

Study on the preservation and renewal of the spatial form of traditional villages based on cultural genes

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Abstract

Traditional villages are both the roots of Chinese civilisation and the carriers of traditional culture. However, with the advancement of urbanisation and industrialisation, traditional villages are facing the crisis of cultural loss and destruction of spatial forms. Taking the ancient village of Qiqiao in Gaochun District, Nanjing as an example, this paper explores the influence of the natural environment, land system, feng shui concept, patriarchal system, traditional customs and behavioural habits on the village settlement form. Based on the complexity of the current influence of multiple cultural forms on village settlements, this paper introduces the theory of cultural genes and focuses on the use of this theory to analyse village forms and their formation mechanisms, and proposes a strategy for traditional village conservation and revitalation based on cultural genes inheritance and development.

Keywords

traditional villages, spatial form, cultural genes, Qiqiao

1. Introduction

Traditional villages, also known as ancient villages, refer to villages that were formed earlier, have richer cultural and natural resources, have certain historical, cultural, scientific, artistic, economic, and social values, and should be protected. China is the largest rural country in the world, and 5000 years of vernacular culture and unique natural environmental conditions have given birth to a large number of traditional villages with various characteristics. These settlements and dwellings with deep historical deposits and strong cultural connotations are important carriers of Chinese civilization. "Without vernacular architecture, the study of architectural history with only palaces, temples, and gardens is incomplete; without vernacular culture, the study of cultural history with only temple culture, scholarly culture, and marketplace culture is also incomplete". Traditional rural dwellings and the village forms composed of them should be the core of research that urban planning, architecture, and other spatially related disciplines should jointly focus on.

However, at present, traditional villages are facing the plight of both physical space and spiritual civilization decay. In the past decades, under the development concept of "emphasizing the city over the countryside", China's village construction planning has blindly applied the technical theories of urban planning, ignoring the specificity of villages and the diversity of regional cultural types, which has brought a strong impact on the traditional village settlements and vernacular culture and led to the degradation of village functions.

The westernized consumption concept of urban residents under the wave of globalization is also alienating the rural space, while the prosperous urban civilization is attracting more and more rural youth to leave the countryside. In this context, it is urgent to study the regional culture of traditional villages and to reconceptualize rural space and rural planning from the perspective of cultural heritage protection.

2. The concept and connotation of cultural genes

Meme, also known as the cultural gene, first appeared in Richard Dawkins' best-selling book 《The Selfish Gene》 in 1976, and is the basic unit of social and cultural transmission and evolution. This theory argues that culture is transmitted and developed mainly through non-genetic means, especially imitation, which is a form of reproduction or copying. The proposal of cultural gene theory provides a new perspective for us to study the inheritance, development and change of traditional village culture, which has important implications.

In terms of the representational characteristics of cultural genes, the cultural genes of village settlements are mainly divided into material cultural genes and immaterial cultural genes (Wang, 2008). In the village settlement, the material cultural genes are a tangible form, which is the carrier expression of the settlement's social economy, culture, and technology, mainly including the natural environment, settlement form, architecture, streets, and other elements; the immaterial cultural genes include the social relations, organizational forms, and behavioral norms established among people, reflecting people's values, morality, and psychological state, mainly including the clan system and The intangible cultural genes include social relations, organizational forms and behavioral norms established among people, reflecting people's values, morals and psychological states, mainly including clan system and blood relations, religious beliefs, customs and festivals, and feng shui concepts. The two are inextricably linked (Figure 1).

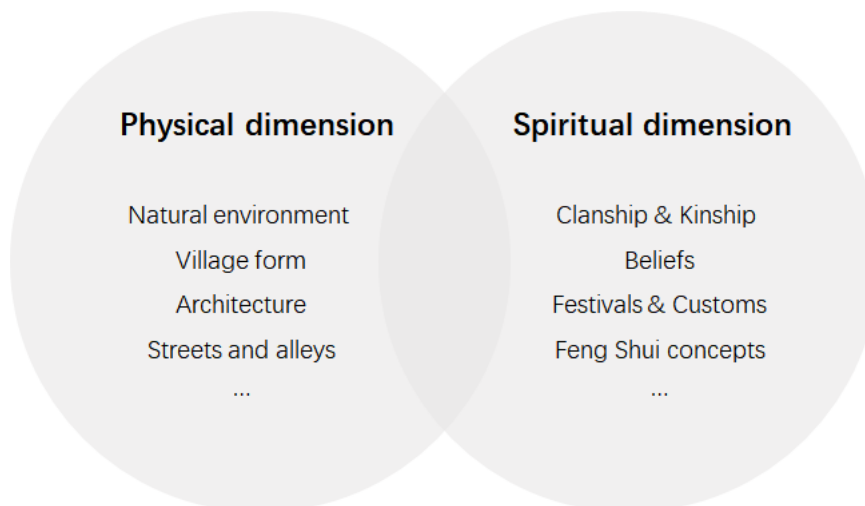


Figure 1. The connotation of cultural genes. Source: Self-drawn by author

3. Village settlement patterns influenced by cultural genes

3.1. Study Subject Overview

The ancient village of Qixiao (hereinafter referred to as Qixiao Village) is located at the junction of the two provinces of Suzhou and Anhui, and has been a major transportation route between southern Suzhou and

southern Anhui since the Han Dynasty, and is now under the jurisdiction of Qixiao Street (formerly Qixiao Town) in the northeast of Gaochun District (Figure 2). The village's history can be traced back to the Western Han Dynasty, and grew during the Southern Song Dynasty when the descendants of Confucius moved there. Today, Qixiao Subdistrict has become the "second largest gathering place for descendants of Confucius in the world"(Xv, 2019) after Qufu in Shandong, and most of them have settled in Qixiao village. According to the survey, there are currently 1,844 people living in the village, of whom over 90% are direct descendants of Confucius.



Figure 2. Administrative boundaries of villages. Source: Self-drawn by author



Figure 3. Traditional architectural complexes and post road in Qiqiao village.

Source: Photographed by author

3.2. The Cultural Genetic Roots of Qiqiao Village

In terms of the natural environment, the ancient village not only has a superior geographical environment with mountains and water at its back, but the topography of the Gaochun district, which is high in the east and low in the west, half mountain and half polder, also brings a unique agricultural landscape to the village. A large number of villages were built on the low-lying areas on both sides of the river to build dikes for aquaculture, and the temperate climate and the rich flora and fauna of the polder area also created a habitat for egrets. (Figure 4).



Figure 4. Ecosystem around Qiqiao village. Source: 1、 2 Photographed by author, 3 from google

From the historical development process, the village of Qiqiao was born out of the bridge, and flourished because of it. The bridge was built to facilitate the development of the village's commercial culture. According to the Nan Song Dynasty's local histories "Jingding Jiankang Zhi", Qiqiao was already an important post station on the Jiankang stage route, and the village, located at the mouth of the Qiqiao River and a key point on the stage road, had the convenience of both land and water transport, giving rise to the budding commercial economy of the town(Li, Yao & Hai, 2015). During the Yuan Dynasty, Kong Wenyu, the 54th grandson of Confucius, moved to Qiqiao and became the founder of the Gaochun Kong clan. Since then, the Confucius clan has continued to grow and expand, and has built security wells and bao-ping wells in the village (Fig. 6), as well as repairing the bridge with the clan's strength. According to the Gaochun County Records, the Kong clan ancestral hall was built in the Kangxi period of the Qing Dynasty, with 72 rooms to symbolise the 72 villages in Gaochun where the Kong surname flourished, and the house was of pure wooden mortise and tenon construction, with columns about 2.5 metres high (Fig. 7). After 1977, with the widening of the two roads outside the village, road traffic became increasingly convenient and water transport basically ceased, and the transport status of the old street of Qiqiao was completely lost. Various public facilities such as government and schools expanded to the north of the highway(Gaochun County Local Records Compilation Committee, 2010) , forming the new township of Qiqiao, and residents of the village moved to the township one after another, with the village gradually going into decline (Fig. 8).



Figure 5. Cultural Icons in Qiqiao village. Source: Photographed by author



Figure 6. Actient wells in Qiqiao village. Source: Photographed by author

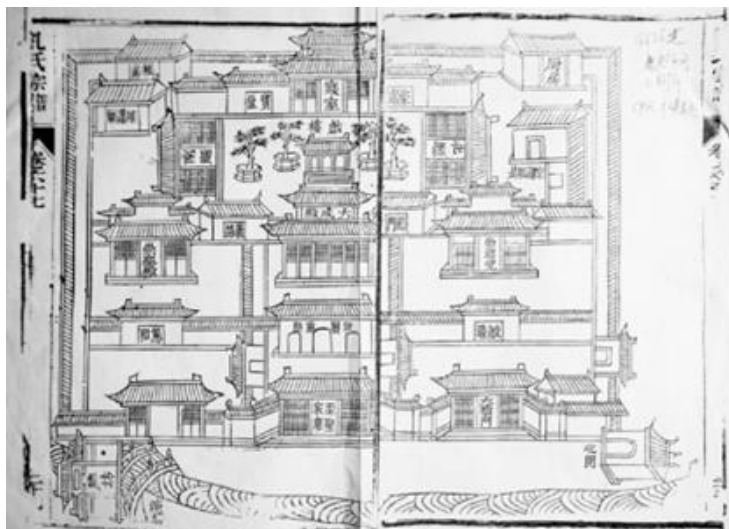


Figure 7. Layout of the Confucius Ancestral Hall.

Source: Li, X.J. , Yao, D..2015. Study on the historical and cultural value of Qiqiao Village in Nanjing. Rural Planning and Construction (02) 26-37.

3.3. The Cultural DNA of Qiqiao Village and its Expressions

(1). Feng Shui Pattern

The ancient village is located on the banks of the Qiqiao River, surrounded by water on three sides and just a few dozen miles south of Youzi Mountain, which is known locally as 'half mountain and half water'(Wei, 2018). The village's main street, Qiqiao Old Street, is more than 500 metres long in the north-south direction, with a curved but not straight street layout, running north-south and winding, with the main street twisting and turning like a centipede, and the branch lanes extending east-west from the main street, a naturally curved and shifting layout with clear priorities, influenced by the concept of "straight does not store wealth". This naturally curved layout, with a clear division of priorities, is influenced by the concept of "straight does not store money". The Chinese concept of feng shui is that the layout of a settlement should be based on hiding the wind and gathering qi, if a place has neither water nor wind, it is easy for the wind to blow and rob the water, and the qi field is scattered and uncollected. The feng shui environment of "hiding wind and gathering qi, getting water is the best" provides an ideal landscape space for the Kong clan to flourish (Figure 8). The original ancestral hall faces the street and is square in shape, and the layout of the building is symmetrical in its central axis, which is in line with the aesthetic norms of traditional Chinese architecture and reflects the spiritual character of Confucianism, which is to abide by the rules of propriety.

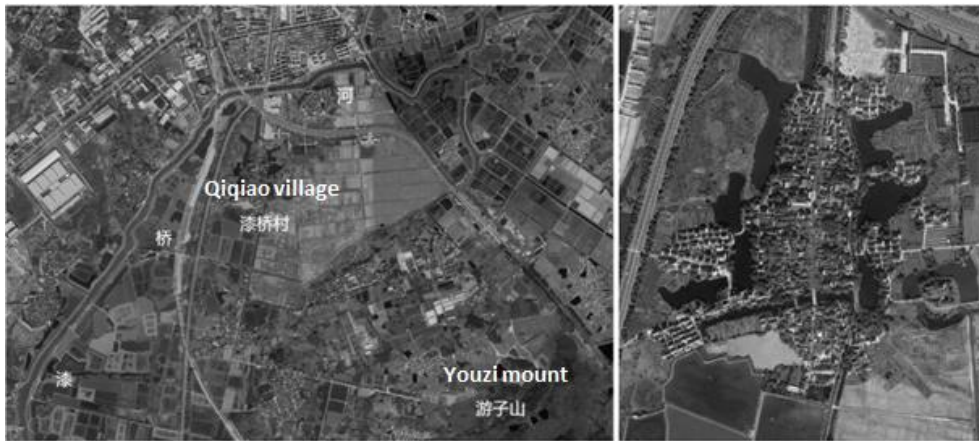


Figure 8. Feng Shui pattern of Qiqiao Village. Source: Google map.

(2). Village form

Thanks to the construction of the bridge and the development of shipping traffic, the village of Qiqiao was elevated to become the town of Qiqiao during the Qianlong period of the Qing Dynasty. According to the "Genealogy of the Confucius Clan", the town of Qiqiao had already developed into a commercial market with the present-day North and South Streets (Figure 9). The shops along the post road were numerous and the area around the bridge in Qiqiao was the most prosperous. The other living alleys are laid out vertically on both sides of the old street and lead to the peripheral water system, presenting a fishbone pattern of streets and an overall outline like an inkstone pond, which plays an indelible role in maintaining the historical and cultural pattern of the village. The water system and the streets and lanes were important places for the villagers' daily activities, and most of the public spaces in the village are located at the end of the streets and lanes or along the waterfront, while there are also some large courtyards formed by enclosing buildings on both sides of the branch lanes (Figure 10).

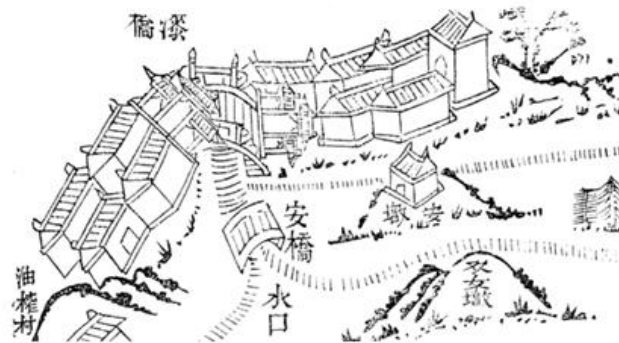


Figure 9. Morphology of Qiqiao village. Source: Village genealogy



Figure 10. Public space of Qiqiao village. Source: Photographed by author

(3). Architectural structure

On both sides of the old street are a large number of ancient buildings of the Ming and Qing dynasties, mostly 2-storey brick and wooden buildings with sloping roofs, more than 100 metres deep. The layout has shops at the front and residences at the back, with warehouses on the upper floors and residences on the lower floors, and a first floor with a riding tower and flower windows on the street. Many of the old houses still retain brick ventilation windows on their facades; the doors of the rich families are built with thick walls, with a door cover outside and a "door pond" and anti-theft tools inside, a Ming Dynasty style that is rarely seen as an ancient residential style in Jiangnan. In addition, the village has a large number of religious, educational and commercial buildings from different periods such as the Land Temple, the A-Ma Temple and the Small School Hall, which are all important cultural resources of the village (Fig. 11).



Figure 11. Architectural details of Qiqiao village. Source: Photographed by author

(4). Clan Culture

The Old Street is the core of the communal space of the community, with the Jiexiao pagoda at the entrance of the village, the clan ancestral hall in the middle of the village and the ancient well of Baoping at the end of the village, emphasising the core values of the clan. As descendants of Confucius, genealogical revision and rituals were a major event in the village, and the genealogy was an important link in maintaining the clan's social network. In each natural village, the genealogy is stored and dedicated annually in rotation among the families of the village. With the destruction of the ancestral hall and the gradual passing away of the older generation of villagers, the rituals in the village are not on the same scale as before, the social network has become loose and the younger generation has difficulty in understanding the importance of the rituals to the family. Many of the village elders have expressed a desire to restore the clan shrine, which is a clear indication of their strong sense of identification and belonging to the clan culture.

(5). Customs and traditions

The Kong clan has gradually adapted to the local customs and traditions of Gaochun, and the women from other villages who continue to marry into the village have brought the folklore and beliefs of Gaochun into the village, resulting in an organic combination of Confucian culture and the traditional culture of the region. The village elders, the central force in maintaining the culture of the clan, organise two large gatherings in addition to the annual Confucian rituals. The women, on the other hand, like to dance traditional Gaochun folk dances in the square of the clanhouse, most of which are based on Taoist legends and agricultural activities and have a strong connection with local folk beliefs (Fig. 12).



Figure 12. Customs of Qiqiao village. Source: Photographed by author

4. Cultural genes for the preservation and development of traditional village forms

The cultural genes of ancient villages are in danger of gradually dying out in the process of transmission. These traditional cultural genes with typical and representative cultural genes should be strengthened even more after the sedimentation of history. We should attach great importance to valuable cultural genes and explore ways to integrate traditional cultural genes with modern ones, so that the cultural gene pool can be enriched and ideas can be provided for the conservation and development of traditional settlements.

In the conservation and regeneration of Qiqiao Village, the existing street pattern and ancient buildings of the Ming and Qing dynasties are mainly preserved and improved, and the spatial form and texture of the ancient village and its architectural courtyards are protected. An archive was established on the basis of a comprehensive mapping survey of the village buildings to clarify the direct targets for action (Figure 13).

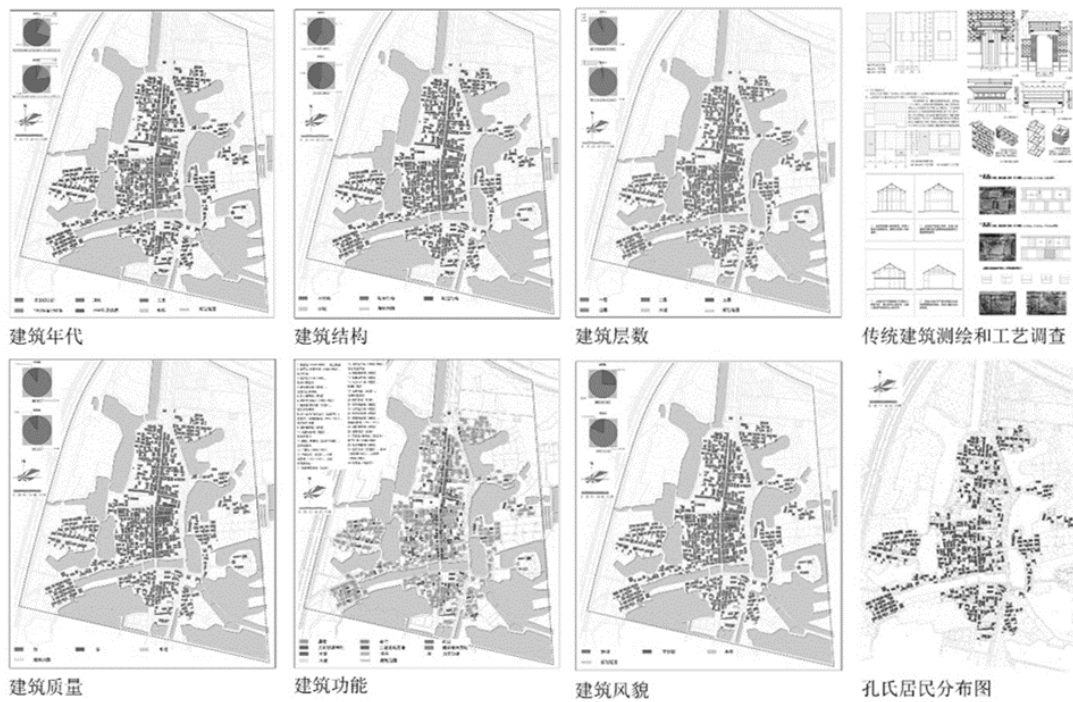


Figure 13. Analysis of current architectural situation in Qiqiao Village.

Source: 《Qiqiao Village Protection Plan (2017-2030)》

1) Resolutely maintain the spatial scale and alignment of the old street in terms of spatial form. Residents along the street will be demolished and compensated accordingly, and the integrity of the skyline of the old buildings will be maintained from the north and south entrances.

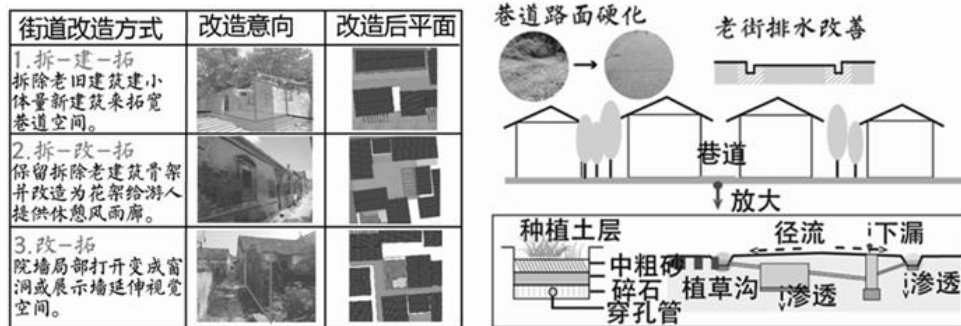


Figure 14. Renovation of the ancient post road and its drainage system.

Source: Self-drawn by author

2) Detailed design of the nodal spaces on the Old Street, incorporating Confucian cultural elements into the spatial design and implanting new functions such as a school, teahouse and expo to strengthen people's perception of the cultural qualities of the village.

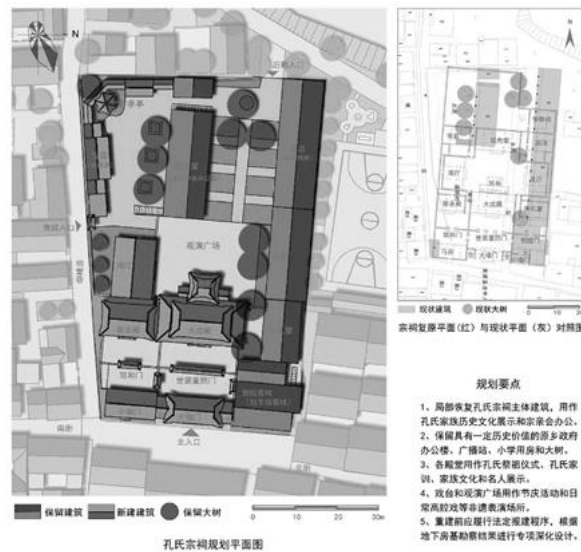


Figure 15. Restoration plan of Confucius Ancestral Hall.

Source: 《Qiqiao Village Protection Plan (2017-2030)》

3) Sorting out the village street network and river system, and adding a number of public space nodes. Some of the streets and lanes are selected to form touring paths with the main street to enhance the accessibility of the waterfront space, and public space nodes such as Qiaotou Square and the Waterfront School are added in conjunction with elements such as the existing ancient wells, old trees and abandoned buildings.



Figure 16. Renovation intention of village characteristic nodes and buildings along the river .

Source: Self-drawn by author

4) Sorting out the architectural groups in the village. Continuing the traditional courtyard space enclosing the traditional buildings, use the unused buildings in the clusters to set up new spaces such as rural B&Bs and cultural and creative studios for rent, to assist the development of the tertiary industry and increase property income.



Figure 17. Renovation intention of buildings along the river. Source: Self-drawn by author

5. Conclusion

Based on the analysis of the cultural genes of ancient villages, we should recognise that ancient villages are not just a collection of external material manifestations such as ancient buildings and streets, but also a carrier of profound national culture and history. Through the identification and refinement of various intangible cultural genes, such as the history and culture of ancient villages and villagers' living customs, traditional vernacular materials should be used as far as possible in the renovation of villages, maintaining the original architectural style of the village with green bricks and tiles and sloping roofs, and fully respecting the traditional needs of villagers for living and production space.

The protection and development of ancient villages requires not only the continuation of the material form, but also the transmission and development of the deep soul of the village's intangible cultural genes, of

which the local villagers are the most important, as they are the driving force and source of the village's cultural development, and only through them can the protection of cultural heritage be valuable and implementable. Most regions are now promoting the conservation and development of ancient villages through the development of tourism, but the blind development of tourism will cause great damage to the historical and cultural connotations of ancient villages, and it is important to realise that tourism is not the only way to preserve ancient villages. The Director of the City of Architecture and Heritage of the French Ministry of Culture, Mr Pédemin, believes that the right approach to cultural heritage, including ancient villages, is to "manage rather than conserve", as conservation is certain to kill, while management can inject real life. He stressed that the development of ancient villages should not be limited to tourism. We should explore and support special industries for ancient villages, and build villages based on the concept of harmonious coexistence between humans and nature, in order to achieve sustainable development of ancient villages.

6. References

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