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Space and Social Life:

Morphological Self-evolution of Urban Villages in Hangzhou

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Abstract

"Village in city" is a unique phenomenon in the process of China's rapid urbanization. As the concentrated embodiment of urban-rural conflicts in the period of urban transformation, urban villages have received extensive attention in the physical space and social security issues. They seem chaotic, but contain rich and colourful social life. They are vibrant communities, which provide a large number of cheap houses for the migrants. Different from modern cities or traditional villages, individuals of different classes and backgrounds constantly compete and cooperate here, forming a unique "community of social life" in urban villages. Based on the perspective of urban morphology, this paper takes Gaotang community, a typical urban village in Hangzhou as the research object, and analyses the relationship between its spatial pattern and social life through field investigation, interview and mapping. Firstly, this paper analyses the texture and public space characteristics of the self-evolution of urban villages in the context of urbanization. Then it insights the life integration of different population based on the environment-behaviour studies, which shows the daily life scenes and neighbourhood relations in a richer spatial level. The research will help to better understand the role of urban village as a social life community carrying a variety of lives. At the same time, the richness and complexity of urban village space and social life provide design strategies and reference for urban organic renewal and future community construction.

Keyword: urban villages, social life community, urban morphology, environment-behaviour studies

Introduction

Village in city is a unique phenomenon in the process of rural urban transformation in the period of rapid urbanization in China. It is undeniable that urban villages have evolved into 'low-income communities providing low rent housing for urban migrants', which has played a complementary role of government functions; Different from the modern community, the village in the city has a poor physical environment, but it still has a dynamic spatial form and rich and colourful social life. The social relationship between residents is close, so it is a social life community that cannot be found in the modern community. Therefore, from the perspective of social life community, this paper will record and analyse the spatial form changes of urban villages, and analyse the community and life, deeply reveal the positive role of urban villages, and provide a new perspective and literature value for the study of urban villages. In particular, what kind of groups live in urban villages? How do they live together? How does the spatial form of urban village support their common life? These questions are addressed through a detailed examination of the community and space of Gaotang village in Hangzhou.

Background

Urban Village

Urban village, as a traditional settlement of farmers, is a unique phenomenon and special space in the process of urbanization (Zhang et al., 2014). Because of the strong contrast between its morphological structure and the surrounding environment, the complex and diverse composition of population and occupation, the rich material life and the backward values and management system, it became the concentrated embodiment of urban-rural contradictions in the transition period (Tian, 1998). After comparing urban villages with foreign slums, it can be found that in terms of material form, urban villages are better than the illegal settlements in the third world countries, and worse than the slums in the more developed countries; In terms of social form, a considerable part of the population of urban villages is mobile, and some of them have development potential in terms of income. Many urban villages have the same vitality as their cities (Xie, 2005).

For the original villagers, it is the land, hometown, and rental income; For the migrants, it is a temporary residence and a 'low price container'. At the beginning, scholars regarded it as a 'tumour' of the city, focusing on the contradiction of problems, and then studied its transformation methods and strategies (Wei, 2005 and Wang, 2008). Later some scholars gradually paid attention to its positive side, believing that the village in the city played the role of a vibrant community, a buffer of urban-rural conflicts, and affordable housing (Zhu, 2013). There is no doubt that the village in the city objectively undertakes the special urban social functions and presents some special urban social space forms. Although the evolution of the understanding of the village in the city has not affected the process of the government to promote the transformation of the urban villages, but it helps to gain the recognition that the existence of the village in the city has social and economic rationality in a certain period of time, and change the focus of the transformation work from how to promote the transformation to explore the comprehensive social effect.

Community Theory

The community in the traditional sense is the regional community of social life. This concept emphasizes two attributes of community: one is the regionality of relatively clear limited boundary, the other is the community attribute, that is, the social and psychological connection between people living within the same boundary. (This paper emphasizes the sociological nature of community, so we use 'community of social life' instead of 'community' .) The research of social life community comes from German sociologist Ferdinand Tönnies. He first put forward the concepts of 'Gemeinschaft' and 'Gesellschaft', which are the combination of two different types of human group life (Tönnies, 1999). According to Tönnies, 'Gemeinschaft' means a closely connected, helpful and humane life community based on 'essential will'. 'Gesellschaft' refers to the combination of personal purposes caused by 'the will to choose'. However, with the in-depth study of modern community by scholars, it is found that community, has increasingly lost its importance in people's life, and will inevitably decline and end (Wang et al., 2003).

From the perspective of community of social life, we can see that the urban villages, which have been renamed as community, not only conforms to the mixed living mode that western countries have been exploring, but also has a close neighbourhood to live together. Urban village community still plays an important role in residents' daily life, which proves the existence of meaningful, relatively clear geographical boundaries and cohesive neighbourhood community in modern city. The in-depth analysis of this phenomenon will help to better build a community of social life, so as to promote the exchange and integration of the community.

Gaotang community in Hangzhou

Hangzhou is the capital city of Zhejiang Province and a famous historical and cultural city. In the past ten years, influenced by major urban events (G20, the Asian Games and large-scale hub construction), the process of urban development and urban village transformation has been promoted rapidly. In 1998, Hangzhou started the reconstruction of urban villages, and 246 administrative villages were removed. In 2015, the government put forward the goal of 'basically completing the transformation of urban villages in the main urban area in five years' (Figure 1). Methods include demolition and reconstruction, comprehensive renovation and the combination of demolition and consolidation. In these three ways, demolition and reconstruction is the most irreversible, which brings a devastating impact on the village in the city. Therefore, it is more urgent and necessary to record and analyse the space of urban villages for the villages to be demolished and rebuilt.

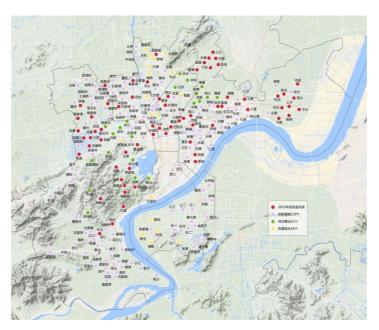


Figure 1. Five year plan for reconstruction of urban villages in Hangzhou

Gaotang community is subordinate to Jianggan District of Hangzhou, with a village area of 1.138 square kilometres(Figure 2). According to the statistics in 2014, there are 824 households, 3225 permanent residents and 19892 immigrants. Gaotao community has superior geographical location and convenient transportation. The location of the east railway station and the canal not only promotes the transformation of the village in

the city, but also makes it special and typical. In addition, the transformation mode of the community belongs to demolition and reconstruction, so it has a certain literature value to record and analyse the original space of the village in the city. Therefore, this paper chooses Gaotang community as the research object.



Figure 2. A panoramic aerial view of the community

Methodology

The research can be divided into two parts: typo morphological research and observation of social life, which can be used to describe spatial form and social form respectively. Based on the urban historical map, the planning and building information was supplied by the Hangzhou Planning Bureau. By abstracting and extracting the morphological elements of architecture, open space, street and other basic space, the morphological characteristics and historical evolution are studied. Qualitative judgment and manual mapping are the basis of this study. As to the observation of social life, we collected data with the method of environmental behaviour, including observation and tracking and semi-structured interview. The activities of residents were recorded by activity marking method, including time, population attribute, specific location, behaviour type and activity frequency. Track observation was used to record the individual's movement track randomly. Record the location and number of people engaged in static activities, as well as the trajectory of different residents (local and foreign). Semi-structured interviews with residents and community leaders provided other details on the local economy and life.

The Spatial and Functional Morphology of Gaotang

Texture evolution under the background of "transportation hub construction"

Hangzhoudong Railway Station covers the land area of 40 hectares, with an annual passenger volume of 48.3473 million (2016). It is the most complete transportation hub in Hangzhou and one of China's large railway hub stations. In December 2008, the reconstruction and expansion of the transportation hub promoted the process of urban village renewal and laid a good foundation for its development. The most intuitive performance is the gathering of people and resources. The convenience of location advantage and

affordable rent make the floating population choose the village in the city as a transitional temporary residence and live in the village in the city, saving time and money for their daily commuting.



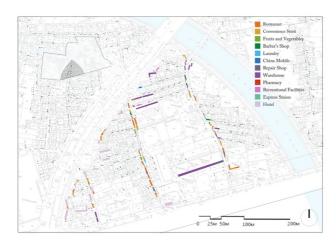
Figure 3. Topology map of the site and the surroundings from 2000 to 2021

In terms of urban spatial form, there are roughly three evolution details(Figure 3): the development of the city has brought a large number of people and rental housing demand, and the villagers, driven by the interests, start the housing addition plan. The number of illegal buildings in urban villages increased, mostly 1-2 storey bungalows (2000-2021); The preparation before the construction of the hub, the re-use of land by the government, and the demolition of a large number of surrounding villages and ancillary buildings (2007); With the rapid development of urbanization, another group of urban villages are about to be transformed (2021).

Functional format: self-sufficient community

With a large number of migrants pooling in, the local residents start to secretly add a floor to a single building, while others build 1-2 floors of auxiliary houses in the original field. The high-rise buildings are used to live, while the low-rise buildings are rented to the residents at a relatively low price to live or make a living.

In order to seek survival, these migrants have developed a complete industrial chain, perfectly meeting the requirements of low - income populations. According to the statistics, this chain consists of 24 restaurants, 18 convenience shops, 14 warehouses and 15 hotels. Within such a small urban village, its industrial structure is rather complete and various, completely forming a self-sufficient community(Figure 5), or rather to say micro closed society. The income of the shop enables them to pay the rent and obtain economic income, which also bring convenience to the residents, which is the best win-win social life community.



*Figure 5.*All ground-level formats make a self-sufficient community

In the period of urbanization transformation, cities need to have transitional transformation space. Accordingly, the urban spatial form should reflect the characteristics of the social and economic development period, and adapt to its needs (Chen, 2011). Urban villages have obvious spatial characteristics of urban transition, and the demand group is the low-income group which is not covered by the current security system. In terms of space form, it is a low-quality, disordered and dynamic compound space form.

Public space: Hidden vitality life

Public space is a platform for social life, communication and information exchange. It is found that the public space in urban villages includes dominant public spaces such as streets and squares, as well as recessive public spaces such as canteens and private houses (Table 1).

Table 1. Public space types and spaces

type	space		teature
Visible Public Space	infrastructure	streets, squares and parks	public
	public service	community activity center and health station	public
Invisible Public Space	productive and operational	convenience shop and barber 's shop	semi-public
	daily life	yard and living room	semi-private

Visible public space is the most frequently used space of residents, which promotes social interaction and community integration. Take the streets as an example. The streets in urban villages have a suitable scale of living. The arrangement of kiosks and other living service facilities along the streets plays a key role in creating a lively and diverse community. Communication not only takes place in the above-mentioned public space with obvious public ownership, but also exists in some private residential space, which is a random and spontaneous global communication. In the process of the development of urban villages, the original auxiliary

housing has changed from renting by outsiders to service facilities, and has become a public space open to the whole people. Because these spaces are originally private, but bear certain production and management and public service functions, they can be regarded as recessive public spaces.

With the influx of foreign tenants, the community has been supplemented and updated. In reality, the two have formed a special form of settlement. The public part of the self-built house facing the street of life, in front of the door, in the courtyard, the main room and the living room, has become a public space that can be opened to the neighbourhood. The residents gather together or play cards, chat, take care of children, etc. People with good popularity, spacious and comfortable homestead and convenient walking are easy to gather friends in the neighbourhood, forming an invisible public communication space between the neighbours. With the increase of communication time, intimacy is also accumulating, and very close people can 'enter the room'.

The essence of space integration and social harmony lies in the balance and coordination of various space interests. The harmony between people is reflected in space, that is, to build a space with diversity and shared by most groups (Xie, 2005). The rich and diverse public space of urban villages can just meet the needs of social communication of different communities, carry different common activities (Figure 6), naturally promote the connection between each other, and form a close social life community (Figure 7).



Trace Observation:

| Gerigners | Foreigners | Foreigner

Figure 6. Common activities of different communities: coliving

Figure 7. Trace observation of different residents (local and foreign)

Conclusions

As a container of social life community, urban village plays an important role in solving the housing problem of migrant population and promoting the integration of different communities. The analysis of urban village space shows that returning to the basic value and goal of public space is to promote the coexistence and communication between different communities. The richness of urban village life also benefits from the

diversity of communication space. To meet the basic activity needs of residents, and guide people to carry out various activities indoors and outdoors, can promote the interaction between different intimacy gradient communities.

Based on the perspective of social life community, the research and analysis of the original space of urban village will help to enrich the connotation and significance of social life community, and provide guidance and review for the current urban village transformation, which can not only guarantee the interests of the original local residents, but also take into account the vulnerable groups of urban tenants. In the hope that future communities can find traces of social life community, rather than 'unrelated neighbours'.

As for the future study, form syntax can be used to integrate multiple urban form elements, which is a comprehensive quantitative analysis based on the combination of street, architectural form and function. Revealing the relationship among streets, buildings and functions can also realize the morphological analysis of urban spatial vitality, and directly show the concept of spatial vitality (Ye et al., 2016).

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