The characters of public space use by various residents in the neighborhoods at urban fringe

a case study of Hegezhuang Village in Beijing

Yafei Li, Beijing Forestry University, China

Yuting Li, Beijing Forestry University, China

Yun Qian, Beijing Forestry University, China

Abstract

With the rapid urbanization process, the green belts in the fringe of Beijing is gradually becoming the urban-rural junction area, and urban-rural conflicts are becoming more and more prominent. The typical villages within the green belts have a unique geographical location and spatial organisation, with not only indigenous villages and towns, but also many villages and communities that accommodate the employment and residence of foreigners. Taking Hegezhuang village in Beijing as an example, this paper uses behavioural sentinel surveys, questionnaires and field interviews to investigate the behaviour and activity characteristics of indigenous people and renters in public spaces, and to analyse their behavioural integration. The results of this study show that there are significant differences between the aborigines and renters in terms of activity time, activity space, and activity content, and that the daily behaviors of the aborigines and renters in public space do not necessarily promote social integration between the two groups of people. On the basis of this research, this paper attempts to propose strategies for optimising public spaces that are conducive to the social integration of indigenous people and renters, in order to provide theoretical and practical guidance for the development of public spaces in such areas.

Keywords

village in green belts; public space; aboriginals and renters; behavior characteristics; social integration

1. Background

With the rapid urbanization process, the green belts in the fringe of Beijing is gradually becoming the urban-rural junction area. State-owned land used for urban construction is mixed with rural collective land. The long-term urban-rural dual structure makes the urban-rural contradiction in this area prominent. The typical villages in Beijing's green belts have a unique geographical location and spatial organization, and there are not only village and town settlements of aboriginals, but also many villages and communities where immigrants are employed and live. Therefore, this study takes Hegezhuang village in the green belts as an example, and through research and analysis of the daily behavior of indigenous people and renters, explores the social integration of both in public space and proposes corresponding strategies to maintain and optimize the multiple needs of both and to promote the sustainable development of urban fringe settlements.

2. Research Methodology

2.1 Study area

Hegezhuang village is located in the northeastern edge of Beijing, within the green belts construction area, and belongs to Cugezhuang Township, Chaoyang District, Beijing. The village is located between two highways, Beijing-Chengde Expressway and Airport Expressway, and is close to the Beigao of Airport Expressway and Huanggang Exit of Beijing-Chengde Expressway, with convenient transportation in the area and Metro Line 15 located at the southeast corner of the village. The area of the village is 1.78 square kilometers, with a household population of more than 1,100 and a floating population of more than 5,000. The main economic source of the village originally relied on the informal leasing of housing by the aborigines who rented out their own house bases to obtain rental income, which made a large number of floating population enter and form a stratified settlement, belonging to the typical "tile economy", and later, under the influence of new rural construction, some of the aborigines gradually moved to special relocation communities or other residential communities, while taking advantage of the transportation location and rich cultural environment, the village began to try to unify and upgrade the unused land and houses in the village. It attracts a large number of art institutions and artists, and outside the village there are many comprehensive art parks, garden art museums, special restaurants and high-end educational institutions, and together with Songzhuang and Caochangdi, it is listed as an "artist community" in Beijing. In 2010, it was selected as the "Most Beautiful Village in Beijing". As a result, the diversity of groups living in Hegezhuang Village has become increasingly evident, forming a mixed residential structure with a variety of occupations, economic incomes and lifestyles.

2.2 Methodology and Process

In this study, the behavioral characteristics and activities of aborigines and renters in public spaces were investigated by using the behavioral spot survey method, questionnaire method, and field interview method to summarize the psychological and behavioral characteristics of two groups of people, analyze their behavioral integration, and investigate the causes of the sub-phenomena.

In this study, we used field surveys to map the distribution of public spaces to classify the public spaces where aborigines and renters gather. The most densely populated activity spaces were found to be the square of the relocation community, the community square of Cai Shi Kou Middle Street, and the community park of Hegezhuang. Therefore, the square of the relocation community, the community square of Caishikou Middle Street and the community park of Hegezhuang were taken as three typical cases.

By observing the activities of residents in each public space every hour from 8:00 to 22:00, the total number of residents in each public space at each time point was compared, and 17:00, the time with the highest number of activities, was selected as the recording cross-section to observe the behavioral content, the place of stay, and the condition of facilities in the public space of the indigenous people and the renters. After that, 10 aborigines and 10 renters were randomly selected for interviews, mainly to understand the basic information of the interviewees, their activity needs in the public space, and the communication and interaction between the two groups of people, and to supplement the information on their behavioral activities. According to the research and interviews, 100 questionnaires were distributed randomly, of which 89 were valid, with 60% of the total sample of aborigines and 40% of the total sample of renters. Finally, we summarized the behavioral characteristics of aborigines and renters in the public space and explored their social interactions.

3. Analysis of the population and behavioral characteristics of the aborigines and renters

3.1. Characteristics of the aborigines and renters

In this survey of residents in Hegezhuang Village, both the aborigines and renters were mostly male, among which, the aborigines were mainly 51 years old or older, showing obvious aging characteristics in age distribution, while the renters were mostly foreigners working in Beijing, so the age range was wide, with the population aged 18-30 years old mainly, followed by the population aged 31-50 years old. In terms of occupational characteristics, most of the aborigines are full-time employed, engaged in stable income occupations, and have more diversified occupational types, such as industrial workers, professional and technical personnel, company employees, workers in agriculture, forestry, animal husbandry and fishery, and retired workers, etc., while the renters most of them are employed part-time and freelancers, mostly in the tertiary industry with relatively flexible work nature or are temporarily unemployed, so their overall economic income is poor. In terms of length of residence, most of the aborigines have lived in the area for more than 10 years, and many of them are family members of their grandparents, while the length of residence of the renters is mainly 2-5 years, so it is difficult to establish a relatively stable neighborhood relationship due to the frequent mobility of the renters.

3.2 Characteristics of public space behavior of the aborigines and renters

There are two squares in the relocated communities, both of which have sufficient activity space, with porches, benches and fitness equipment, and ornamental flowers, which can meet the basic activity needs of residents. The community square of Cai Shi Kou Middle Street is located in the center of the village, with rest benches and parking sheds, and lacks physical fitness facilities and other recreational facilities. Hegezhuang Community Park is located in the northwest corner of Hegezhuang Village, is the largest area of a public activity space in the village, the square is set up with rest benches and decorative scenic walls and configured with plants to decorate, lack of sports and fitness facilities and other recreational facilities, while due to negligent management, there is a random pile of garbage and parked vehicles.

Field research and interviews revealed that there are significant differences in the time spent using public space between the two groups. Full-time employed people and retirees account for the majority of the aborigines. Full-time employed people are constrained by strong working hours and only choose to do activities in the evening after work or after dinner, and only actively socialize with familiar people, while fewer renters use public space during this time. Some of the retired residents are elderly and have the habit of going to bed early and waking up early. A certain percentage of the renters are part-time employed, freelance and unemployed, so they are free to use the public space during the day, and the renters usually enter the public space before lunch or during the afternoon.

According to the research, after the construction of the new countryside, some of the aborigines living on their own house bases moved into the relocated community, and only a small number of aborigines still live on their own house bases; the aborigines usually have lived in the community for generations and are familiar with each other, so they are more willing to do activities in the public space in groups; among them, the aborigines in the relocated community usually choose to do activities in the relocated community square on weekdays, and the activities usually include On their rest days, they choose to go to the Heliqi Wetland Park in the village, which has better environmental quality, for recreation or drive with their friends and relatives to places with more recreational value, with richer activities, such as outdoor barbecue, picnic, B&B experience, theme park tour, etc.; while the aborigines living in the village often choose to go to the public space near their homes (Caishikou Middle Street Community Square, Hegezhuang Community Park) or in front of their homes for activities, which are more homogeneous and usually consist of chatting, walking, taking care of children, chess and recreational farming activities, etc. The renters are usually people from other provinces or other districts (counties) who come to Beijing to work, and they usually rent their own houses at low rents, and only keep in touch with their landlords and

workers, and have no interactions with other neighbors, so they usually carry out activities alone. At the same time, most of these renters are engaged in manual work, so many of them said that their work is too intense to do public activities during their rest time, and only a small number of them are willing to do activities in the public space near their homes (Caishikou Middle Street Community Square, Hegezhuang Community Park) or in front of their homes, and the content of their activities is usually chatting and resting.

3.3 Integration of the aborigines and renters in public space

In this survey of residents in In this study, we used behavioral spot surveys, questionnaires and field interviews to analyze the daily behavioral characteristics of the aborigines and renters in public spaces, and to explore the integration of the two groups through their use of public spaces. The study found that there are significant differences between indigenous people and renters in terms of activity time, activity space and activity content.

First, the use of public space by the aborigines and renters does not intersect over time. The time of use of public space by the aborigines and renters showed that full-time employed aborigines tended to use public space in groups in the evening; retired aborigines tended to use public space in the morning, before lunch and after dinner; and renters used public space alone during the day. Since there is no clear pattern in the time of use of renters, there is a mismatch in activity time and companionship, making it difficult for the two groups to interact in the public space.

Secondly, the choice of activity space between the aborigines and renters is also different. The aborigines who lived in the relocated communities often choose the public space within the relocated communities or other public spaces of higher quality for their activities, while the aborigines living in the village and a small number of renters choose the public space near their homes for their activities. This indicates that there are differences in the choice of activity space between most aborigines and renters and between aborigines, which cannot generate social interaction activities and therefore have little effect on social integration.

Third, there is a gap between the needs of the aborigines and renters for the content of public space activities. The aborigines in the relocation area have higher requirements for the quality of public space and pursue a variety of activities, while the aborigines living in the village have lower requirements for the quality of public space and believe that it is sufficient to meet their daily needs. The renters are mainly concerned with their daily living and do not demand the quality of public space. Therefore, there are differences in the quality of activity space pursued by the aborigines and renters, and it is difficult to reach a consensus, and social interaction cannot be enhanced in the process of activity.

4. Analysis of the reasons for the integration of public space for the aborigines and renters

4.1 Loss of vitality due to the single function of public space services

The infrastructure of the existing public space in Hegezhuang Village is not perfect, and the quality of the public space is lowered, and it cannot provide facilities to meet the shared needs, so it cannot attract renters to move around here, and it forms a state of alienation from the indigenous people. The public space has lost its vitality due to the loss of a large number of people, resulting in the divergence in the daily use of public space between the aborigines and renters of Hegezhuang Village.

4.2 Psychological differences between the aborigines and renters

The integration of the aborigines and renters in public space reflects the different identities and psychologies of the two groups. First of all, the aborigines mostly have local registration status, live in fixed locations for a long time, and see themselves as local masters, so they are more likely to have a sense of belonging and identity in public space, while renters do not have local registration status and are highly mobile in work and residence, so it is difficult for them to develop a sense of belonging to public space, and it is difficult for them to overlap with aborigines in terms of activity time. The aborigines tend to live in

neighborhoods with good environmental quality or own their own houses and have lived there for generations, so they have a deeper sense of belonging, while renters have no fixed residence in the village and have lived there for a short period of time, so it is difficult for them to develop a sense of belonging and identity. Therefore, it is believed that there is a big psychological difference between the aborigines and renters.

4.3 Insufficient space for interaction due to the distribution of public space and class

According to the research results, the aborigines prefer to move around the relocated community or the public space near their homes, while only a small number of renters are willing to move around their homes. Although there is no threshold restriction on the number of people moving back to the community, the renters are reluctant to go to the community where the aborigines live, which leads to the inability of the aborigines and the renters to spend time together in public space.

5. Strategies to promote the integration of public space for the aborigines and renters

5.1 Improve the quality of space and promote interaction between residents

The social integration of aborigines and renters cannot be achieved without the establishment of a wider social interaction between renters and aborigines, and public space provides the possibility for more contact and social interaction between renters and aborigines. If renters and aborigines can have sufficient social interactions and enhance the familiarity of the two groups, it will help social integration. Improving the environmental quality of public spaces in urban villages is the primary condition for stimulating public activities, which can prolong and increase the necessity and spontaneity of activities and indirectly lead to social activities, thus increasing social interactions between different groups in urban villages and facilitating social integration. The improvement of the environmental quality of public space needs to start from the landscape environment, leisure facilities, recreational facilities and sports facilities. Due to the complex composition of the population in Hegezhuang Village, the needs of public space use vary greatly. As an indispensable part of Hegezhuang Village, tenants should have the same rights and opportunities to enjoy public space as indigenous people, so the needs of renters should be taken into consideration when building public space facilities. In addition, the living habits and common needs of the aborigines and the renters of Hegezhuang Village should be taken into consideration to provide a basis for the construction of public space facilities.

5.2 Stimulate the participation of multiple community organizations to build consensus and trust

Social organizations can promote a change in the concept of urban residents by increasing the publicity and education in the community, mobilizing community members, providing community services, etc., and treating renters as part of the community, eliminating the barriers between them, helping renters adapt to urban life and understand local customs and habits, and using various channels or resources to help renters defend their legitimate rights and promote renters. They can also use various channels or resources to help tenants defend their legitimate rights and promote their active integration into urban society. In addition, social organizations can also provide opportunities and platforms for communication between the aborigines and renters by organizing community public activities and fostering autonomous organizations or interest groups in the community, so as to promote the participation of the aborigines and renters in community construction, management and development and other community public affairs, and to foster a sense of community identity and belonging among indigenous people and renters. It can be seen that strengthening the construction of community social organizations plays an important role in enhancing the social interaction, social participation, sense of identity and sense of belonging of the mobile population and promoting social integration of the mobile population.

5.3 Reinforce the accessibility of public space and attract residents to participate in activities

The number of public spaces in Hegezhuang Village is relatively abundant, but they are mainly concentrated in the northern part of the village, which can only serve the residents in the north and have a small radiation range. In addition, the lack of management has produced the phenomenon of encroachment on public space. The public space in Hegezhuang Village has not yet formed a multi-level, holistic and orderly public space system, which is not conducive to the social interaction of renters. Therefore, how to sort out the existing public space in Hegezhuang Village and use it in series to form an accessible, hierarchical and systematic public space system, so as to create conditions for more convenient, diverse and effective social interaction of renters.

By sorting out the scattered spaces in the courtyard, the encroached spaces on the street corners, and the large outdoor unused spaces, and establishing a hierarchy of public spaces from within the house to between the houses to the community, and forming a whole through the street tandem, it not only facilitates social interactions among different groups, but also meets the needs of different types of social interactions, enhances mutual understanding, eliminates the barriers between them, and facilitates social integration.

5.4 Promoting management system innovation to foster social identity of foreign populations

Management system innovation plays an irreplaceable and special role in enhancing and constructing the community identity of the mobile population in marginal urban settlements, and is the main way to enhance urban identity and then promote community identity through urban identity. While promoting the social integration of the aborigines and renters, the living habits and common needs of the two groups of people should be fully considered as the basis for the construction of community public space, so as to truly meet the needs of indigenous people and renters in Hegezhuang Village. First, to establish a "bottom-up" demand reflection mechanism, so that aborigines and renters can actively and effectively express their respective needs for cultural service facilities, and make their needs an important decision-making factor in the construction of public space. Second, during the use of community public space, it is also necessary to pay attention to the collection and investigation of information on the needs and problems of public space users, and to establish a feedback mechanism for timely adjustment of community public space facilities and services. Third, the relevant government departments should strengthen publicity and education, change the mindset of community committees and local residents, treat foreign tenants equally and treat them as part of the community, and increase the possibility of foreign renters using community public space.

6. Conclusion

The results of this study show that there are significant differences between the aborigines and renters in terms of activity time, activity space, and activity content, and that the daily behaviors of the aborigines and renters in public space do not necessarily promote social integration between the two groups of people. In addition, it was found that the aborigines expressed their affirmation of the social value of the renters and were willing to improve their social integration with them, while the renters perceived that there was a gap between their social class and the aborigines and therefore had difficulty in improving their social relationship with them. Based on this study, this paper attempts to propose strategies for optimizing public space to promote social integration by improving spatial quality, promoting residents' interaction, stimulating participation of multiple community organizations, building consensus and trust, promoting management system innovation, and fostering social identity of the foreign population, in order to provide theoretical and practical guidance for the construction of public space in such areas.

7. References

- Knox P, Pinch S. (2000) *Urban social geography: An introduction*. 4th ed. Essex. UK: Pearson Education.
- Duncan D, Duncan B. (1955) 'A methodological analysis of segregation indexes', *American Sociological Review*, 1955(20), p210-217.
- Echazarra A. (2010) 'Residential segregation of the foreign population in Madrid's metro politcan area: A quantitative anslysis', *Revista Internacional De Sociologia*, 2010, 68(1), p165-197.
- 何莹, 顾红男. (2021) 基于原住民与租住者人群行为的传统村落“共处”空间研究——以张家楼村为例, *住区*, 2021(02), p16-22.
- 李玉婷, 钱云. (2021) 社会分层视角下艺术村公共空间隔离研究——以北京崔各庄乡何各庄村为例. *住区*, 2021(02), p64-71.
- 马昕琳, 柴彦威, 张艳. (2020) 郊区配建社区的居住混合与行为分异——以北京美和园社区为例. *城市发展研究*, 27(03), p55-62+76.
- 申悦, 柴彦威. (2018) 基于日常活动空间的社会空间分异研究进展. *地理科学进展*, 37(06), p853-862.
- 陆自荣, 张颖. (2016) 城市社区感知融合度的影响因素——基于三个群体的比较. *城市问题*, 2016(03), p92-103.
- 汪明峰, 程红, 宁越敏. (2015) 上海城中村外来人口的社会融合及其影响因素. *地理学报*, 70(08), p1243-1255.
- 刘望保, 谢丽娟, 张争胜. (2013) 城中村休闲空间建设与本、外地人口之间的社区融合——以广州市石牌村为例, *世界地理研究*, 22(03), p83-91.
- 李志刚, 刘晔. (2011) 中国城市“新移民”社会网络与空间分异. *地理学报*, 66(06), p785-795.
- 柴彦威, 沈洁. (2008) 基于活动分析法的人类空间行为研究. *地理科学*, 2008(05), p594-600.