

Study on the Contact Space in Traditional Villages under the Influence of Behavior Characteristics

Taking Xiangyang Village, Xiaowu Township, Xiaochang County as an Example

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Abstract—The contact space in traditional villages is closely related to the life of villagers. Under the influence of people's activities, the contact space shows different types and morphological characteristics. Through the study of the current situation and types of the contact space in traditional villages, this paper takes Xiangyang Village, Xiaowu Township, Xiaochang County as the research object, analyzes the overall morphological characteristics of the spatial layout of Xiangyang Village, and summarizes the different types of contact space inside Xiangyang Village, as well as the inherent relationship between behavior characteristics of contact and contact space.

Keywords—*traditional village; contact space; behavior characteristics; spatial form*

I. INTRODUCTION

As the ancient saying of "people cannot live without group", living in group life is inseparable from the contact, which is a necessary need of people's lives, an essential link to maintain the emotion between people, and a necessary condition for sustainable development of society. Therefore, the creation of contact space becomes very important in human life. The appearance of contact space is also different in different living spaces. The traditional Chinese villages are usually clan societies formed through the long-term precipitation of social civilization, with blood relationship as the link and ritual customs as constraint. In traditional villages, the villagers' sense of belonging and emotion to homeland are cultivated through the creation of space environment inside the villages. Most of the contact space in traditional villages is formed naturally according to the long-

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term resident experience of the villagers, reflecting the most primitive and basic needs of human, governed by doing nothing, yet forming an orderly, abundant, people-oriented space pattern of contact.

II. TYPE OF CONTACT SPACE IN TRADITIONAL VILLAGES

The public contact space in traditional villages is different from that in ordinary natural villages, which places more emphasis on the memory and inheritance of space. The objective things, institutional systems, moral concepts, folk culture and folk art passed on from generation to generation are all the inheritance of the "tradition" as a "root".¹ It carries the moral concepts and laws of ritual system formed based on ethical memory, historical context and civil restraint. Under the influence of these traditional elements, the historical status of traditional villages becomes more solid, and the public contact space of traditional villages is more contagious and cohesive.

The public contact space in traditional villages has two meanings: the firstly is any public place in villages where people freely communicate, spontaneously chat, have fun and conduct other social activities, such as the sunning grounds, ancestral halls, streets and alleys, even in front of houses, by rivers, under eaves, on fields, under trees, etc.; secondly, folk culture, customs of ritual system and other traditional activities formed based on the constraints in the village gather people. For example, in village activities such as traditional folk festivals, villager rallies, weddings and funerals, people can also gather and contact.² According to the two meanings of public contact space in traditional villages, it can be divided into the following two types:

1) *Physical space*: Physical space refers to the public place in an objective physical space where people contact. Such contact space has a certain degree of certainty and

¹ Li Mingyan. Study on creation and design of public space in rural communities [D]. Guangdong University of Technology. 2015. P2

² Cao Hailin. Public space in traditional villages: an analysis perspective of generation and reconstruction of rural social order [J]. Tian Fu New Idea. 2005 (4). P88

tangibility, and representatives include platform around wells, ancestral temples, under the tree, under the eaves, in fields, etc. "Table I".

2) *Mental space*: Mental space refers to traditional activity forms formed during a long term in villages, such as folk custom culture, which has certain intentionality and uncertainty. It is influenced by traditional folk culture and moral concepts and is a spiritual space, such as typical folk festivals, celebrations, wedding ceremony, and ancestor worship activities in villages "Table II".

TABLE I. TYPES OF PHYSICAL SPACE

Physical Space	Function / Activity	Existing Status
Under (Ancient) tree	The trees often attract villagers to gather here because of their cozy atmosphere, to chat, play chess and have other activities.	Continued
Platform around well	The contact space here is the contact space with the deepest atmosphere of traditional life, and it's also a main contact space of villagers, where villagers do laundry, fetch water and wash vegetables every day.	Weakened
Field	Farming is closely related to villagers' life, and the field thus becomes one of the main contact space for people. For example, people often rest and talk about harvest on the edge of fields or in the shade of trees.	Continued
Street and alley	Street and alley space is the most common contact space in a village, and the backbone of a village. It not only has traffic functions, but also has functions of chatting and exchanging commodities. It is a contact space with rich spatial level and atmosphere based on its change according to the terrain and layout of villages.	Continued , weakened
Bridgehead	The bridgehead is also one of the favorite contact spaces of villagers. Accompanied by gurgling water and cool breeze, villagers can chat pleasantly and rest, full of a sense of beauty and image of small bridge, flowing water and household.	Continued , weakened
Dam / pond	There are many large or small ponds distributed among fields in traditional villages. These ponds are the main source of water for villagers to produce and irrigate, and villagers also gather here for farmland irrigation.	Weakened
Square	Ancestral halls, village entrances and square in front of temples are often important spaces for villagers to carry out mass activities, such as some folk festivals, temple fairs, celebrations and other activities, which make the core contact space in villages.	Weakened
In front of doors and under eaves	The place in front of doors and under eaves is the transitional space between street and building. People can either walk into the building or stay here, greeting people outside. People can play cards, play chess and chat comfortably under the eaves; the space in front of doors can serve as a courtyard, where people enjoy the shade and the sun, but the space's greatest role is to serve as a work site for villagers to sun crops such as the grain and cotton.	Continued

TABLE II. TYPES OF MENTAL SPACE

Mental Space	Function / Characteristic	Existing Status
Trade, rally	Going to market is the trade rally activity with the greatest folk characteristics in traditional villages. There are a large number of contact activities in the market. As venue carriers, streets, small squares, intersections and other spaces also naturally become contact spaces for people to trade and exchange here, and even become people's entertainment venues.	Continued , weakened
Folk festival	Traditional folk festivals are the concentrated expression of rural culture. During the celebration of traditional festivals, there are a lot of contact activities, such as paying New Year calls in the Spring Festival, lantern show on the Lantern Festival, dragon boat race on the Dragon Boat Festival and ancestor worship on Qingming Festival and so on, which provide good mental venues for people's contact activities.	Continued , weakened
Weddings and funerals	Weddings and funerals are also the concentrated reflection of local culture in traditional villages, and will continue to consolidate the social relations and kinship through frequent social contacts.	Continued , weakened

III. MORPHOLOGICAL CHARACTERISTICS OF THE SPATIAL LAYOUT OF XIANGYANG VILLAGE

A. Village Profile

Xiangyang Village, Xiaowu Township, Xiaochang County has a long history. According to the available data, the village was established when the Yang's clansmen moved from Macheng area in Jiangxi Province to North Xiaogan in the Ming Dynasty and settled here. The men in the village all have the last name Yang. It is one of the best preserved ancient building groups found in Northeastern Hubei Province. A large number of traditional ancient dwellings in Ming and Qing dynasties remain in the village. The ancient buildings account for about 60% of the construction area of the whole village, among which the representative buildings include "Yang's ancestral hall" and "Shuangbai Temple" built in the middle and late Ming Dynasty. Xiangyang Village is surrounded by mountains on three sides, and the overall space environment mainly consists of buildings, farmland, streams and ponds, mountains and forests, streets and alleys, which is an ancient village near the mountain and by the river.

B. The Overall Spatial Layout of the Village

The spatial pattern of the village and the network of streets and alleys are a process of growth and evolution after the development in Qing Dynasty. There is no obvious change in the residential form either, which were all constructed or reconstructed on the original site "Fig. 1".

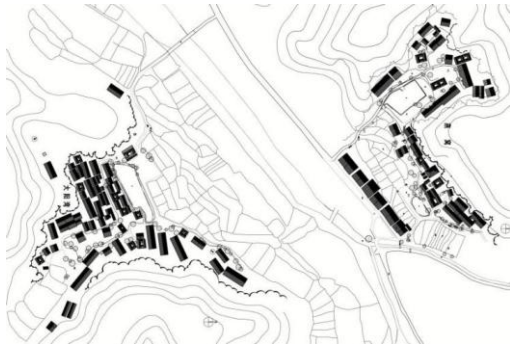


Fig. 1. General plan of Xiangyang Village.

1) *Street and alley space*: The existing streets and roads in Xiangyang Village are divided into three levels: the first level is the roads connecting the village and the outside world, and the only main road was formally built with cement in 2008; the second level is mainly the internal roads connecting various construction groups inside the village, which is also the most important and characteristic street space in the inside the village, generally in east-west direction, and there is a stone path along the stream, which used to be the main road to the village before there was the main road; the third level road is the narrow gaps between residential buildings, mostly made of flagstone through simple paving, which can only meet the function of "passing", and basically has no room for people to stay, but it can provide a certain passenger flow, giving people a certain degree of convenience. Alleys change according to the orientation of buildings in different shape and size "Fig. 2".



Fig. 2. Street and alley space.

2) *Water system space*: Xiangyang Village's main water system is divided into two parts. A part of is the river, and the other part is the tap water. There is a mountain spring flowing from Dawu Mountain in the village, which is the main source of domestic water and irrigation of farmland in the village, and the water for residents of the ancient village was mainly from the ancient well beside the road, piled by square stone, with water surface of about 1 square meter, shared by a few households. In modern time, every household has a well by their house, and mainly use underground well water "Fig. 3".



Fig. 3. Water system space.

C. Analysis of Layout and Characteristics of Contact Space in Villages

1) *Space near house*: Space near house mainly refers to the small space transitioned from the inside to the outside of the house and the public contact space adjacent to the house, such as in front of doors and under eaves, streets and alleys near the house, courtyards and so on. Such contact space has a certain degree of comfort, convenience and sense of belonging, which attracts villagers to stay and rest here, making it one of the contact space that villagers often use. In Xiangyang Village, villagers are often seen gathering in groups at the door, chatting, enjoying the shade, playing chess, or sunning grains and doing farm work at the door. It is the most popular contact space, especially for the elderly with mobility problems in the village. It is the most convenient and friendly contact space, where villagers can chat and play chess and exchange feelings with neighbors in the front door "Fig. 4".



Fig. 4. Contact space near house.

2) *Space with moderate distance from house*: Space with moderate distance from house refers to the public contact space which is inside the housing cluster in the village but not adjacent to the houses, with abundant types. Dotted contact space centered on ancient trees, well platforms, bridgeheads, street intersections and house entrances, large space such as square in front of temples, square at village entrance and ancestral hall, all belong to the space with moderate distance from house. These spaces are open, with pleasant natural landscapes, architectural landscapes and cultural landscapes, and they often attract villagers to stop here. Ordinarily villagers in Xiangyang Village often gather under trees, by wells and on street intersection, which become popular activity spaces in the village. Open spaces such as square in front of temples are usually used to hold weddings, funerals, rallies, festival celebrations and other large-scale traditional folk activities, which are important contact spaces for villagers to carry out spiritual and cultural exchanges and consolidate relations with acquaintances. There is a large open space in front of Yang's ancestral hall in Xiangyang Village, where the villagers thresh, sun grains and peanuts, besides, large-scale public events, decision-making, banquet and weddings are all held here, which is the largest public activity space "Fig. 5".

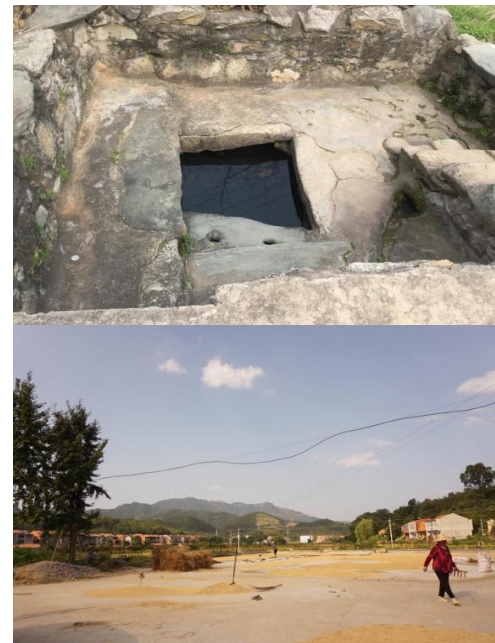


Fig. 5. Contact space with moderate distance from house.

3) *Space far from house*: Space far from house mainly refers to the contact space far away from housing cluster in the village, such as fields and village entrances. In traditional settlements, farming is closely related to the life of villagers. Villagers spend most of the day in the fields, and the fields thus become one of the main contact spaces for people. For example, people often rest and talk about harvest on the edge of fields or in the shade of trees. As an important transport hub of the village, a large number of people pass by the village entrance every day, and villagers often stay here, greet each other and chat. It becomes one of the villagers' common contact spaces "Fig. 6".



Fig. 6. Contact space far from house.



Fig. 7. Necessary activities.

IV. RELATIONSHIP BETWEEN THE BEHAVIOR OF RESIDENTS AND THE CHARACTERISTICS OF CONTACT SPACE IN XIANGYANG VILLAGE

A. Analysis on Characteristics Behavioral Activities

The villagers in Xiangyang Village have a lot of routine contact activities. According to the theoretical knowledge put forward by Jan Gehl "Life between Buildings", the daily behavioral activities in the village can be divided into the following three types:³

1) *Necessary activities*: Necessary activities are the basic activities of villagers' contact. They are not affected by the external material environment and are activities that villagers must carry out. They are not restricted and may occur under various conditions. They are long-term and stable. Shopping, work, waiting for bus and other daily work and living activities are all necessary activities. In Xiangyang Village, agricultural activities such as picking chestnuts, ploughing, picking tea and planting vegetables are the most common necessary activities. Daily living activities such as going to school, shopping and laundry are also necessary activities with common occurrence "Fig. 7".

2) *Spontaneous activities*: Spontaneous activities are different from necessary activities, which are subject to external environmental factors. The better the external environment conditions, the higher the possibility of the occurrence of necessary activities. The degree of contact of villagers depends on the material conditions of the external space environment. When the external environmental conditions are appropriate, people are willing to spontaneously contact. For example, activities such as chatting, walking, sunbathing, playing games, breathing fresh air, etc., are all carried out with the attraction of external space according to their own needs, and have a certain degree of randomness and freedom. Most of the residents of the village are old people and children, whose most important spontaneous activities include walking, chatting, sunbathing and so on. These activities are greatly influenced by the weather, so they usually take place in front of houses or in a sunny public space. Occasionally groups of old people can be seen playing chess under a tree and children playing games in an open space. These are spontaneous activities "Fig. 8".

³ (Denmark) Jan Gehl. Life between Buildings [M]. Translated by He Renke. China Architecture & Building Press. 2002. P13



Fig. 8. Spontaneous activities.

3) *Social activities*: Social activities are combination and evolution of necessary activities and spontaneous activities. They depend on various activities involving others and are also affected by the physical environment of external space. Social activities have high requirements on the quality of space, and generally require a lot of people to participate in. Activities in which only a few people participate can only be called spontaneous activities. In social activities, people generally communicate and feel others by listening and seeing, with a certain degree of passivity and chain. Such activities include large-scale folk activities such as village gatherings and weddings. In Xiangyang Village, villagers' gossiping, chatting and other small-scale social activities are the most common, and people take care of children, play chess, greet each other to kill times, whole traditions folk activities such as rituals are rarely seen in Xiangyang Village nowadays. Only activities such as weddings and rallies can be seen, but they are all different from the past.

B. *Inherent Relationship between Characteristics of Behavioral Activities and Spatial Patterns*

The behavioral activity and spatial form interact with each other and are inseparable from each other, and different behavioral activities have different requirements on the forms of contact space, so as to promote the generation of various space types, and the specific contact space form also has a significant impact on people's contact activities.

1) *Behavioral activities promote generation of contact spaces*: In traditional villages, different behavioral activities

have different needs for contact space. In the long-term development of Xiangyang Village, affected by the content and form of villagers' behavioral activities, the contact space can be roughly divided into four types: facility space, traffic space, living space, social space.⁴ Usually necessary activities are carried out in facility space to meet people's living needs such as laundry, cooking and shopping. It is a type of space necessary for villagers' daily life and has certain functions of use, such as well platform, small shops, etc.; traffic space is also associated with people's necessary activities, which mainly refers to some public space that has transport functions and can also meets people's contact. There are many of such spaces in Xiangyang Village, and the most common ones are linear street and alley spaces. People often stop and chat at the junctions of streets and alleys, at doors and stairs; the living space is mainly to carry out spontaneous activities with strong cohesion, which is a space type of activities that people voluntarily participate in under the attraction of the external material environment, mainly for people to rest and talk, such as small square at the entrance of village, sunning ground and other venues for recreational activities; social space is related to social activities, mainly to carry out some thematic activities of social interaction, this type of space is not often used, but it is an important venue for villagers to exchange spirit and souls, and often large-scale activities such as weddings and funerals, cultural activities and village rallies, etc. are held here. Specific forms include ancestral hall, drama stage and so on.

2) *Influence of contact space on behavioral activities*: Behavioral activities are carried out in space. The function, form and layout of space have important impact on contact behaviors. From the perspective of spatial functions, it mainly includes facilities inside the space and space atmosphere, and the public service facilities are mainly to meet people's living demands. Therefore, the location, quantity and quality of the public service facilities directly affect the villagers' usage behavior, which in turn affects villagers' contact behaviors. There are few service facilities inside Xiangyang Village, which has little effect on promotion of people's contact behaviors. The overall atmosphere of space also has an important influence on behavioral activities. For example, the treatment of different atmospheres such as plants, decoration and lighting in the space will give different psychological feelings to people; the spatial form mainly affects people's contact behaviors from two aspects of spatial shape and scale. Different spatial shapes give different feelings to people. For example, social spaces such as ancestral halls are relatively regular, giving people a serious feeling, while well platforms, street and alley space are relatively free, giving people a relaxing sense and attracting them to stay. The objective environment

⁴ Xu Zhen. Study on the Contact Space in Traditional Villages in Huizhou [J]. China Ancient City. 2013 (09). P66

of space affects people's contact behaviors by affecting their psychology. The same is true for scale. Japanese architect Ashihara Yoshinobu puts forward the idea of d/h in "The Aesthetic Townscape" He believes that when $d/h = 1$, the space gives people a sense of symmetry, which is an ideal spatial scale.⁵ However, in traditional villages, d/h is between 1 and 2, which gives people a cordial and pleasant feeling, and can promote the occurrence of contact behaviors; the spatial layout mainly affects people's behavioral activities from two aspects: distributed location and hierarchy level. The more superior the location of the contact space, the closer it is to villagers' residences, the more convenient for villagers to contact with each other, the more frequent the contact behaviors, and the more participants. The spatial level is divided according to the degree of spatial privacy. The more participants in the contact space, the larger the activities held, the higher hierarchical level of the space, such as public meeting space in villages.

V. CONCLUSION

Traditional villages go through the long-term development and precipitation of traditional human civilization. Villagers have the most primitive and natural ways of contact, and the spatial form is abundant. The contact space in Xiangyang Village forms an orderly and abundant spatial layout with different space forms. These different types of space are linked with the activities of villagers and provide a complete network of contact space for the villagers. This is exactly an important part missed in modern community in general. However, with the rapid development of modern society, people's relations have become increasingly distant. Even traditional villages with a strong local flavor have been affected. Therefore, protection of the historical features and traditional life habits in traditional villages is increasingly becoming the focus of designers' reformation and design. The future of the contact space in traditional village needs our inheritance and innovation.

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