

# ***Analysis of Hanlin Yuan Community "15-minute Life Circle" Transformation***

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**Abstract:** With the acceleration of urbanization, the rationality of community planning has an increasingly prominent impact on residents' quality of life. As an advanced community planning concept, the 15-minute life circle concept has been widely concerned. This study takes Hanlinyuan community as an example, using the method of literature investigation and case analysis, to analyze its planning status. The study found that there are some problems in the community, such as inconvenient long-distance transportation, unreasonable allocation of resources, weak attraction of shared space and lack of pension security. In view of these problems, the paper puts forward the methods of integrating rail transit with the surrounding land, providing multi-level security for the elderly, and increasing parking space. The purpose of this study is to provide reference for the planning of this community and other similar communities to enhance the quality of life of residents and promote the sustainable development of the community.

**Keywords:** 15-minute life circle concept, Community planning, Hanlin Yuan community.

## **1. Introduction**

The 15-Minute Living Circle is a community planning concept designed to enable residents to meet the basic needs of daily living within a 15-minute walk or bike ride. Since Japan introduced the concept, comparable ideas and practices have spread to Europe, the US, and Australia. Examples of these include the "15-minute city" concept in Paris and the "20-minute community" in Australia. Shanghai was among the first Chinese cities to push for the development of the "15-minute living circle." The first planning instructions for the "15-minute living circle" in the nation were published by Shanghai in 2016 and are titled "Shanghai 15-Minute Community Living Circle Planning Guidelines (Trial)"[1]. The "15-minute living circle" idea has been explored and put into practice in a few places in recent years, and the amount of research on the subject has steadily expanded. Nonetheless, there are still certain holes and issues with the particular implementation of community planning. Different areas' communities have unique demands and traits. More in-depth research is still needed to determine how to best incorporate the idea of a "15-minute living circle" into community design based on actual conditions, achieve acceptable resource allocation, and optimize the architecture of service facilities. The 15-minute cycle can greatly improve the convenience of life. Residents can easily access a variety of living services, supermarkets, vegetable farms, and health service centers. These will be provided in the living circle. In addition, the 15-minute life cycle can

promote green travel. This will not only reduce air pollution but also improve the health of residents. So the 15-minute life circle is hot right now.

There is currently a dearth of focused analysis and recommendations about the planning of the Hanlinyuan community based on the "15-minute living circle" concept, which presents a chance for this study. This research uses the Hanlinyuan Community in Suzhou as a case study and applies techniques like case referencing and field research to investigate in detail the community planning based on the idea of a "15-minute living circle." The particular goals are to: analyze the community's current resource distribution and facility conditions to determine how well they align with the idea of a "15-minute living circle", pinpoint the issues and obstacles the community must overcome to realize the "15-minute living circle". Based on the analysis's findings, suggest targeted planning recommendations and corrective actions to optimize the community's service facility configuration and functional layout in order to improve residents' quality of life. Initially, this post will offer a thorough description of the "15-minute living circle" concept. After that, this essay will give a thorough examination of the Hanlinyuan Community, covering things like its location and current amenities. Next, using the process of analysis, this article will carry out a thorough investigation of the discrepancies and problems that exist between the community's spatial arrangement, service facility accessibility, and the notion of the "15-minute living circle." On the basis of this, detailed planning recommendations are made, along with actions for improving traffic and optimizing facilities. In conclusion, present an overview of the research findings, evaluate the significance and function of the study, identify its limitations, and suggest directions for future investigation.

## 2. Analysis of Current Situation

Hanlinyuan Community is situated in Suzhou Industrial Park's Dushu Lake Higher Education Area, with Dushu Lake Avenue to the north and Linqun Street to the west. It consists of contemporary high-rise structures of 16-25 stories. Renai Road is the closest metro stop, which is 1.3 kilometers away. In addition, there are numerous bus routes around Hanlinyuan, with direct access to Auchan, Guanqian, Taihua, and the train station. Moreover, there is a free shuttle service within the higher education area, providing a loop around the entire district. The Dushu Lake underwater tunnel has been open for some time now, and the rapid transit bus service is also in operation, providing a 5-minute ride directly to the city center. There are also shared bicycles and shared electric scooters near the bus stop, providing suitable transportation options for short-distance travel. Furthermore, the majority of the surrounding roads only have one lane. Community workers provided the age distribution of the Hanlin Edge people during the study. According to staff, a significant portion of the population is old, while around 20% of people rent as students or are mobile due to the higher parish's close proximity. There is a kindergarten near Hanlinyuan, so most of the elderly are with children, and a few are retired university professors living here. Near Hanlinyuan, Wenxing Square and Hanlin Neighborhood Center are built, which houses some small supermarkets, vegetable markets, restaurants and educational institutions. In addition to infrastructure construction, Hanlinyuan community also provides some convenient services. There is a silent reading room on the first floor of Hanlinyuan, and there is also a table tennis table. Of course, children's play facilities and fitness equipment are also essential.

In addition, Hanlinyuan community also created a green garden, garden will grow some vegetables, nearby also posted garbage classification and other environmental protection related knowledge. And officials say vegetables from the garden will be used in the community canteen, which is open to residents. There are second-hand goods recycling counters in the community, residents can not only recycle second-hand goods but also buy the second-hand goods residents want. There is also a legal Culture park not far from Hanlinyuan, but this park is not well known and residents rarely go there.

The 15-minute living circle takes a 15-minute walk as the scale to create a low-carbon, healthy, convenient and shared space quality around residents' life [2].

### **2.1. Traffic Problem Analysis**

If want to consider the convenience of a space, the first thing to think about is the traffic problem. Although there are bus stops and subway exits around the community at present, there are certain limitations in the coverage and operation time of bus lines. Especially during rush hour, traffic jam is a big problem, not to mention the subway stations are not so close. The uniqueness of being in the High parish has led to more electric vehicles around Hanlin, but the width of the road is not enough to support the complete separation of pedestrian and electric lanes.

### **2.2. Analysis of Rational Allocation of Public Resources**

In addition, the rationality of resource allocation should be considered. There are only kindergartens near the community, which do not meet the complete set of educational facilities, and the lack of primary and junior high schools. When the child grows up, the distance needed to pick up the child may exceed the 15-minute living circle. The allocation of business resources is also an important part. Although there are small supermarkets and wet markets near the community, the variety of goods is relatively limited. Moreover, there is no large comprehensive shopping mall around, which cannot meet the shopping needs of some residents.

### **2.3. Analysis of Shared Space Problem**

From the point of view of sharing, the community has a certain degree of sharing, such as children's playground, reading space. These are shared resources among the residents. But these cannot fully meet the needs of residents and are not attractive. The only park nearby is equally unappealing, if not unknown. It can be imagined that the construction of shared space in this area has a large shortage.

According to the principle that residents can meet their basic material and life and culture needs when walking, the urban residential area is divided into 15 minutes, 10 minutes and 5 minutes living circle residential areas. It is stipulated that within a five-minute walk of community residents, elderly care institutions should be equipped according to the population density of residents [3]. Pension security is also an important part of the 15-minute life cycle. But the Hanlinyuan community does not have similar protection. Even though most of the residents in Hanlin are senior citizens, there are no related services around Hanlin. According to the status, such traffic conditions also caused trouble in parking around Hanrim. If someone still pulls over when the road is not wide enough, the obstruction to traffic can be imagined. In addition, there is a lot of traffic in Hanlin, and there are not a few tourists who go to the neighborhood center to eat, and parking is also a problem for Hanlin.

The traffic jam during rush hour is really a big difficulty. Reference can be made to Guangdong to integrate rail transit with surrounding land. The living type expansion site is adopted, and the surrounding site is dominated by residential communities and supporting service facilities, supplemented by commercial services, cultural entertainment facilities, schools and public green Spaces [4]. Subway stations with these services can be built to ease the use of private cars and provide more convenient services. In terms of elderly care, the transformation can refer to the transformation of Tang Xiang community in Chongan Street, Wuxi City, to provide different services at three levels. The group level provides the most essential service needs, such as canteens, emergency medical care and help with cleaning. The community level provides centrally set recreational and sports facilities. At the residential district level, comprehensive elderly care service institutions are mainly built, with functions such as social elderly care, physical examination, medical treatment, education and training, and information exchange [3]. The related contradictions of urban parking can be summed up as

follows: contradiction between supply and demand, contradiction between property rights, contradiction between management and contradiction between use. This series of contradictions are related to each other, to some extent each other cause and effect, interweaving together and making parking management become one of the most difficult problems faced by city managers [5]. To solve the parking problem, the first and most important thing is to increase the parking space. Hanlin Neighborhood Center has an underground parking lot, but the underground parking facilities are old, the environment is dark and wet, and should be adjusted accordingly. In addition, the width of the ground road is more difficult to adjust, but some open space can be opened up in Wenxing Square as a temporary ground parking lot. Addressing the problem of insufficient attraction of shared Spaces in parks. Outdoor Settings for chess can be set up in the park. The government can strengthen environmental maintenance and facility renewal of the park, improve the overall quality of the park, and attract residents.

### 3. Conclusion

Based on the concept of 15-minute life circle, this study analyzed the planning status of Hanlinyuan community. Through literature investigation and case analysis, it is found that there are some problems in this community, such as improper road planning, special resident structure, insufficient attraction of parks and unreasonable layout of various service facilities. To solve these problems, some suggestions are put forward, including traffic planning, improvement of community services, optimization of commercial resources allocation and improvement of public space. The results of this study have important guiding significance for the planning and development of Hanlinyuan community. Reasonable planning of subway, road and other transportation facilities can improve residents' travel convenience and reduce traffic congestion. Improving community service facilities can better meet the needs of different groups such as the elderly and students, and improve the quality of life of residents; Optimizing the allocation of commercial resources can make it more convenient for residents to obtain various necessities in the community; Enhancing the attraction of public space helps to enhance the communication and interaction between community residents and promote the harmonious development of the community. At the same time, this study also provides reference for the planning of other similar communities, and has certain popularization value. Although this study puts forward some suggestions for the planning of Hanlinyuan community, there are still some limitations. For example, during the research process, the impact of the historical and cultural factors of the community on the planning may not be fully considered, as well as the new needs that may be brought about by the demographic changes of the community in the future. Future studies can further explore these issues and formulate more scientific and reasonable planning schemes based on the historical and cultural background of the community. At the same time, pay attention to the changing trend of population structure, and arrange the corresponding service facilities in advance to meet the needs of future community development.

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