Comparative Study of the Defense Layout in Traditional Villages of Cantonese and Hakka in Conghua District of Guangzhou

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Abstract. Located in central Guangdong, Conghua is the cultural district junction of Cantonese and Hakka. Although Cantonese and Hakka are located in the same place, the traditional village forms between them are different sharply, especially in the defense layout. Based on the information from the field investigation of the traditional villages, this paper makes comparative study om Cantonese and Hakka traditional villages in terms of location, spatial pattern and defensive structure, etc., which concludes the similarities and differences of defense layout between Cantonese and Hakka traditional villages and attempts to analyze the reason.

Traditional Villages Distribution of Cantonese and Hakka in Conghua District

Conghua district is located in the transition zone of Pearl River Delta plains and mountains of northern Guangdong with the terrain inclined from northeast to southwest and river flow from northeast to southwest through the whole Conghua, and the feathery tributaries covers most areas. Conghua landforms are composed of mountainous with 39%, hilly 30%, plains 15% and the rest are mountain and terraces.

In Guangdong Cultural Geography, according to the regional culture characteristics, Ouyang Shangji divides Guangdong into four cultural areas: Cantonese, Hakka, Hoklo and Qiongli Cultural District. Conghua district is located in the junction of Cantonese and Hakka cultural district, which creates it into a wide area of staggered distribution of Cantonese and Hakka people. According to 2013 statistics, the population of Conghua is 602,300, about 70% Cantonese, 23% Hakka, and mainlanders only 7%. With a higher proportion, Cantonese people are distributed in various town. Hakka people live more dispersed with most mixed with Cantonese, mainly concentrated in the north of Lu Town, southeast of the Taiping town and three hundred dong village and so on.

In Maslow's theory of stratification, after meeting the basic needs of the first level of physical demand, the human beings' second level of demand is security needs. The ancients cluster together, forming a settlement through blood relations, interests, etc., to resist natural disasters and bandits, pirates and other man-made disasters. In the village layout, defense layout is an important factor affecting the form layout. Because of the microscopic geographical conditions, historical and cultural heritage, foreign enemies and other differences, the Cantonese and Hakka villages co-existing in Conghua have different defense layout in the performance of building.

Defensive difference analysis of Cantonese and Hakka traditional villages

Macro - Village location.In ancient times, subject to the constraints of economic and technical aspects, the traditional villages will try to make use of existing natural resources in the most economical way to build villages, and they often use natural geographical advantage as the village's Border while forming a defense of the first barrier. This is the common ground between Cantonese and Hakka village location in Conghua district - use the geographical environment of danger as far as possible.

Since Cantonese enter Conghua district first, they occupy plain areas in location priority, and concentrate on both sides of the stream rivers with network traffic on river, or take advantage of the streams or introduction of them to build reservoirs to form a water defense system, which helps

slow down the enemy and the beast's attack and provide a backward evacuation route when encountering enemies. Belonging to hills region, some villages of Conghua choose the foot of the mountain, taking advantage of the mountains behind the village to resist the invasion of foreign enemies, also hiding in the mountains under attack. For example, the Dajiangpu traditional village located in Jiangpu town (seen in Fig.1) was built in the Yuan and Ming dynasty, with the site on the east bank of the River's flow and the east streams also pass through the village, people dig chisel ponds with the stream for the water in front of the village to strengthen river system defenses. Jiangpu village is close to Fengyuan village and several other villages, so they contact more closely to form defense ties. Huangxi Village in Taiping Town (seen in Fig.2) is also located in the east coast of Stream River, taking the hills behind the village as natural barrier. In river defenses, they use the Stream River as a barrier macro, and dug pond in front of the village to form boundaries micro.

Hakka people are far later than Cantonese, with disadvantage in the village location, and they mainly gather in the northern mountain of Lvtian Town and other Towns hills, living in deep mountains in order to avoid the direct conflict with Cantonese, using the mountain as a barrier. Water of the villages is mainly from the water in the mountain. Part of Hakka villages dug pond in front of the village, with the water in the mountain as a source. For example, Sanbaidong village of Taiping town is located in south of Conghua (seen in Fig.3), Heliao, Gaopai and Sanyitang village are distributed in relatively flat areas in the foothills along the village road. Located in northern Conghua, Fentian village of Lvtian Town (seen in Fig.4), is built along the foothills with the mountains as a natural barrier, since there are streams through Piedmont and the terrain is relatively flat, more enclosed groups gather here to form a large village. The villages are often built with mountains as reference, and they form contact groups between villages to form a common defense.

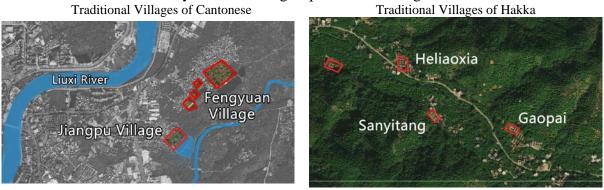


Fig.1Dajiangpu Traditional Village in Jiangpu Town

Fig.3 Sanbaidong Village in Taiping Town





Fig.4 Fentian Village in Lvtian Town

Meso - Village spacial layout. The spatial layout of Cantonese and Hakka traditional villages have emerged a strongly artificial planning, with vertical lane and side streets orderly. The main difference is that, Cantonese traditional villages have comb layout, while Hakka traditional villages have centripetal layout.

Cantonese villages in Conghua district mainly have comb layout with a main street perpendicular to the residential areas guiding the overall and the multiple longitudinal lanes perpendicular to main

street as the branch. With the main street as a starting point, people make the rear opening along the longitudinal lane, with buildings built along the slope. The width of longitudinal lane playing a major role in transportation is usually only within 2 meters with tall and closed gable on both sides and vertical lane aspect ratio of 1: 4-1: 2, which shows easily defensible features in space. In order to strengthen the defense, some villages are still setting lane roadway at night or under attack, so that the village can form a closed peripheral line of defense.

The Fengyuan village in Jiangpu Town was built in the Southern Song Dynasty by Ouyang, facing southeast, it has width of 272m and depth of 247m (Fig.5). In the heyday, the village had to accommodate four thousand villagers, and is a larger Cantonese traditional village in Conghua district. The village is planed rigorously, with a wind reservoir in front, five halls are lined up in front of the vertical roadway (Fig.6). There are totally ten longitudinal lanes from west to east with width of 2 meters, where no side streets are interspersed, residents enter on both sides, and the lane gate is set. The vertical forms a closed defense with gable of no windows, and the horizontal use the gate for semi-closed fortification, and they are combined to form a powerful defense system.

In addition to following strict vertical and horizontal alignment, Centripetal Hakka traditional villages also pursue axial symmetry and concentric settlements and appear mainly in the form of enclosed house in Conghua district. The roundhouses are mainly square, mostly in the form of church cross house layout, with axis arranged into two-into or three-into hall, residential estates are arranged on both sides and the rear in the form of horizontal house or pillow house. Villages are outside close and inside open, the horizontal house is built with walls with only a small number of small window, showing linear enclosure of the fortification. The entrance is located just in front of the positive entrance of the main room, some villages add entrance beside the patio of the horizontal house. In addition to the material defense system, centripetal Hakka villages hold a family meeting or ritual activities arranged in the center, which helps to strengthen the sense of community and maintain family members, in order to consolidate the family cohesiveness to fight against foreign enemies.

Liang double house in Sanbaidong Village of Taiping town is a typical enclosed house with centripetal layout. Buildings are backed by a small hill, sitting east to west with 29 meters width and 26 meters depth. The building plan is two-main, two-horizontal and one-pillow layout (Fig.7), and later a horizontal house is constructed in the south of the building, but it is not connected to the space. The wall of one-storey building is the brick of rammed earth. There are three entrances (Fig.8) which are located in the middle of the main room and the end of two walkways cross-linked to the horizontal house. Less exterior wall windows, the main room is interlinked with the patio of horizontal house by a corridor, and the buildings are outside close and inside open.



Fig.5 Fengyuan Village Plan

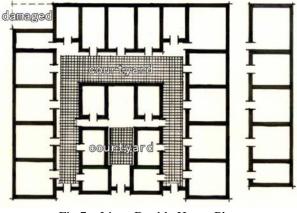


Fig.7 Liang Double House Plan



Fig.6 Fengyuan Village Elevation

Fig.8 Liang Double House Elevation

Microscopic - defensive structure. Cantonese and Hakka villages have a widespread varieties of defensive structure. The main difference between them is that Cantonese defensive structure is point-base and linear-supplement, while the Hakka defensive structure is linear -base and point-supplement.

Cantonese defensive structure in Conghua district is point-base and linear-supplement. Village wai is not widespread in Cantonese settlements, the defense is mainly point, including the village gate, alley door and the tower located in village start or end playing the role of lookout and alert. Village gate is ubiquitous in Cantonese villages as the entrance to the village, usually in the form of gatehouse arranged in entrance of the village start on one side or both sides. Large-scale village is surrounded by four gatehouses. For example, Qiangugang village of Taiping town has gatehouses in the four corners. The fence is used for the connection between gates to form a linear village around, the wind reservoirs is outside the village wall and the wall and pond together form a complete defense to the village. If you want to get into the village drying floor are regarded as an important place for villagers' everyday social life and entertainment, so that the point entrance space is often monitored by villagers sight to see whether a stranger enters. Some villages builds a multi-layered blockhouse playing the role of lookout, asylum and even force returned fire and so on, and high-rise buildings can even play psychological deterrent to the enemy. Point defense structure not only has the physical defensive role, but deepens settlements spiritual defense in the psychological level.

Mayi village in Chengjiao Town (Fig.9) has comb layout, with a wind pond built in the front of the village, and only the eastern side of the wall opens a doorway with a single layer of gate. The wall is not high, just to the waist about one meter, forming defense with the wind pond, coupled with the depth of a pond, it is close to two meters high above (Fig.10). Under normal circumstances, it is difficult for the thieves to cross the wall into the village.

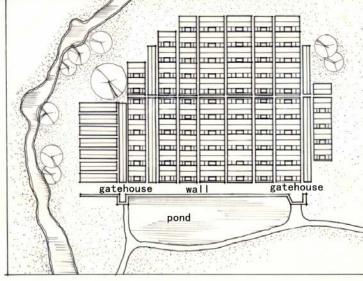


Fig.9 Location Figure of Mayi Village Gatehouse and Wall in Chengjiao Town



Fig.10 Elevation of Mayi Village

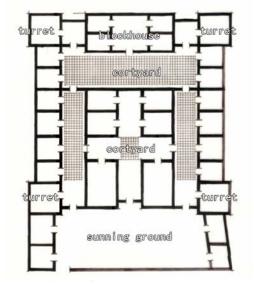


Fig.11 Deqing House plan



Fig.12 Deqing House Elevation

Hakka defensive structure in Conghua district is linear -base and point-supplement which is mentioned before. The square enclosed house is the main form of Hakka villages, with the horizontal and pillow house in three directions as external linear defense system, forming a seal. Different from a separate set of Cantonese wall, Hakka linear defense is usually live-defense together. Some enclosed houses located in Lytian town are built with high turrets in the four corners, some even construct watchtower or blockhouse for outlook and shoot, which plays a defensive role, and become shelter for villagers at the time of attack.

Xinlian village Deqing House in Lvtian town was built in Guangxu years and served as field hospital of KMT one-fifty-three during Sino-Japanese War. The building is surrounded by mountains, sitting southeast to northwest, with a total of three horizontal path of 32 meters and 42 meters depth, and its plan shape can be seen in Fig.11. The middle is high double main room of two layers. Three towers are constructed with Wing House, with three-bay and three-storey blockhouse, wall bars and round bullet hole (Fig.12). The building constructed with brick, building basis to one meter is concrete ramming and the mud-brick masonry above.

Affecting Factors Research on the Difference between Cantonese and Hakka Village Defense

The last section of this paper summarizes the different defensive features between Cantonese and Hakka villages in Conghua district. In the village defense system, the Hakka villages show stronger defense system than Cantonese villages. For the use and transformation of the natural environment, Cantonese villages mainly use river tributary streams and dug ponds as defensive barrier, supplemented with the hills. Hakka villages mainly choose to live in the mountains with mountains and woods as the village's main barrier. In village planning, Cantonese villages have high-density comb layout with point-main fortification and linear-supplement. Hakka villages have the centrality layout, to strengthen family cohesion, with high walls of horizontal house and pillow house with linear-main and point-supplement defense structure. In horizontal space, Hakka village does not appear like a large, multi-Wai Long House and square floor as Hakka cultural core area. More Cantonese villages are built with defensive construction, and Cantonese relative to the inner core area of Cantonese culture area. For the differences between different villages in the same area, as well as different parts of the same villages, the author analyzes the reasons for the following three points:

In order of arrival of Cantonese and Hakka people. In Conghua district, Cantonese entered the area relatively early and first occupied the plains and rivers with fertile land and plenty of water. Then, in the Ming and Qing period, a large number of Hakka people moved into Conghua district. Since they are later than Cantonese, the Hakka village location is in a passive state, in order to avoid dispute, they only choose settlements on undeveloped hills, mountains and other natural environment of relatively poor area, adding that they were afraid that aboriginal and beast attacks, the Hakka people choose living together to build a strong defensive enclosed house. Due to shortage of land and low economic status, when the population develops to a certain extent, it will move a part of villagers in the neighboring village, along the terrain to form a group-style layout, so it is difficult for Hakka to form large-scale enclosed house in Conghua.

Continuation of the historical and cultural heritage. Cantonese people in Conghua district are mainly from Cantonese culture core area, while Hakka people are mainly derived from the core area and the northern part of Guangdong Hakka culture sub-region, the cultural connotations of the two part have a certain gap. Cantonese culture is relatively openness, equality and freedom, usually with living unit of small family in single-family dwellings, and the building is fully functional with independent living household. With macro comb layout, as the main transport, the alley is parallel to residential mountain wall. Different with Cantonese culture, Hakka people are relatively conservative with awareness of the Central Plains, emphasizing family-oriented settlements and ancestor respect. Until now, Hakka is a closely integrated social group with common beliefs and values. Therefore, in Hakka villages, the enclosed houses with temples as a core clearly reflect the integration of safety as the most important clan with surname outlying settlements, the enclosure takes a closed manner easy to resist the human-induced threats of foreign enemies.

Mutual absorption of Cantonese and Hakka people. According to the records of the Qing Dynasty years, with social unrest and serious mountain robber, under the circumstances of complex social security environment and long-term fights, Cantonese and Hakka department has gradually developed a coexistence, and the culture has been mutually recognized, with mutual absorption of respective advantages in building form. In the era of unstable law and order, primarily Cantonese

villages learn defense from the Hakka village. In addition to the continuation of comb layout of the Cantonese culture core area, with a wall as a defense in the external and watchtower in the internal, and even appears in Lvtian region. Referring Hakka enclosed house, Cantonese villages are built together, such as Huaiandi in Shuipu village, the internal townhouses are surrounded by the enclosed houses with a three-storey block tower. After the founding of China, the society is becoming more peaceful, Hakka enclosed houses weaken defense and draw the Cantonese culture of freedom and openness so that the lifestyle has evolved to a single family model and the entrance is added in the new Hakka Enclosed houses for the villagers' convenient access.

Summary

The ancients are vigilant in peace time. When the villages were built, they considered the residence defense primarily. Combined geography customs, history culture with historical environment in different periods, the village defense system differences between Cantonese and Hakka are generated in the long-term practice and experience in Conghua district. In the same historical and social background, Cantonese and Hakka learn from each other and form the unique traditional villages in Conghua district.

References

[1] Q. Lu. Guangdong residential areas. China Building Industry Press, 2008.

[2] S. J. Ouyang. Guangdong Cultural Geography. Guangdong People's Publishing House, 2001.

[3] X. Wang and X. Hou. Research on traditional defensive settlements classification. Architects, 2006.

[4] X. Wang. Analysis of traditional defensive settlement space. Architects, 2003.

[5] X. X. Yang and Y. Lai. Research on enclosed house plan layout in Conghua Lvtian area. Huazhong Architecture, 2008.

[6] X. X. Yang and Y. Lai. Hakka enclosed house survey in Conghua district of Guangzhou. Journal of China Three Gorges University (Natural Sciences), 2008.

[7] L. Qiu and M. Zhang. Defensive analysis of Cantonese settlement and residential buildings. Huazhong Architecture, 2007, 11.