

Conference Paper

A Preliminary Study on the Shaping of Outdoor Space in Future Urban Community

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Abstract

Nowadays, the singularity of outdoor space in urban community has been unable to meet the needs of people. The concept of home, the smallest unit of society, is changing with the change of family structure. The huge living community consists of a family of loose relationship or fragmented families, each of which is an island. In the past, it is said that a neighbor that is near is better than a brother far off. However, at present, a close neighbor is like a stranger. The walls of the building have become a barrier for people to communicate. People's activities should not be restricted by the "box" of home. Can we open the walls and re-design the outdoor space? Therefore, we begin to think about the connection between people, can we achieve it through space? Can there be more public space between neighborhoods? Can such a public space be used as part of the family space again? In this paper, the outdoor space of urban community is taken as the research object to strive to break the boundaries of traditional indoor and outdoor space. How to optimize the outdoor public space in urban communities to promote residents' communication is taken as the purpose of research to carry out a new design of this kind of space. The outdoor space outside the traditional wall is combined with the living needs of present people to discuss the possibility shaping of outdoor space in urban community.

Keywords: Urban community; Outdoor space, Neighborhood relationship

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1. Research Background

1.1. What is the community?

The word "community" is derived from Latin, meaning common things and close partnerships. In 1887, German sociologist Tonnies, F published the book *From Community to Society*, first using the word "community", which originally meant "a social group with consistent values, close relations, mutual help among the neighbors and mutual assistance in humane atmosphere". American Smith, C translated it into English "Community". Community has "common society", "local common society", "common regional society" and other meanings.

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Modern community refers to a kind of relatively independent social groups that have various social relations and social activities within a certain area and have a sense of belonging. Therefore, in a community, it not only concludes buildings, roads, greening, public facilities, and material space environment demand, but also the common values and sense of belonging and identity of the people in the community.

1.2. Outdoor space of modern urban community

1.2.1. Existing problems

With the trend of “commercialization” of residential buildings, at the moment, the outdoor space of urban communities is now strictly divided into community areas according to the building, roads, greening and service facilities. Most of the residents come from all corners of the country, and have different backgrounds, cultures and job natures, which is in sharp contrast with the construction form of “quadrangle courtyard” that was widely distributed in China, and later unitized centralized residence. Although the environmental quality of physical space in the community has been improved a lot, there are fewer people in the outdoor space of the community. People would rather stay at home on weekends than go downstairs to communicate with their neighbors. In the past, it is said that a neighbor that is near is better than a brother far off. However, at present, a close neighbor is like a stranger.

1.2.2. Causes

From the perspective of crowd demand, the young people have a fast pace of life, and have to go out in the morning and return in the evening because their working place is often away from home. It is difficult for them to have extra time to establish neighborhood relations; the middle-aged people live a stressful life, would like to have a private space after a day of work and do not want to be disturbed by the outside world; the residential development trend of elderly people is changed from the original level to the current high-level development, which has hindered the daily outdoor activities of the elderly people in space.

From the perspective of social background, first, in the trend of commercialization of housing, the residents in the same community come from different cultural backgrounds and work fields, and there are differences in cognition; second, with the continuous enrichment of urban public living space, people’s communication is no longer limited

to the outdoor space of the community, and people have more choices; third, in the planning of public space of the community, the developers excessively pursue the floor area ratio, form sense and green rate of outdoor landscape space, which destroys the suitable scale of the original living outdoor space.

1.3. Key points of outdoor space shaping in the future urban community

1.3.1. Comfortable sensation

The construction of comfort mainly starts from two aspects: space order and natural elements.

In terms of space order, first, it emphasizes the scale of space. Why was the public space atmosphere of quadrangle courtyard harmonious and full of life before in the past? It is because of the intimacy of outdoor space scale. Nowadays, due to the high height of the building, as well as demand of sunshine and ventilation, the size of outdoor public space is too large, losing the intimacy of outdoor space like the quadrangle courtyard. Although there is also clear divisions of land for activities and roads, people rarely stay here for a long time due to the lack of sense of dimensions. Second, it emphasizes the ambiguity of space. It is not difficult to find out that in the quadrangle courtyard space, people prefer to stay in the corridor space (namely “gray space” in our current building) rather than pure indoor and outdoor space. In such a space, people can not only have an obvious territory sense of space, and sense of security, but also have a more direct relationship with outdoor space. However, the boundary between indoor and outdoor space in modern community is too clear. It overemphasizes the private domain, and blocks the platform of communication between people from the spatial form.

In terms of natural elements, it emphasizes the integration of plants and other landscapes. Being close to nature is the human nature, so the attention should be paid to the creation of natural landscape atmosphere in urban community. However, currently, it pays too much attention to the greening rate in the community, but ignores the landscape scale and form. Although the large area of green space landscape improves the greening rate, the large scale landscape blocks the space for people to communicate, and makes people unable to get close, which becomes a viewing landscape that can only be seen from afar and not enjoy.(2) Sense of belonging and neighborhood relationship

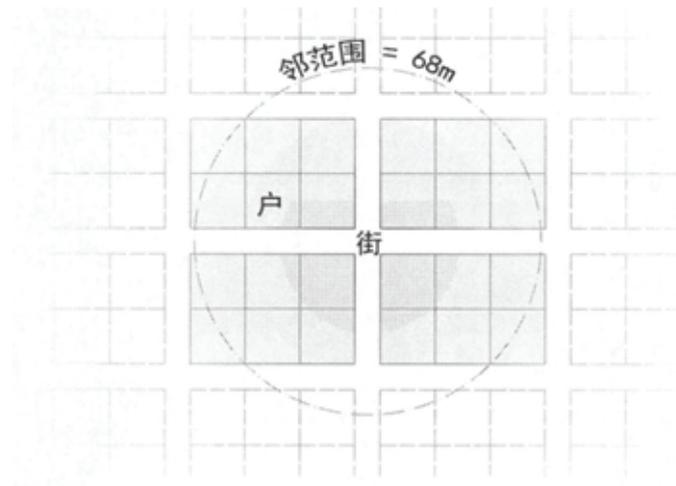


Figure 1: Restored map of neighborhood in Han Dynasty (Source of the picture: Network).

1.3.2. "Neighborhood" concept

In China's ancient books, the neighbors and li correspond to specific household units, five households are equal to one neighbor, five neighbors are equal to one li, and one li is equal to twenty-five households. In the *Research on Public Space in Beijing's Residential Communities under the Background of Contemporary Neighborhood Relationship*, a neighborhood model was given, ranging from a circle with a radius of about 68 meters. That is to say, the residents living in this radius can form a better and close relationship. No matter how the change of upper layer of space expands, the basic unit of neighborhood relationship has not changed, and it is still the core of people's communication.

1.3.3. Sense of belonging and neighborhood relationship

Most of the researches on community belonging by foreign researchers are related to psychological research. Worth believes that the size of population, residential density of the community and diversity of society are highly correlated with the sense of belonging of the community. Wellman considers that the key significance of the existence of the community is not in the environmental region, but the mutual communication and interaction between community groups. The interaction in the process of communication forms the residents' sense of belonging to the community. If the residents of a community do not have a sense of belonging, they can only be called the people living in the same area, which is meaningless at the social level. Therefore, the residents' evaluation of

neighborhood relationship affects the satisfaction of residents with the community to some extent.

The quality of neighborhood relationship affects the security and stability of a region. From the perspective of sociology, the neighborhood relationship affects the daily living habits of the residents in the local region to some extent, which is formed in people's long-term living. It is not subject to the law, but above the law. Residents consciously safeguard and perform it, which limits the daily behavior of people in a region. A good neighborhood relationship represents trivial matters such as "giving them assiduous and thoughtful attention, helping each other, and excluding the difficulty and anxiety". These daily behaviors enhance the residents' sense of belonging to the community living space and form a living place culture.

2. Research Purpose and Significance

2.1. Research purpose

The huge living community consists of a family of loose relationship or fragmented families, each of which is an island. In the past, it is said that a neighbor that is near is better than a brother far off. However, at present, a close neighbor is like a stranger. The walls of the building have become a barrier for people to communicate. It is not that people are unwilling to communicate, but that the current living space does not provide such an environment. Without good communication space, it is difficult to establish neighborhood relationships and a sense of community belonging. In this study, the outdoor space of urban community is taken as the research object to strive to break the boundaries of traditional indoor and outdoor space. How to optimize the outdoor public space in urban communities to promote residents' communication is taken as the purpose of research to carry out a new design of this kind of space. The outdoor space outside the traditional wall is combined with the living needs of present people to create a diverse communication space.

2.2. Research significance

The quality of public space of the community affects the neighborhood relationship of the community. Good community public spaces tend to increase the frequency of use and enable people to come out of their homes. People communicate with each other in such a space, which will inevitably develop into good neighborhood relations.

Why are people reluctant to go downstairs, are no longer keen to communicate with the people around them, but prefer to stay at home? It is not that there is no good community public space, but the current form of community public space is not suitable for people's psychological communication needs. Therefore, a model for outdoor space shaping in future urban communities is proposed in this paper to solve the needs of people's communication from the perspective of architectural space, create a good neighborhood culture, and enhance residents' sense of community belonging.

3. Space Design

3.1. Design strategy

In this design scheme, the outdoor space order is mainly divided into four spaces: "public-semi-public-semi-private-private" to improve the level of community outdoor space, and meet the needs of residents' activities, communication, and privacy. Meanwhile, in the "private" area adjacent to the indoor space of residents, the residents are encouraged to participate in the design and reconstruction according to the individual needs, extend the indoor area to the outdoor area, increase the identity of the residents, and blur the boundaries of indoor and outdoor areas to some extent.



Figure 2: Intention figure (source of the picture: drawn by the author).

3.2. Design plan intention

The design of whole intention plan focuses on the shaping of community outdoor space. Therefore, the indoor space of the building is simplified as a regular cuboid, which is enclosed as the entity of outdoor space. The streamline entrance is on the first floor. The whole mode is “entrance space-traffic-the entire community public space (covering the entire community, such as basketball courts, supermarkets, bookstores, etc.)-Traffic-local area public space (covering surrounding households, such as public vegetable fields, swimming pools, etc.)-Traffic-public space at the door of the household-(covering independent households, different function settings can be made according to the needs of residents).



Figure 3: Intention figure (source of the picture: drawn by the author).

Through the division of outdoor space, according to different space scales and functions, the corresponding settings are carried out to meet the basic needs of households in an independent community so that residents can participate in each public space from the moment they enter the community space to enter the door of the house, and have corresponding activities in this space. In the meanwhile, it also attracts people who stay at home to walk out of the room and spend most of the day in these community public spaces, while the home, the relatively closed space is only used as a guarantee for basic activities such as sleeping and going to the toilet. By breaking down the barrier of indoor and outdoor separation, it emphasizes that outdoor space is used as the main activity space for residents in the community, where most of their daily behaviors will take place, thus awakening the real vitality of the community space.



Figure 4: Intention figure (source of the picture: drawn by the author).



Figure 5: Intention figure (source of the picture: drawn by the author).

4. Summary

In this study, the author attempts to propose a model for outdoor space shaping in future urban communities. It is designed to break the division of indoor and outdoor spaces in the community by traditional walls, create different communication spaces and public spaces according to the needs of residents, blur indoor and outdoor spaces, and guide the residents to walk out of the closed space, re-stimulate the vitality of community public space, as well as create a sense of community belonging.

References

- [1] Wang Hua, Analysis of "Neighborhood Communication" and "Space Environment" in The Living Community [J]. Residential Building and Residential Culture, 2004 (3), 46-48.
- [2] Wang Changxi, Research on Community Outdoor Environment Psychological Quality and Resident Satisfaction——Investigation on 230 Community Residents in Beijing [D]. Beijing, Beijing Forestry University

- [3] Xie Zhao, Research on Public Space in Beijing's Residential Communities under the Background of Contemporary Neighborhood Relationship——From Residential Zone to Neighborhood Community [D]. Beijing, Central Academy of Fine Arts