free system of the city. At present, the bridges connecting rice are mainly stone arch bridges. The beautiful arch bridges, mottled steps and swaying boats under the bridges form a beautiful picture scroll against the background of Italian architecture. But for the barrier-free people, the uneven steps limit their desire to walk in Venice. For many years, the Venice Municipal Government has been committed to ensuring the accessibility of the city through the Urban Accessibility Law drafted in 2004, and has taken a series of updated measures to build barrier-free bridges in areas with traffic barriers within the city. In the past, the municipal authorities have tried a variety of barrier-free renovation schemes: from the lifting platform to the elevator, and then to the barrier-free ramp that can be integrated with the original building. The latter is the main means of renewal at present, such as the renewal series of Youafu Bridge.





fig 5.28 Add ramps to existing stone bridges  
(photo by author)

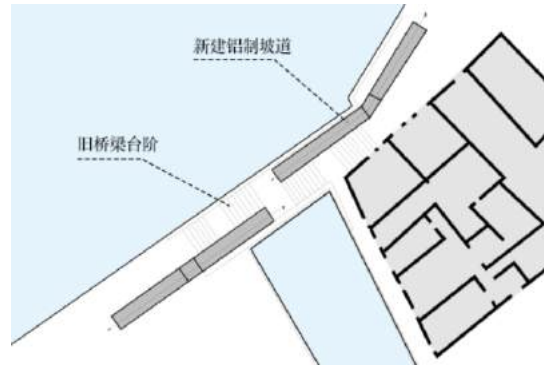


fig 5.29 ground floor of bridge  
(picture by author)

The renewal project of Youafu Bridge mainly adopts steel ramp, which is superimposed on the ladder section of the original bridge to form a "convenient path" system. This is an experimental scheme studied in Venice since 1980s, in which a series of slender and uniformly inclined pedals are used instead of the original steps, and these pedals are connected obliquely by the back riser to form a straight slope with a gradient of 8%. The ramp keeps a part of the freedom of the bridge, which does not limit the space of existing activities, and minimizes the interference and damage to the original structure. Through the design of graphite-treated steel guardrails and transparent vertical elements, a dialogue is established with the original structure and environment. Ramps are superimposed on the original bridge: one is straight, and the other is folded, so as to reduce the occupied passage space of stairs.

The updated architectural and structural design is mainly carried out by university teachers, technicians and a group of young architects composed of doctors and researchers free of charge. The project has had a great social impact: the city government of Venice believes that it is the key to ensure the barrier-free passage of facilities such as walking, shopping carts and wheelbarrows for the disabled and children.

#### 5.4.3 Renewal concept of barrier-free community

With the popularization of barrier-free renewal concept in China, the concept of building barrier-free community has become a new renewal trend. This research is carried out by the Urban Planning Laboratory in Politecnico di Milano. The research takes Homero District of Milan as the experimental object, trying to build a barrier-free community here. The starting point of this study is to define the concept of barrier-free community, which holds that cities are a cellular system, and they organize themselves

into a biological structure. A city should be barrier-free and everyone should be allowed to participate in the operation of the city. The function of city is the result of the synergy of all parts. All parts of city need to cooperate in an organic way, just like interconnected cells with different identities, which together constitute a complex and articulated system. The strategic theme of the project involves gathering place, effective connection, permeability, green system and community service. In this project, the slow-moving system composed of bicycles and pedestrians has attracted attention, and the designer began to rethink the road system and tried to connect Homero District, the project area and the South Agricultural Park through a new entrance. Green system includes embedded wedge-shaped landscape, which is the embodiment of penetrating into urban structure from agricultural parks in the south.

#### 5.5 Summary: government forces gradually withdraw from community renewal, and public intervention becomes dominant

With the maturity of local community organizations and the enhancement of residents' awareness of self-management of the community, the degree of government intervention is getting weaker and weaker, and public intervention is the leading force in the new round of renewal

## Chapter 6 Summary and Enlightenment

### 6.1 Summary and reflection

#### 6.1.1 Experience summary of community renewal model in Italy

After combing the development stages of community renewal in Italy in recent 20 years and analyzing and comparing different renewal modes, we can get the following experience summary: in different renewal stages, due to the different social background and prominent contradictions of the times, the renewal objects and contents of each stage are different. However, the overall renewal trend is from the promotion of physical space environment to the common revival of the combination of people and regions. It is manifested by transforming the quality of building environment to paying attention to the restoration of social structure and the regeneration of neighborhood relations. In addition, the development of community renewal in Italy is also a process of decentralization of power: from the initial unified planning and control by the central government to the considerable autonomy of local authorities below, to the bottom-up renewal led by social forces such as community organizations and gradual evolution into residents. The realization of this power transfer needs not only the awakening of public participation consciousness, but also a complete set of laws and regulations to ensure the orderly participation of all stakeholders, which is also a valuable experience in the renewal of Italian community. From Bologna's Regulations on Public Collaboration to the neighborhood contracts or neighborhood declarations of local communities, all of them are trying to maintain the legitimacy and legitimacy of their participation in community renewal affairs by means of legal institutionalization.

The specific experience of community renewal can be summarized as three decisive factors. First, there must be available physical space, which can be public or private in nature, which is the premise and basic condition of community reconstruction and regeneration. Second, there are events that can gather popularity, such as planning themes put forward by management associations or community organizations, such as neighborhood homes, participatory community centers, community back gardens, etc.,

which are used to fill the social functions and activities of the space. Third, it is a qualified public department or organization association that can provide necessary resources for community renewal projects, or it can be a community maintenance committee formed spontaneously by residents. On this basis, two feasible community renewal routes are derived: one is to create a unified platform in the country, which integrates all the research and exploration done by Italy to determine the suitable location for establishing a community hub; The other is to create a user manual, which clearly lists the objects involved in the update and specific operation instructions for those who want to activate, develop or strengthen the regeneration project.

### 6.1.2 Common Topics of Community Renewal Practice in Italy

After combing and studying nearly 30 practical cases of community renewal in Italy, it is not difficult to find that there are many frequent renewal themes. To some extent, this also reflects the focus of urban renewal and the trend of community renewal. Common themes of community renewal in Italy can be summarized as: mixed residence, residents' co-construction, urban agriculture, education and learning.

Mixed residence includes not only spatial mixture but also social attribute mixture. Social housing with emphasis on social inclusion and space sharing is a typical practice of mixed residence, with representative cases such as the transformation and regeneration of the former Olympic Village in Turin into social housing (see Chapter 6.2 for details). Social housing provides shared areas and public services for residents, which can effectively reduce rental costs and promote social interaction. Due to the existence of shared space and the formation of shared space open to the city under the guidance of external public services, the social inclusiveness and urban environmental compatibility among mixed residents have been greatly improved. Therefore, social housing can give birth to new social forms and become an incubator to promote public morality and accelerate the democratic process. In addition, another advantage of mixed living is the positive response to aging. In an aging community, by mixing the age structure of living, the elderly can be made as active as possible to avoid their physical function degradation and marginalization in social relations.

Residents' co-construction is mainly manifested in the construction of public space, which represents the case co-construction community center (see Chapter 4.1 for details). As an important renewal method, residents' co-construction can not only improve the

material environment, but also enhance the cohesion of the community. When people do their own work for the design and construction of community environment, they will put more energy into caring for their homes in the future. Renewal projects jointly built by residents depend on voluntary service, so they are mainly micro-renewal with small scale, less investment, short cycle and quick effect, which is usually initiated by project sponsors or non-governmental organizations. Residents' co-construction provides neighbors with an opportunity to meet, discuss and explore the potential functions of neighborhood space, which is a process of local experience building, personal experience sharing and mutual trust building. The process of co-construction also evokes residents' sense of belonging to the community and cultivates vague community identity, thus uniting the community; The improvement of space environment will encourage people to spend more time outdoors and interact with others. With the improvement of neighborhood relations, a good community image can also increase the number of tourists and bring new economic growth points for cafes, restaurants and shops in the community.

Urban agriculture, as an important issue to deal with the decline of urban green space system and promote the sustainable regeneration of ecological environment, also plays an important role in community renewal, such as Gasparoto Square in Padua (Chapter 3.1.3), Turin Roof Garden (Chapter 3.2.3), Bologna Community Greenhouse (Chapter 4.3.1), Milan Pepe Cape Verde Community Garden (Chapter 3.2) The advantages of urban agriculture are shown in four aspects: agricultural production, social inclusion, neighboring economy and environmental improvement. Urban agriculture can take place in public or community gardens, roof gardens, balconies or courtyards. Urban farm can promote a series of social activities, employment, entrepreneurship or education and training (such as gardening), which also emphasizes the social impact of urban agriculture. Especially, the characteristics of urban agriculture lie not only in the geographical proximity between producers and consumers in urban areas, but also in the socio-economic proximity. In addition, urban agriculture promotes social inclusion, because all citizens, especially vulnerable groups and people with fewer opportunities, can gain significant benefits by participating in agricultural and horticultural activities. For example, urban agriculture provides convenience for low-income urban residents to obtain fresh food, because locally produced food means shorter food supply chain, which means lower transportation, packaging and storage costs, resulting in cheaper food. Therefore, urban agriculture brings a wide range of benefits to cities, including improving

urban resilience, stable food supply, biodiversity conservation, reducing carbon dioxide emissions, creating green areas in cities, exerting economic advantages and promoting social inclusion.

Education and learning, skills training are also common renewal themes to stimulate community endogenous motivation and improve neighborhood relations. The representative cases are Turin Neighborhood House (Chapter 4.2.3), Naples Community School (Chapter 4.3.3) and Turin Gintsburg Community Library (Chapter 5.1.2). Educational learning renewal is based on the active participation of "students" and active interaction with surrounding communities. This learning model is not only for children, but also for people who need skills upgrading, such as language learning of immigrants, cooking skills of community mothers, gardening exchange of retired old people, and secondary upgrading of groups to be employed. This is an open learning environment based on community space and behavior, which gathers all kinds of people and activities with educational resources as the core.

### 6.1.3 Reflection on the Lessons of Community Renewal Model in Italy

Although Italy's community renewal has achieved good results, there are still some shortcomings in its development stage and renewal status, which are worthy of our country's warning. For example, in the early days, the community renewal driven by urban planning paid too much attention to the improvement of physical space environment and ignored the differentiation of social classes, which was a misunderstanding of renewal that treated the symptoms but not the root cause; In the second stage, the renewal rights center was devolved to community organizations, but there were no clear regulations to restrict this part of self-management, and some community organizations turned community renewal into self-profit tools; Even today, community renewal has become a state in which the whole people participate in the management of the whole people, but in fact, a few elites are active in it, which makes it difficult to avoid the risk of gentrification. There are few voices about resolutions and proposals concerning vulnerable groups such as unemployment, migrants and immigrants. This is also a direction worth considering in the next process of community renewal. How to make the results of community renewal really benefit the residents who are in need but are not good at expressing themselves and striving for themselves, however, these

grassroots people are often the ones who need community strength most.

In addition, in practice, the lessons of the failure of social housing cases in Ma Erkai are also worth rethinking. This is a social housing project transformed from a monastery, including two residential buildings and a courtyard. Its renewal should be funded by the non-profit private foundation, and the regeneration should be promoted by controlling the rent lower than the market price. Although it also provides a certain sharing space and organizes open social activities, it is supported by local voluntary associations. However, the result is rather negative, and there is almost no social interaction among the residents, and there is also a lack of effective activities in actual use. Analysis of the reasons for its failure mainly includes three aspects; First of all, in the bottom-up social construction, Ma Erkai social housing did not carry out social activities, but limited its activities to determine the standard of rental housing, and did not really form effective public participation. Secondly, the concept of mixed living is not based on specific residents' motives, such as old age, weak economic bearing and anxiety of living alone. Finally, the envisaged shared kitchen, library and other public activity spaces have not been well maintained, which leads to the loss of opportunities for the co-residents to establish mutual contact and exchange. In a word, Ma Erkai's lesson is that the creation of space is only the carrier, and how to promote the internal behavior is the key to the renewal for a long time.

## 6.2 Enlightenment to the Reconstruction of Old Residential Quarters in China

### 6.2.1 At the level of policy mechanism: establish an effective updating mechanism, improve legislation and strengthen protection

At the level of policy mechanism, we should further improve the working mechanism of the renovation of old residential areas, such as issuing the operation manual or implementation rules of the whole process, and clarifying the responsibilities and roles of various departments. For different types of renewal projects, community renewal working groups can be set up to work nearby, and attention should be paid to uniting the available social resources and strength of local organizations, associations and schools. With the steady advancement of community renewal, there is an urgent need for an effective renewal mechanism, including a clear and operable renewal mode, an inclusive



and open decision-making system, a multi-party discussion platform, and a cooperative implementation system. At present, most of the community renewal in China is still in the state of government leading and developers leading the implementation, and the participation of the masses is very limited. The renewal experience of European cities shows that, in order to avoid the market subject being too large, it is necessary to actively introduce community power into the decision-making and implementation subject, and form a tripartite power balance with the public and private, so as to ensure that the renewal benefit will benefit everyone fairly. Therefore, government departments should give full play to the role of overall control and ensure the full participation of community residents by setting up at least 1/3 resident seats in the community renewal working group. In the early stage of investigation, we should fully observe the public opinion, talk directly with the residents and dig out the real demands, so as to form an open mechanism of horizontal connectivity between various departments and double circulation between the government and social communities. At present, China is constantly exploring the mechanism suitable for community renewal. For example, Beijing, as a representative city, is implementing the system of block responsibility planner according to local conditions.

In addition, relevant laws and regulations should be supplemented and improved as soon as possible. Because China started late in urban community renewal, relevant legislation is still not perfect. However, in order to ensure that every link of community renewal can be followed by rules and laws, China needs to fill in the gaps of relevant laws and regulations as soon as possible. When introducing policies and regulations, we should try our best to consider them comprehensively and adapt to local conditions, reduce the one-sidedness and blindness of renovation, and strictly control all kinds of speculation or illegal acts that harm public interests in the process of renovation. A risk and cost sharing mechanism should be established among the government, society and residents to effectively protect the fundamental interests of the people. On the premise of legality, encourage small-scale and low-cost spontaneous micro-transformation.

### 6.2.2 Sociological level: Expand and update the connotation to form multiple interactions and consolidate the dominant position of residents

At the sociological level, we should first expand the connotation of community

renewal, and let residents realize that community renewal is closely related to themselves. From the practice of community renewal in European cities in recent 40 years, it is not difficult to see that community renewal is not only the renovation of existing building environment and public facilities, nor is it just a means of block restoration, nor is it just a market behavior for development and construction. From a deeper level, community renewal is an important part of urban social development and urban governance system, aiming at connecting material space and social humanities with community as the basic unit of the city. By improving the living environment, renewing the infrastructure, repairing the neighborhood relations and revitalizing the community economy, we can achieve the goal of promoting the sustainable recovery of the city. Community renewal moves from material level to social humanities, and pays more attention to whether it can bring social benefits to the community. For example, providing more convenient services, bringing education and learning, skills training, health and health resources, increasing employment, improving unemployment and reducing crime rate, creating a good community atmosphere is conducive to introducing new growth points, enhancing community competitiveness, thus curbing the decline of the community and realizing the regeneration of social vitality.

Neighborhood builds itself and forms multi-role interaction. In China, the exploration of community renewal represented by "Qinghe Experiment" has achieved initial success. With the popularization of the concept of "returning from space to people", more and more community renewal began to pay attention to creating a good neighborhood atmosphere and increasing employment opportunities. Self-management consciousness within the community gradually awakens, spontaneously forming bottom-up "community actions". These neighborhood self-built actions are based on people's scale and living needs, and actively seek multilateral cooperation with the government, social capital, designers, social organizations and other forces. Through the practice of community renewal, neighborhood protection and other actions, with frequent social contacts, the contact, trust and dependence between residents are increasing day by day. Residents' sense of participation, identity and belonging gradually deepened. It has positively stimulated the active development of social activities such as business, employment and education in the community. Forming a good neighborhood atmosphere will help to improve law and order and reduce the crime rate in the community. To fully mobilize the enthusiasm of residents to participate in community affairs, we can first visit

residents, widely understand the wishes and actual needs of the masses to participate in community renewal, and collect suggestions, so as to formulate a detailed neighborhood participation system in line with the actual situation at the grass-roots level, so as to ensure the legalization of neighborhood residents' participation in community renewal. And through the establishment of the system, arouse the enthusiasm of residents and improve their awareness of participating in maintaining community affairs spontaneously, strengthen the formation of community identity, belonging and cohesion through internalization and externalization, and help to build a grass-roots community governance system of co-construction, governance and sharing.

### 6.2.3 Architectural level: Promote micro-renovation and regeneration of existing buildings to promote sustainable development

At the architectural level, more attention should be paid to the sustainability of human settlements and communities. We can think about the characteristics of different communities' renewal and transformation by combining the humanistic factors in the neighborhood. On the basis of respecting the original community style and urban texture, we should choose the most suitable renewal type from the actual site. The renewal design of community pays more attention to the creation of livable environment and the realization of sustainable community, and the design focus shifts from clean renewal to comprehensive improvement and improvement of community environment. At the architectural level, we should make full use of existing space resources, such as the renovation and recycling of existing buildings or idle spaces. This is not only the best use of everything, but also the inevitable choice when China's cities enter the era of high-density stock. In the specific project transformation, it is also necessary to consider the actual needs of residents and the spatial characteristics of the original building.

In terms of design concept and mode, it can be changed to organic growth micro-renewal mode. The renewal time of more than 40 years has made people realize that the time-consuming and large-scale renewal project is not only laborious, but also difficult to meet the actual needs of residents, and will inevitably destroy the urban texture and human environment. With the concept of old community renovation, community revitalization, neighborhood restoration and neighborhood revitalization gaining popularity, the future renewal design is increasingly inclined to combine the community

reality, small-scale, short-cycle, phased and low-investment organic growth and micro-renewal. This kind of renewal is characterized by community-oriented, self-organized design and implementation teams, and appropriate support from the government. The micro-renewal of organic growth takes the attitude of caution and respect for the status quo, selects the subtle corners in the community, transforms and promotes them, and the community residents personally participate in the realization of co-construction, governance and sharing. Although this gradual transformation has little strength and slow effect, it can effectively avoid the environmental damage and irreversible risk caused by demolition in the long run, which not only saves manpower, material resources and financial resources, but also realizes the sustainability of community renewal. Therefore, micro-update can often play a role of four or two.

## Reference

- [1] Rob Atkinson. Discourses of Partnership and Empowerment in Contemporary British Urban Regeneration. Urban Studies.1999
- [2] Francesco Musco. Sustainability, participation and local action for city regeneration: processes and experiences in Copenhagen. London and Barcelona. Competence Center of Urban and Regional Planning.2006.
- [3] Rianne Van Melik & Philip Lawton. The Role of Public Space in Urban Renewal Strategies in Rotterdam and Dublin. Planning practice and research. 2011
- [4] George Galster. On the Nature of Neighbourhood. Urban Studies. 2001
- [5] Antonio Accetturo. Historical Origins and Developments of Italian Cities Sauro Mocetti. Italian Economic Journal. 2019
- [6] Gilles Pinson. Political Government and Governance: Strategic Planning and the Reshaping of Political Capacity in Turin. International Journal of Urban and Regional Research. 2002
- [7] 彼得·罗伯茨, 休·赛克斯. 叶齐茂, 倪晓晖译. 城市更新手册[M]. 北京: 中国建筑工业出版社, 2009:23-24
- [8] 阳建强. 西欧城市更新[M]. 南京: 东南大学出版社, 2012:69-73
- [9] 张利. 软性可持续: 都灵的策略[J]. 世界建筑, 2013(05):31-33.
- [10] 何深静, 刘玉亭. 邻里作为一种规划思想: 其内涵及现实意义[J]. 国外城市规划, 2005(03):64.
- [11] "Principles of Public Participation". Co-intelligence.org. 2008-05-23.
- [12] Sassen S. The Global City: Strategic Site/New Frontier[OL]. 2001.  
<http://www.india-seminar.com/2001/503/503%20saskia%20sassen.htm>.
- [13] Syrett S, North D. Renewing Neighbourhoods : Work, Enterprise and Governance[M]. Bristol: The Policy Press, 2008.
- [14] 忻晟熙, 李吉桓. 从物质更新到人的振兴: 英国社区更新的发展及对中国的启示[J/OL]. 国际城市规划:1-11 [2021-01-30].
- [15] 王婷, 余丹丹. 边缘社区更新的协作式规划路径——中国“城中村”改造与法国“ZUS”复兴比较研究[J]. 规划师, 2012, 28(02):81-85.
- [16] 薄力之, 邓琳爽. 边缘社区的公众参与——以柏林邻里管理项目为例[J]. 上海城市规划, 2013(02):88-93.
- [17] 单瑞琦. 社区微更新视角下的公共空间挖潜——以德国柏林社区菜园的实施为例[J]. 上海城市规划, 2017(05):77-82.
- [18] Lorentzen H & Dugstad L. Den norske dugnaden: Historie, kultur og fellesskap. Kristiansand, Høyskoleforlaget. 2011
- [19] Francesca Governa & Silvia Saccomani. From urban renewal to local development. New conceptions and governance practices in the Italian peripheries, Planning Theory &

- Practice, 2004: 327-348
- [20] Tricarico, L. (2014) “Imprese di Comunità nelle Politiche di Rigenerazione Urbana: Definire ed Inquadrare il Contesto Italiano”, Euricse Working Papers, 68 | 14.
- [21] Borzaga C., Depedri S. e Galera G. (2010), “l’interesse delle cooperative per la comunità”, in Bagnoli L. (a cura di), *La funzione sociale della cooperazione*. Roma: Carocci.
- [22] Legacoop (2011), *Guida alle Cooperative di Comunità*. Disponibile online al link: <http://www.legacoop.coop/wp-content/uploads/2013/03/CoopComunita%CC%80.pdf> [Ultimo accesso: 15 maggio 2014].
- [23] Borzaga C. (2009), “L’impresa sociale”, in L. Bruni e S. Zamagni (a cura di), *Dizionario di Economia Civile*. Roma: Città Nuova, pp. 516-26.
- [24] Membretti, A. (2007), “Centro Sociale Leoncavallo buliding citizenship as an innovative service”, *European Urban and Regional Studies*, Special issue: Social Innovation and Governance in European Cities, n.14(3): 25-63.
- [25] 古斯塔沃·安布罗尼西,莫罗·贝尔塔,米凯利·博尼诺,王欣欣.可持续发展的奥运会?都灵2006年冬奥会的背景和遗产[J].世界建筑,2015(09):30-33+134.
- [26] 达维德·托马索·费兰多,李若星.社会团体的反击[J].世界建筑,2013(05):76-77.
- [27] 李若星.“美景”社会住宅,都灵(原奥林匹克村),意大利[J].世界建筑,2013(05):78-81.
- [28] 达维德·托马索·费兰多,孙德龙.既存建筑的再思考[J].世界建筑,2013(05):34-35.
- [29] Michela Barosio, Enrico Eynard, Cristina Marietta, Giulia Marra, Giulia Melis, Matteo Tabasso. From urban renewal to urban regeneration: Classification criteria or urban interventions. Turin 1995–2015: evolution of planning tools and approaches. *Journal of Urban Regeneration and Renewal*. 2016
- [30] 《都灵 UIA 城市联合更新行动条例》，欧盟城市专项计划，2017.
- [31] 《都灵城市再生行动指南专案》，都灵城市更新与发展部，2009.
- [32] 《关于公民与行政部门之间在城市公共物品的照护，共享管理和再生方面进行合作的规定》，CO-CITY 专项委员会，2016.
- [33] 《联合城市行动管理新条约》，欧盟理事会，2020
- [34] 《都灵城市市政项目手册》.都灵城市更新专案部，2017