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Research on the Basic Unit Reconstruction of Residential Space Based on "Ankang Neighborhood"

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Abstract: In the face of COVID-19, urban residential areas in China have exposed problems such as large scale and insufficient public service facilities, leading to difficulties in closed management and basic living services in the time of epidemic prevention and control, and also reflecting the weak atmosphere of neighborhood watch and mutual assistance in the current urban stranger society. On the basis of analyzing the spatial attributes and social functions of the basic units of residential space, this article proposes to reconstruct the basic units of residential space in the mode of "Ankang neighborhood". In Chinese, "An" means safe, "Kang" means healthy. So the principle of the unit reconstruction of Residential Space is mainly based on the perspective of safety and health. This article discusses the scale, space, facilities and governance, and demonstrates the "Ankang neighborhood" with three typical residential areas in Nanjing, China. This article suggests "Ankang neighborhood" as residential space basic unit, to adapt to the more accurate social governance trend, so as to realize grassroots governance and social harmony. Although not perfect, it is very necessary to think about health, safety and resilience. It is an active exploration to respond to the growing needs of the people for a better life and build an all-age friendly residential space. It is also a beneficial attempt to build a new model of urban governance with high mobility and high density urban society.

Keywords: Ankang Neighborhood, Residential Space, Neighborhood Planning, Residential Unit

1. Introduction

The living pattern of modern urban housing in China has changed significantly after the founding of the People's Republic of China. In the 1950s, the severe housing shortage in major cities forced architects to try the collective mode of living introduced by the Soviet Union, and basically abandoned the courtyard housing model that had lasted in China for nearly 3,000 years [1]. In this context, the living mode of urban residents in China has changed from introversion to extroversion and urban collectivization. Two Soviet community planning methods were introduced into China: one is a unified neighborhood district with no road classification within the smaller land scope, represented by Beijing Baiwanzhuang residential area; the other is a loose neighborhood unit composed of several buildings within the larger land scope, divided by the graded road and represented by Shanghai Hudong residential area [2-3].

With the increasing shortage of land resources in China's coastal cities, a kind of high-density residential area called "Hong Kong Model" which is composed of high-rise residences has quickly replaced other residential forms as the major fabric in large high-density cities such as Shanghai and Guangzhou since the 1970s. This closed residential area composed of high-rise housing is believed to lead to traffic congestion, produce social isolation and other urban problems [4].

The COVID-19 has accelerated the entry of lifestyle and urban space into a "new normal": the need to maintain high density to maintain operational efficiency, as well as to address emergencies to become more socially resilient, which posing a severe challenge to urban residential space. The residential space not only serves as a unit for residents to reside and obtain services, but also serves as a unit for epidemic detection and prevention, playing an important role in the epidemic prevention process [5].

With ‘stay-at-home’ orders and recommendations, the lifestyle of residents has begun to change, with more daily activities taking place within the vicinity of their residence [6]. The service functions and social attributes of residential space are becoming increasingly important. The experience of epidemic prevention and control in large cities in China such as Shanghai, Wuhan, Nanjing shows that the spatial attributes and social functions of the current residential areas in China cannot meet the needs of epidemic prevention and control, and the traditional residential space is in urgent need of transformation and reconstruction. In terms of scale, the size of residential areas varies greatly, and the area of large settlements is about 30 times that of small settlements [7]. The difference in space and population size leads to a large gap in grid management quality and insufficient sealed management capability. In terms of service function, many residential facilities lack life service, medical treatment, property management, which cannot guarantee the distribution of basic living materials and meet the basic living needs of residents in the face of neighborhood communication, home isolation and community isolation reflect the neighborhood is not conducive to the reconstruction of the community and the formation of social connections.

Yi-Fu Tuan, a pioneer of human geography, believes that human understanding of space and place may go to two extremes: extreme dependence on high-tech communication technology to ignore the importance of space and place; or out of human nature, re-realize the importance of closeness and intimacy [8]. With the progress of science and technology and the impact of the epidemic, the future lifestyle of Chinese urban residents may be as Yi-Fu Tuan said: relying on technology to separate people's life more in material level, which is an individualized and introverted family lifestyle, or cherishing the state of social intimacy, which is a city collectivization and extroverted lifestyle. These two approaches are likely to coexist for a long time in the future [1].

This polarized lifestyle will have a profound impact on the prevention and control of urban social risks with high mobility and high density. Therefore, it is necessary to build a reasonable spatial basic unit within the residential area. The ideal basic unit of residential space should have a suitable space scale, including necessary life service facilities, a harmonious neighborhood atmosphere full of mutual support, and can meet the needs of residents 'daily basic life and communication. It is a happy home for residents' neighbors in ordinary times, and a defense unit for epidemic prevention and disaster resistance under the epidemic situation. The basic units of traditional residential areas, including urban planning, sociology and behavior, have carried out relevant studies from different perspectives, and formed beneficial explorations in the aspects of residential scale, neighborhood communication and service function [9-11] However, there is a lack of overall consideration of the development elements of the basic units of residential space. Therefore, it is necessary to seek suitable scale, take into account multiple functions such as basic living facilities, comprehensive management grid, neighborhood mutual assistance and community governance, and reconstruct the basic unit of residential space which is safe, healthy, livable, convenient, and full of neighborhood cohesion.

2. Relevant Theories and Research for Reference

2.1. Residential Units from the Perspective of Planning Science

The classic paradigm of western residential unit planning is the "neighborhood unit" proposed by American architect Clearence A. Perry in 1929. The neighborhood unit is a residential unit surrounded by urban roads. The center of the unit is the necessary supporting facilities for primary schools. With the service scope and service scale of the primary school (about 400 people), the walking range is about 5 minutes from the center, and the population size is about 5,000 people, aiming to create a good community atmosphere [12]. "Neighborhood unit" constitutes a residential area in the modern sense and has an important influence on the residential planning theory. On the basis of this classical theory, later generations inherit and develop the traditional neighborhood development (TND) and sustainable neighborhood models to further meet the needs of urban development and community construction [13]. In the relevant construction practice, more neighborhood units have been localized, and small-scale basic units have been added. The organization mode of living space has gradually evolved to the residential area-residential community-residential cluster, and the residential cluster has become the basic unit of residential space [14]. Typical cases such as "Residential Cluster (Le groupe résidentiel)" in France and "Group" (Precinct) in Singapore, with a scale of 200~500 households and 700~1000 households respectively, through small-scale space units to enhance neighborhood communication, and cultivate a sense of belonging within the community [15-17].

Residential units in China have experienced the development and evolution, and show obvious differences in various historical stages. In ancient China (before 1949), influenced by the totalalism and etiquette law, residential units were also social management units. For example, in Tang Dynasty, the capital city Chang'an implemented the "Li-Fang system", with 100 or 50 households as one Li, which was separated as a closed residential area from the city. After 1949, in the planning and construction of residential areas, on the basis of "neighborhood units" and "expanding neighborhood" of the Soviet Union, it gradually formed a hierarchical structure of "residential area-residential community-residential cluster" through practice, taking groups as the basic unit of living space, and constructing public service facilities in the principle of hierarchical supporting facilities [18]. In 2016, the central committee of the communist party of China under the State Council on further strengthening urban planning construction management of several opinions put forward to establish the "narrow road, dense road network" of urban road layout concept, and actively explore building livable, convenient and safe small block model. In the "Urban Residential Area

Planning and Design Standards" released in 2018, the residential neighborhood is identified as the basic unit of residential land, with a population size of 1,000 to 3,000 people, the same as the residential cluster. Domestic scholars in China constantly reflect on the shortcomings of the closed residential area model based on neighborhood units. Focusing on the issues of dense road network and open residence area in small blocks, they analyze the influencing factors of residential size from the aspects of land development, road network scale and community management, and discuss the possibility of reducing the scale of residential areas [19, 20]. Therefore, from the perspective of residential planning, combined with the current development trend of dense road network in small blocks, referring to the study of the basic units of residential areas [10, 21], the author believes that the size of the basic unit in the residential space should be 150m~200m, with an area of about 2~4 hectares, and a population size of about 1500 people, which can meet the requirements of unit accessibility and living quality.

2.2. Communication Unit from the Perspective of Sociology

After the 1950s, people began to re-examine the functional urban planning theory and the residential spatial organization under its influence, developed the "community theory" on the basis of the research in sociology, and took it as the leading theory of residential construction, and gradually abandoned the functional organization mode of "neighborhood unit" [22]. Community theory emphasizes people's subjectivity, takes people's cognitive scope and communication needs as the principle to determine the scale and spatial organization of settlements, combines the material environment with diversified lifestyle, and tries to restore the intimate interpersonal relationship and warm living atmosphere in the traditional residential community. According to sociological and psychological research, the number of people in social communication is roughly subject to the principle of "Dunbar's number", that is, individuals have a stable social network of about 150 people, which is called the 150 interpersonal circle of gossip communication [23, 24]. Sociology research shows that about 300 people are the upper limit of a small group of contacts, and the intimacy of communication decreases after exceeding the upper limit [25]. According to the research in the field of residential communication, small scale can make people have a sense of psychological identity and domain, and it is easy to form a good neighborhood relationship. Alexander pointed out that the neighborhood range diameter is no more than 274m, and no more than 400 to 500 residents [26, 27]. Based on cognitive and interactive relations, western scholars divide the residential communication level into three levels (Table 1).

Table 1. *Comparison of the four neighborhood typologies.*

Scholar	First Level	Second Level	Third Level
Perry (1939)	5~10 Household	From 50 to 150 households	5,000 ~ 1,500 households
Blumenfeld (1948)	6~12 Household	For 50~100 households	For 100~500 households
Bardet (1961)	5~10 Household	For 50~100 households	5,000 ~ 1,500 households
Lee (1968)	For 0~400 households	For 400 ~ 1,000 households	In 400 ~ 2,000 households

* Source: Reference [28].

On this basis, according to the actual situation of domestic settlements, Wang Yanhui determined three levels for mutual communication neighborhood (5~10 households), acquaintance neighborhood (50~150 households), approved neighborhood (500~1000 households). He suggested the scope of homogeneous living limit in the second level of "acquaintance neighborhood" is appropriate, and the maximum scope should not be more than "approved neighborhood" [29]. Therefore, from the perspective of human cognition and neighborhood communication, the author believes that the scale of the basic unit of residential space should be 50~150 households (150~500 people), which can not only make residents have psychological identification, facilitate the construction of the social network of acquaintances, but also lay a foundation for the formation of a harmonious neighborhood relationship.

2.3. Life Circle from the Perspective of Behavior

How to organize the living space within the scope of residents' daily activities to meet the basic living and living needs is the key issue of "Life Circle" research. By analyzing the dynamic relationship between spatial and regional resource allocation, facility supply and residents' behavior, "Life Circle" constructs multi-level activity layer, which is an important tool to realize balanced distribution of resources, maintain spatial justice and organize local life [30]. Among them, the basic life circle refers to the most basic unit where residents carry out their daily life such as shopping, leisure and social communication. Its scale and facilities show certain differences in different countries. The basic colony circle in Japan is bounded by the walk of 15~30 minutes between the elderly and children, covering 1~2 kilometers, with a population size of about 1000 ~5000 people, including child care, elderly care and other facilities [31]. The service radius is 200-300 m, with facilities for childcare, daily shopping, children and the elderly [32].

According to the needs of residents and the actual conditions of residential areas, Chinese scholars studied the hierarchical structure of the life circle from the perspectives of residents' travel distance, daily behavior, and facility service radius, and measured the range of each level, thus enriching the connotation of the life circle [33-36]. According to the allocation of service facilities at all levels, Zhang Longlong (2016) studied the reasonable and minimum scale of all kinds of service facilities, and proposed the strategy of allocating service facilities according to the population size and formulating the list of allocation and construction list, so as to ensure the convenience of residents' basic life. Therefore, from the residents behavior characteristics, use demand and facilities with population (Table 2), the author thinks that the basic unit of residential space should be 500~2000 people, walking radius within 300m, set for the convenience of business, activities,

garbage collection facilities, meet the demand of residents daily shopping, leisure, fitness, entertainment.

Table 2. *Population size of various service facilities.*

Facility category	Facility	Minimum scale		Starting with the standard (ten million m^2)	Configuration standard (m^2/ ten thousand m^2area of structure)	Initial distribution population (person)
		Area of structure	Land area			
Education	nursery school	--	Class 3, Class 1,200	7	--	2100
Health care	Community service station	210	--	30	7	9000
Culture and sports	Cultural activity room	--	--	--	15	--
	Residents sports field	--	--	--	100 outdoors, and 40 indoors	400
Commercial service	Food market	150	--	10	15	3000
	Other businesses	--	--	--	--	--
Community service	Community service station	300	--	15	20	4500
	Estate management	60	--	--	--	900
	Community support for the elderly	--	--	--	25	--
Municipal public utilities	Comfort station	70	--	--	--	5000
	Garbage collection point	--	5	--	--	200

3. Propose the Concept of "Ankang Neighborhood"

Based on the above theoretical research and practice, it can be found that different perspectives have different requirements for the basic units of the residential space, and the suggested scales are different. The reasonable scale should be determined in combination with various factors. From the perspective of epidemic prevention and community governance, residential function, neighborhood relationship, supporting facilities and activities are the main influencing factors of basic units, while urban road network and land development can be used as influencing cofators.

Therefore, the author proposes to reconstruct the basic unit of residential space with a relatively appropriate small-scale "Ankang neighborhood". In Chinese, "An" means safe, "Kang" means healthy. Ankang neighborhood is a group of residents based on the geographical relationship, with a certain scale, including basic public service facilities and public activity space, forming a basic unit of residential space with perfect basic facilities, neighborhood watch and mutual assistance, safety, vitality and health (Figure 1). The basic unit of Ankang neighborhood space includes five aspects:

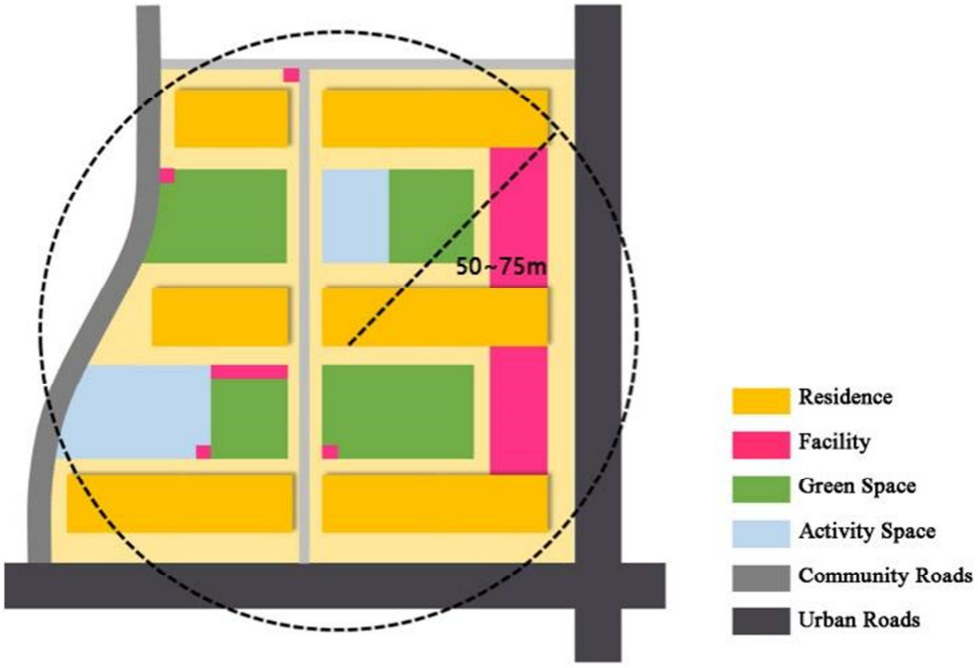

Photo source: the author of self-painting

Figure 1. *Mode diagram of "Ankang Neighborhood".*

3.1. Spatial Scale

The population scale is determined by neighborhood communication and service facilities, reaching the threshold scale of facilities, with about 200~300 households and 500~1000 people. The spatial scope is determined by the population density and the basic living circle, and the principle of walking priority is continued. It is about 50~75m walking from the center to the outside, including several contiguous residential buildings and their surrounding Spaces, which is the most basic unit of residents' daily life.

3.2. Unit Boundary

The urban road layout concept of "narrow road, dense network" is adopted in the units' external connection. Boundary is given priority to residential internal roads and urban road boundary. Partial sections are elastic boundary such as residential paths, landscape greening, courtyards, public space elastic boundary, etc. There is a prohibition on rapid passage of external vehicles to maintain a quiet and safe living atmosphere.

3.3. Service Facilities

Unit should contain rigid facilities such as non-contact mail delivering point, garbage classification collection point, motor vehicles and non-motor vehicle parking, etc. Quality promotion facilities such as community club, aging friendly service, property management, convenient sales, catering and leisure facilities should be adjacent to the outer-ring. Emergency and epidemic prevention facilities such as emergency medical service point and supplies reserve point for flexible arrangement also need reserved space.

3.4. Public Space

The unit should contain relatively independent public activity space such as small green space and basic activity space, and should include children's recreation, leisure and fitness facilities to meet the needs of activities and communication for residents nearby, and take into account the shelters during the epidemic or natural disaster outbreaks.

3.5. Road System

The internal road system of the unit should follow the basic principles of safety, convenience and appropriate scale, ensure the good accessibility of all kinds of sites and facilities, complete and continuous walking space, good landscape environment, and create a slow and friendly environment.

4. Reconstruction of the Basic Units of the Residential Space

As the basic unit of residential space, "Ankang Neighborhood" can be well adapted with the current technical specifications, respond well to residential neighborhood, complete residential community and 15-minute life circle, and can also be well connected with grid governance and property management of residential area.

4.1. Scale: In Line with Various Policies and Norms

According to the current residential standards in China, Ankang neighborhood correspond to all levels of residential area with clusters as the basic units. The recommended scale of Ankang neighborhood is 200~300 households, 500~1000 people, and 50~75m from the existing residential area and the previous norms. About 3~4 Ankang neighborhoods constitute one residential block. About 3~4 residential blocks, i.e. several Ankang neighborhoods constitute one complete community. Several complete communities constitute a 15-minute life circle (Table 3).

Table 3. *"Ankang Neighborhood" is connected with various normative policies in terms of scale.*

	Ankang neighborhood	Residential cluster	Residential Block (Jiefang)	Complete community	15-minute life circle
Walking distance (m)	50~75	——	100~150	300~500	800~1000
Residential population (person)	500~1000	1000~3000	1500~3000	5000~12000	50000~100000
Number of residences (sets)	200~300	300~1000	500~1000	1500~4000	17000~32000

4.2. Space: Gradually Integrating into Urban Layout

Ankang neighborhoods are fully divided in the neighborhood. The scope and area of units are determined according to the distribution of buildings, building height and population density, and the number can be increased or decreased according to the actual population size of the neighborhood. The community living circle at all levels above the residential neighborhood is beyond the scope of the traditional residential area, and should be integrated into the "complete community—15-minute life circle—city" (Figure 2), and further adapt to the management and service scope of the community and street.

4.3. Facilities: To Improve Basic Living Facilities

Taking into account the accessibility of public services facilities, Ankang neighborhoods should allocate public service facilities according to the travel distance and population, and give priority to meeting the basic needs of daily life and epidemic prevention and control. Referring to the setting of supporting facilities at all levels of life circle as non-inclusive relations, residential neighborhoods, complete

residential communities and 15-minute life circle are required to actively respond to the construction requirements of Ankang neighborhood, and encourage the joint setting of land composite functions and facilities, so as to promote the sharing of space [37-39].

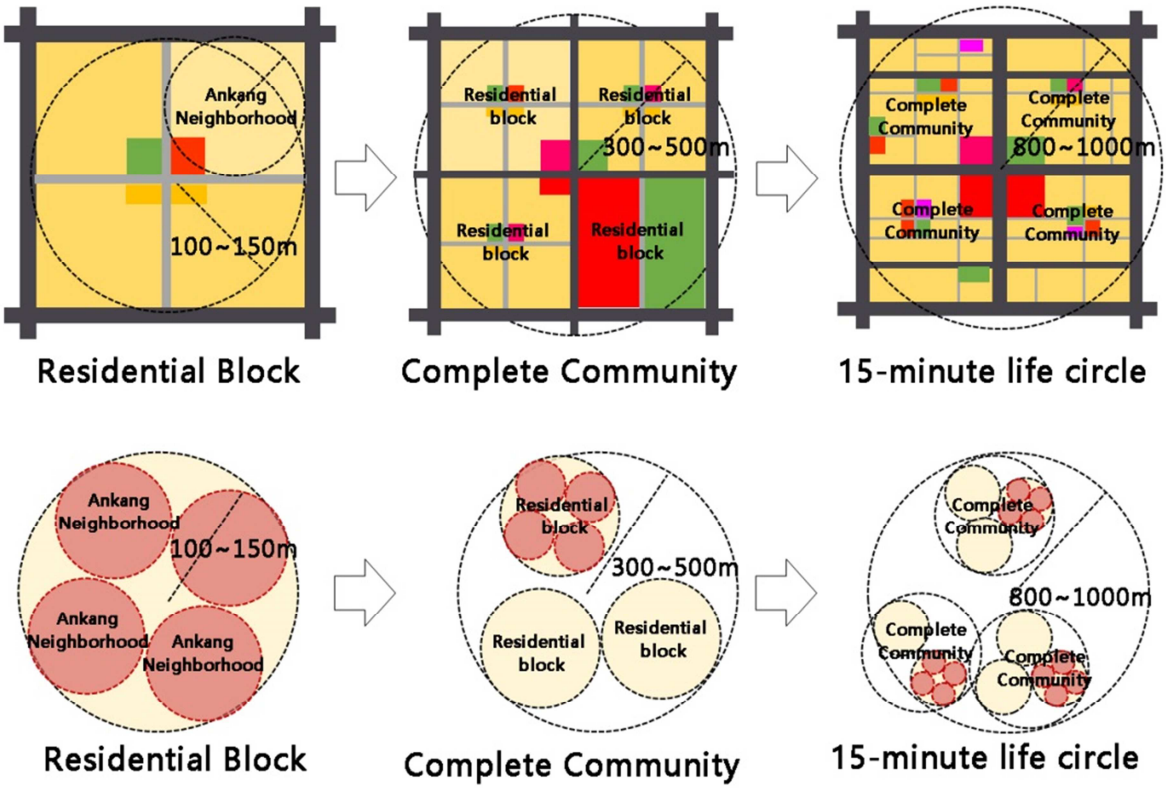

Photo source: the author of self-painting

Figure 2. *Schematic diagram of the spatial layout of the "Ankang Neighborhood" mode.*

4.4. Governance: Balancing Comprehensive Governance and Community Autonomy

Ankang neighborhood model takes into account both top-down comprehensive governance and bottom-up community autonomy, which contributes to the construction of emergency transformation governance unit.

Table 4. *Summary table of local grid practice exploration.*

	Beijing Dongcheng District	**Nanjing Gulou District, Ninghai Road Street**	**Nanjing Qixia District, Xianlin street**	**Foshan City**
Area (hectare)	1	—	—	—
Population (household)	—	350	Primary grid: 2300 Secondary grid: 140	In principle: 200~500 Actually: 300~1000
Management style	Several staff one grid	One staff one grid	One staff one grid	One staff one grid

Considering the shortage of staffing in grid management, residents are encouraged to serve as the leader of residential building, unit or neighborhood, forming a 4-leveled autonomous management mode of "street- community- grid-Ankang neighborhood" (Table 4).

The scale of Ankang neighborhood is about 200~300 households, which can be arranged in the residential neighborhood in combination with the comprehensive treatment grid. By monitoring the resources of labor, space, materials and information, problems such as huge gaps in quality between different communities can be solved. And it's more effective to realize the refinement of administrative management.

In the Ankang neighborhood based on residential building and courtyard concluded acquaintances neighborhood, residents' "life community"can be built and the community autonomy and social participation could be promoted. It will realize mutual supervision and mutual aid, strengthen the efficient autonomous management and can contribute to accurate matching and efficient supply between the grass-roots "demand-will" and "resource-service".

5. Empirical Promotion

In order to prove the practical significance and value of the

"Ankang neighborhood" mode, the author selected three typical residential spaces: old residential area, existing residential area and new residential area for empirical analysis.

5.1. Old Community —— Southeast University East Community

The east community of Southeast University is located in the old city of Nanjing. It was built in the 1950s and covers an area of 14.68 hectares. There are about 123 rental households, 250 floating population and 5,950 registered population in the community. The community presents three characteristics. Firstly, the management subject is diverse, the rights and responsibilities of school and community management are blurred. Secondly, the old neighborhood exists as well as the migrant population increases, leading the neighborhood gradually alienated. Thirdly, there's scarcity of space for supporting facilities in the community.

Steps are taken gradually (Figure 3). Firstly, commercial, residential, educational functions are defined. Secondly, the building ownership, architectural layout and architectural form are considered to divide the community into 9 units. Thirdly, moderately reduce the Ankang neighborhood size where the floating population is located. Finally, the community is divided into 11 Ankang neighborhoods with an average of 550 people, meeting the walking radius of 50~70m, without physical boundary.

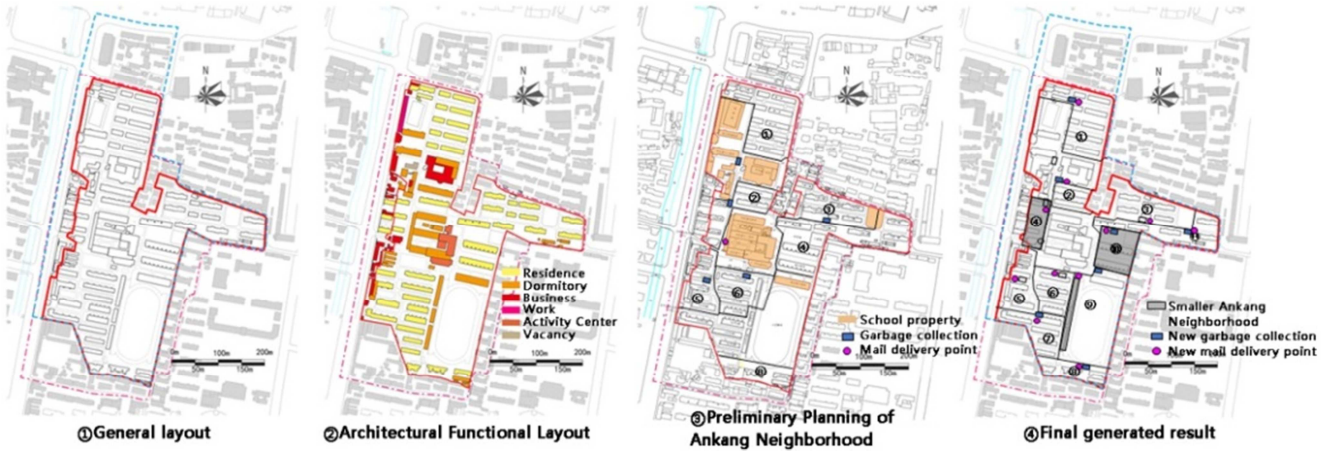

Photo source: the author of self-painting

Figure 3. *Construction process of Ankang Neighborhood Community of Southeast University.*

In terms of supporting optimization, green patches between dwellings in residential area can be transformed into parking space, non-contact mail delivery service points and garbage collection points. Several Ankang neighborhoods can share the emergency epidemic prevention facilities by overall property management, and realizing the bottom line guarantee with the help of community, streets and other superior forces.

In terms of neighborhood autonomy, the acquaintances of the original units can be used to excavate the potential of high-quality students' families, build a small autonomy platform with healthy neighbors as units, and discuss public affairs such as epidemic prevention and control management, the construction of public space, and the use of maintenance funds, etc.

5.2. Existing Residence —— CR International Community Plot D

Plot D of CR International Community is located in the core area of Jiangbei New Area, Nanjing, with a community area of 34 hectares and 5 houses with more than 30 floors and a total number of 1008 households. The community presents three characteristics. Firstly, it has low density and high intensity development with sufficient green space and public space. Secondly, located in the new district, it is the commercial property with low occupancy rate and weak sense of identity among residents. Thirdly, closed property management and environmental maintenance is in place.

In the construction of Ankang neighborhood unit (Figure 4), it is preferentially divided into four Ankang neighborhoods according to the scale and building combination, and the boundary adjustment is combined with facilities and building layout. According to the actual occupancy situation, the average is about 250 households, 500~700 people, and the walking radius is about 50m.

In terms of facility supplement, non-contact mail delivery services and garbage sorting and collection points are provided in Ankang neighborhood. Some Ankang neighborhoods can appropriately reduce some ground parking spaces according to the needs of residents, and transform them into public spaces to accommodate residents' activities, communication and leisure functions.

In terms of neighborhood autonomy, it is suggested to use the public space of Ankang neighborhood to organize neighborhood activities with certain frequency and scale, and to optimize community management by cooperating with property management companies, and gradually deepen residents' community identity.

Photo source: the author of self-painting

Figure 4. *Ankang Neighborhood Construction process of CR International Community Plot D.*

5.3. New Settlement Area —— NO.2021G74 Plot

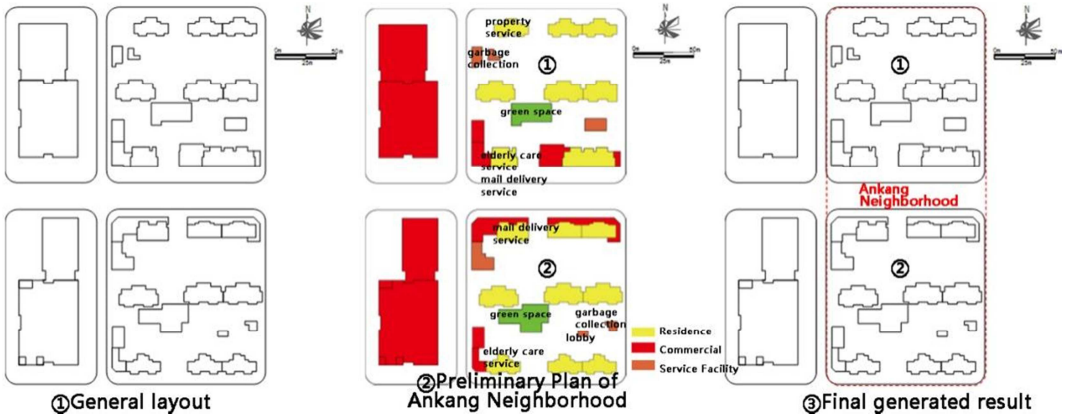

Photo source: the author of self-painting

Figure 5. *Ankang Neighborhood Construction process of NO.2021G74 plot.*

The NO.2021G74 plot is located in the southern New town, Nanjing, containing two independent residential blocks, with land area of 1.79 and 1.92 hectares respectively. It is planned to build 6 high-rise residential buildings below 18 floors, or about 270 households. The residential area has three characteristics. Firstly, it has the construction mode of small blocks. Secondly, the residential area is equipped with perfect supporting facilities including community home care service and property service, and the southern plot is also equipped with community clubs. Thirdly, the housing has sufficient public activity space and high residential quality.

In the mode of dense road network of small blocks, the residential plots can be built as independent Ankang neighborhood (Figure 5), with an average of 270 households and a walking radius of about 75m.

In terms of facility supplement, it is suggested to explore the flexible opening and time-sharing mode supported by big data methods to address the problem of insufficient availability of facilities.

In terms of neighborhood autonomy, considering that the two plots belong to the same residential area, the establishment of the residents committee is encouraged to optimize the autonomous management, and the two independent grids can be integrated into one Ankang neighborhood with unified collection management, so as to promote the facility sharing and information exchange between the plots.

5.4. Thinking on the Construction of "Ankang Neighborhood"

The demonstration shows that the "Ankang neighborhood" model can be promoted in all three typical residential areas. Limited by the realistic conditions, there are some differences in spatial division, facility configuration, neighborhood autonomy and other aspects, which need to be further optimized in practice.

5.4.1. Optimize the Spatial Division Mode to Provide Various Possibilities

When constructing the spatial unit of "Ankang neighborhood", influenced by the current construction and management, the division logic and the ranking of elements are different, which make the boundary and scale also have certain elasticity and uncertainty. Adhering to the idea of pursuing the overall "optimal solution", the Ankang neighborhood in the same residence is allowed to have different sizes and dynamic

boundary adjustment, which can be continuously corrected in combination with the response degree of residents and the management ability of the community.

5.4.2. Enrich the Types of Public Facilities and Reduce the Allocation Cost

The bottom line of "Ankang neighborhood" is to ensure the most basic needs of food, medicine, communication, daily outdoor activities, etc. In order to better respond to all kinds of emergency and enhance the anti-interference ability of basic space unit, Ankang neighborhood aims at composite use, low cost, modular operation, market participation of service facilities, to reduce financial pressure, and to improve the comprehensive service level of facilities, which can be promoted in the renovation of existing areas.

5.4.3. Change the Governance Methods and to Achieve Long-Term Autonomy

The formation of community governance of "Ankang neighborhood" can be combined with the old village reconstruction and urban renewal action by using the existing space, to promote from strong government control mode to residents elastic autonomy model, from "one size fits all" to wisdom governance, from passively responding to actively changing, so as to promote democratic participation and achieve long-term residents autonomy.

6. Conclusion

This paper suggests "Ankang neighborhood" as residential space basic unit, to adapt to the more accurate social governance trend, so as to realize grassroots governance and social harmony. Although not perfect, it is very necessary to think about health, safety and resilience. It is an active exploration to respond to the growing needs of the people for a better life and build an all-age friendly residential space. It is also a beneficial attempt to build a new model of urban governance with high mobility and high density urban society.

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