



Study on the Evolution Characteristics and Mechanism of the Official Da-cuo Spatial System in Southern Fujian

Shufen Qi^(✉) and Zhe Zou

College of Arts and Design, Jimei University, Fujian Province Xiamen, China
604021824@qq.com

Abstract. Official Da-cuo is a kind of traditional folk house developed and matured in the feudal society of ancient China, and occupies an important position in the folk houses of southern Fujian. Taking the southern Fujian official Dasuo as the research object, this paper sorts out the spatial form and system characteristics and evolution direction of the southern Fujian official Dasuo. By analyzing its influencing factors, this paper explores the unique evolution mechanism of the official Dasuo and explores the connection between the spatial evolution of the official Dasuo and the social culture, production and life of southern Fujian, so as to make better development and utilization of the form and system of the traditional folk house.

Keywords: Southern Fujian culture · Official style big house · Spatial shape system · Mechanism of evolution

1 Introduction

It is said that the rise of official grand house in the folk is related to the local dialect culture in southern Fujian. During the Ten Kingdoms period, the houses of Concubine Huang Shi Si and Hui ‘an’s wife were in bad condition. After hearing this, the emperor granted “Your Mother’s Palace Grand House”, which meant that the Huang family could build a residence regulated by the palace. However, due to the homonym of “mother” and “fu” in Quanzhou dialect, a royal palace style residence was built in Quanzhou Prefecture, whose shape and system exceeded the regulations of the shape and system of folk houses. When the emperor knew the local misunderstanding of “fu”, he immediately ordered to stop the construction of such shape and system. By this time, most of them had already been built in Huian and Jinjiang. At present, the specific spatial layout of official grand residence has been fully studied, but in the evolution of official grand residence, it is generally believed that the intervention of Central Plains culture and overseas Chinese culture caused its evolution, and the evolution mechanism of its diversification factors is often ignored.

2 Relevant Overview

2.1 The Basic Shape and System of the Official Grand House

The layout of the official residence is as follows: the first entrance is the fall, where the hall is located, and the second entrance is the top landing, which is mainly the hall and the main living room. The hatchback said beech head, Qi head, horn head, east beech head commonly used for kitchen, west beech head commonly used for idle miscellaneous room. The courtyard formed by falling, top falling and beech head is called deep well. There are chengs in front of falling. If the third step is built, it is called back falling [1]. Generally, the residence with at least two or more entrance can be called official grand residence.

2.2 The Space Composition of Southern Fujian Official Style Large House

The official large house is formed by combining houses around the courtyard. Its shape and system are mainly three-room and five-room, and the plane types are rich. Among them, three-room and two-room large house are the basic shape and system of large house, which are widely distributed and are the representatives of ancient houses in southern Fujian [2]. Its spatial composition can be divided into three parts: main house, protective house and Chenghouse, as shown in Fig. 1.

(1) The Lord’s House

As the core part of a large house, the main house is mainly responsible for the main living and activities of family members. From the horizontal dimension, the number



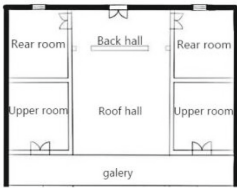
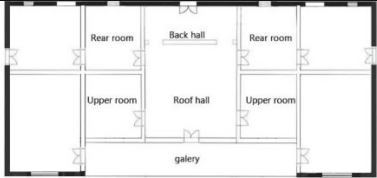
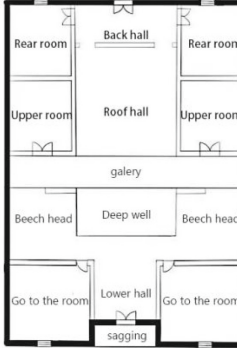
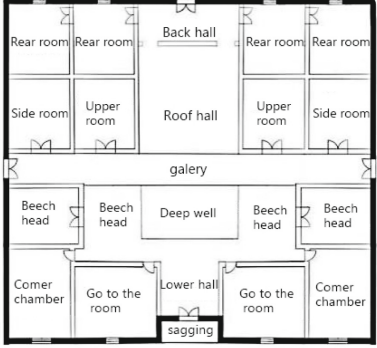
Fig. 1. Official style large house space composition (photo source: self-drawn by the author)

of rooms is generally odd, which can be divided into single room, three room and five room. Among them, five room is the limit of traditional residential rooms. From the perspective of longitudinal dimension, the minimum scale is a sitting, which is called the first step, and the first step can be divided into two deep rooms at most, namely the large chamber and the rear chamber, while the two falls are enclosed into a deep well, which is called the two steps, namely the top fall and the fall respectively. The official grand house in southern Fujian is usually in the form of three rooms and two rooms and five rooms. The common shapes are shown in Table 1.

(2) Protecting the House

As an auxiliary part of architecture, the protector house is obviously subordinate to the main house. On one or both sides of the main cuo, a guard cuo with a small patio is added to form the official big cuo in the shape of “single cuo” and “double cuo”. Guard cuo is one of the main characteristics of the big cuo in southern Fujian. A wall is set on the south side of the head of the pavilion, which divides the seven rooms into two units with four inner rooms and three outer rooms. The three transverse corridors divide the rooms into two inner rooms and three outer rooms. The three corridors are also called water rooms. The crossing room at the back door of Cuo Cuo is called “Cuo tail”. The

Table 1. Common Shapes and forms of official grand residence (Photo source: Self-drawn by the author)

Advance number Interval number	Three sheets	Five sheets
One advance		
binary		

corridor and its associated crossing room form a vibrant place around the courtyard of Cuo Cuo.

(3) **Cuocheng**

Cuo Cheng refers to the front space of the same width in front of the main cuo and the protection cuo. The word “cheng” is a pseudomial character for the court in southern Fujian dialect [3]. Cuo Cheng refers to the front courtyard of the official style of large cuo.

3 Evolution Characteristics of the Official Large House Space Shape System in Southern Fujian

3.1 Direction of Spatial Evolution

(1) Horizontal and Vertical

Due to people's needs for functions and family population, they will give full play to their subjective initiative to properly adjust and rebuild the original structure layout, but still retain its basic shape and system, which is mainly manifested in the repetition and superposition of the original shape and system of the official large house, expanding to the horizontal and vertical dimensions, increasing the number of Spaces, number of falls or protection of the house. Evolved into a variety of expanded types of official grand house. Yang Amiao House in Tingdian Village, Licheng District, Quanzhou is one of the typical cases of space expansion. On the basis of two into three rooms, the house expands to both sides to protect the house and double protect the house. The overall layout is two into five rooms and double protect the house, and the plan is square. Licheng City Kwai Altar lane Wu house is a representative of the vertical expansion, by three three Zhang of the large house, the depth of the direction of a total of four falls.

(2) Simplification and Variation

At the same time of expansion, due to the limitations of landform and population shrinkage and other factors, the official style of Dawei Village in Longhai City in southern Fujian is also developing in the direction of simplification and variation. The “three beech ends” is the representative of the official large house, which omits the front part of the original shape, so that the courtyard part is integrated with the front chengcheng and streets, presenting an open layout [4]. Diwei 98 in the village is a common form of three beech ends. Another variation of the official grand house is called “one-piece beech head”, which is formed by two single three-room beech heads against the back, with a more unique appearance, and is represented by the combination of Diwei 72 and 225 buildings. As shown in Fig. 2.

(3) Foreignization and Foreignization

The building and foreignization of Da Cuo are influenced by many factors. Influenced by Ganlan culture, the official big house in southern Fujian integrates the inner quadrangle layout of Central Plains culture with the colonnelled living space of Ganlan

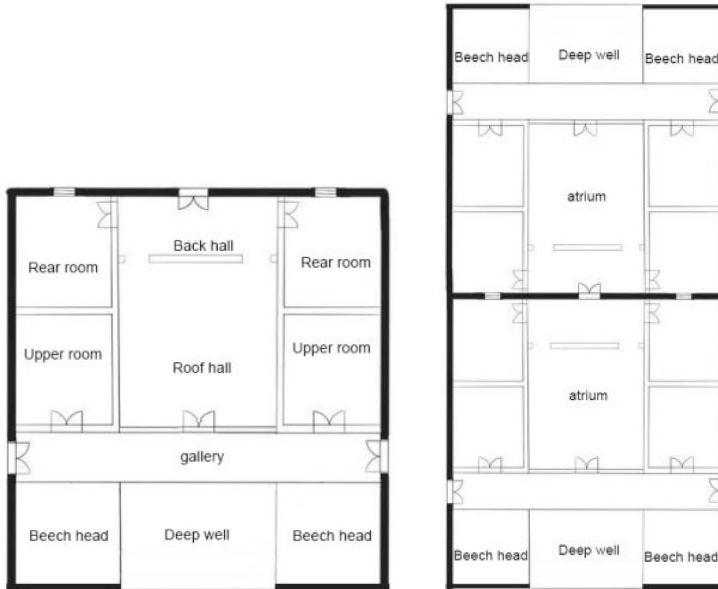


Fig. 2. Three-piece beech head stop, One-piece beech head stop (photo source: author drawing)

residents, and the building of protecting house appears. The spatial layout of such shaped big house in southern Fujian does not change greatly, and protecting house is mainly used for livestock breeding and drying for harvest. In the later period, under the influence of the returned overseas Chinese culture, the official large house in southern Fujian appeared a variety of shapes and systems, such as the storialization of the whole space, the storialization of the roof space, the storialization of the beech head and the house guard, and the house guard single, etc. When the environmental space was restricted and could not be expanded to the external space, the storialization of the space enabled the life function to move upward. Both in space layout and decoration style, it can be understood as the westernization of southern Fujian's official grand house under the influence of The Times [5].

3.2 Stability Characteristics in Evolution

Under the comprehensive influence of various factors, the official architecture has undergone great changes. However, under the influence of the original culture and natural geographical conditions, in the process of spatial evolution, no matter expansion, simplification and variation, or building and westernization, it still retains the characteristics of central axis symmetry, centripetal enclosure, compound form of courtyards, wooden frame system and sloping roof.

(1) Middle Axis Symmetry

The architectural space composition of Big House in southern Fujian mostly follows the principle of central axis symmetry. The main axis is located in the middle of the hall,

and the number of Spaces on both sides of the hall are symmetrical. Both in terms of plane and elevation, they are symmetrical according to the central axis, fully reflecting the order of “rites”.

(2) Centripetal Enclosure

The layout of official large house in southern Fujian adopts the centripetal enclosing mode, which means that in the middle of the building group is one or several quadheyuan developed along the central axis. When the building needs to be expanded, it does not copy a building with the same shape around, but expands by adding protective house on both sides of the building body.

(3) Courtyard Combination

Big house in southern Fujian is mainly arranged in the form of courtyard combination. Courtyard houses of different sizes and functions are formed by taking courtyard houses or siheyuan as the basic unit and developing in depth or horizontally. The basic form of courtyard houses is three or five main rooms and one wing room on the left and right sides, which are connected together. In Zhangzhou area, this form is called climbing lion or downhill tiger, Quanzhou area is called Sanjian Zhang. The basic form of Siheyuan is the main room three rooms, one on each side, the inverted seat three rooms, the middle door, Zhangzhou area known as four gold, Quanzhou known as five Zhang.

4 Analysis on the Influencing Factors of Southern Fujian’s Official Dasuo

4.1 Natural Conditions

Natural and geographical environment is formed in the long term in the natural process. In addition to large-scale changes under the action of geological activities and other natural conditions, human production and living activities will also have a small impact on natural conditions. However, in general, natural and geographical conditions exist as relatively stable factors.

In terms of natural environment, southern Fujian has a subtropical monsoon humid climate with rain and heat at the same time, low latitude, abundant rainfall, frequent sunshine and typhoons in the region, and it is also a region with many earthquakes. The wooden frame structure is conducive to earthquake proof, and the patio and sloping roof are conducive to drainage and windproof. In terms of geographical environment, Fujian is located in the coastal area, mountains and hills account for more than 80% of the total area of the province, and the mountainous barrier has created a unique regional culture [6]. In southern Fujian, people are mostly distributed in flat plains, platforms and hills, etc. Therefore, the population in the plain area is relatively dense, and the settlements and dwellings mostly live next to each other and adopt the form of compound combination.

4.2 History and Culture

The unique geographical environment of southern Fujian has created its rich history and culture. The historical and cultural context is formed by continuous accumulation, which

can be said to be rich in changes. However, in a certain period, it will be influenced by the same culture and show a certain stability.

In terms of spatial layout, the government-style grand house in southern Fujian is influenced by various historical cultures such as folk culture, religious culture, family culture, Kanlan culture and overseas Chinese culture. At the beginning of building site selection and construction, it is necessary to invite “Mr. Geography” to take the place, pay attention to the taboos in site selection and construction, and pay attention to the order of “rites” in the layout. North is respected and dominant, south is humble and guest, east is dominant and west is guest. Facing south, the main body is placed on the central axis, and the overall layout is symmetrical with the central axis. Influenced by their family culture, the big house in southern Fujian always exists in the form of courtyard combination, and the storeization of protecting house is also influenced by the Kanlan culture. The emergence of returned overseas Chinese makes storeization and westernization become the main popular trend of official large house in a long period of time.

4.3 Function of Substance

As a living place for people, official residence should first meet the needs of people’s living functions, daily use functions, production and life and other material functions. According to Maslow’s hierarchy of needs theory, people’s needs are constantly changing and show a rising trend from low to high. With the development of society, living standards are constantly improved. People’s production and life style and habits, functional needs, and the number of family population are constantly changing, and their material function factors are linked with people’s subjective initiative, which belongs to the changing factors in spatial evolution.

4.4 Social Structure

Social structure is always a reflection of the social form in a certain period, and it is a relatively stable factor in a certain period. However, the progressive characteristics of society make the social environment not always stay in a certain form, so it exists as a relative change factor in the evolution of the southern Fujian official grand house. In the social change, it is more susceptible to the influence of the changes of The Times and presents different situations.

During the Tang Dynasty, in accordance with the provisions of the “Tang will · Yu Fu Zhi”: “ordinary people made the hall reluctant to give up three four frames, the door house shall not be a room two frames.” In the Ming and Qing dynasties, “Ming history · Yu Fu Zhi” recorded: “ordinary people Lu, Hongwu 26 years custom: but three five, not allowed to use brackets, decorated color. Official grand houses are generally restricted by the official regulations of the contemporary society. Emerging ideas flooded in during the Republic of China, and the original official grand houses began to be regarded as symbols of the old times and rejected, thus emerging various new-style official grand houses.

5 An Analysis on the Evolution Mechanism of the Mandarin-Style Grand House in Southern Fujian

5.1 Generation -- Response to the Utilization of the Means of Production and the External Environment

There are many theories about the formation of official grand house. The more widespread one is the folk legend that the emperor gave “the palace of your mother” because of his concubine Huang. There are also some people who believe that the official grand house was influenced by the migration of the people of Central Plains. Its formation is bound to be affected and restricted by the local natural environment, geographical conditions and cultural customs. It is a response to the utilization of means of production and the external environment in the continuous exploration of ancestors.

5.2 Continuation -- Imitation and Replication of Historical Information

The generated official grand house basically has a complete form and pattern, and the volume, structure, layout, scale, construction method and materials of this kind of building are remembered as a kind of historical information and become a fixed construction logic. The continuation is to imitate and copy the existing historical information, and people’s mentality of seeking common ground will accelerate the circular development of official grand house. However, when the external environment changes, the existing construction logic will be analyzed and questioned in combination with the current environment. However, under certain circumstances, the existing construction mode, as the result of historical trials, is not easy to be broken, and more often it will become a reference mode for adjustment on the original construction mode.

5.3 Slight Changes -- Local Adjustments and Corrections in the Whole

Generally speaking, the official grand House is affected by various factors of change, but the general factors of change will not affect the stability of the existing model of the official grand house. Due to the change of production and living demands of people in different geographical locations, the official grand house expands and changes in various directions. However, no matter how it develops, it is still subject to the social situation and historical culture at that time. The original three-room layout is adopted in accordance with the principle of central axis symmetry, and the whole is a centripetal courtyard combination form. This evolution is based on the reconstruction and redesign of the original space shape and system. For the whole system of official large house, it belongs to local adjustment and correction, and does not have the effect of completely overturning the original shape and system.

5.4 Great Changes -- Evolution of New Mechanisms

In the process of various factors of change, if a certain factor is amplified, it may affect the change of the spatial form and system of the official grand house. However, generally, the huge changes of the contemporary social structure will promote the change of the spatial

form and system more quickly, that is, the westernization and institutionalization of the official grand house. Of course, the change of the shape and system of the grand house is not the result of any change factor. It is under the interaction of various factors that the reform of social structure magnifies the influence of change factors on the official style. Due to the pluralism and inclusiveness of southern Fujian culture, the formation and system had a relatively stable development state in the early period. During the Republic of China period, the ideology changed and the social structure began to change. During this period, the returned overseas Chinese came in with “Nanyang culture”, thus ushering in the new mechanism of westernization and building.

6 Conclusion

As a traditional residential building in southern Fujian, the formation and evolution of official grand house is not only influenced by any one factor, but by the coupling effect of multiple factors such as natural conditions, Central Plains culture, contemporary social structure and material functional needs. The expansion, simplification and transformation of official grand house adapt to the natural conditions and production and living needs. The reform of social structure will catalyze people’s dislike of old things and love of new things. The westernization and building of official large houses adapt to the development of The Times and social culture. In the evolution of form and system, the existing construction criteria are usually questioned and abandoned, so the courtyard combination form adapted to the social life remains. As well as some Central Plains cultural thoughts rooted in the construction spirit of residential buildings such as central symmetry and centripetal enclosing. The spatial shape and system of the southern Fujian official grand House integrates culture and science, and its evolution process is the dynamic development process of the society and history in southern Fujian, revealing the interaction between the official grand house and people and the environment. The analysis of its mechanism will be more conducive to the balance and transition between tradition and modernity, so that the southern Fujian Grand house can adapt to the modern context, so as to achieve better protection and evolution.

References

1. Cao Chunping: Traditional Architecture in Southern Fujian [M], Xiamen: Xiamen University Press, 2006, pp. 1-2.
2. Zhang Jie, Pang Jun. Spatial Analysis of Folk Dwellings in Southern Fujian from the Perspective of Immigrant Culture [M]. Nanjing: Southeast University Press.2019.12: Page 12.
3. Wang Jianshe, Zhang Ganli: Quanzhou Dialect and Culture (Part 1) [M], Xiamen: Lujiang Publishing House, 1994, pp., 162–163.
4. Liang Chuyu: A Study on the Unconventional Evolution of the Official Style of Great House in Southern Fujian [D], Quanzhou: Huaqiao University,2019, page 23.
5. Zheng Shenghua, GUAN Ruiming: From Official Large House to Four-Room Hall -- Analysis on the Evolution of Quanzhou Traditional Residential Houses [J], Huazhong Architecture, Volume 39, Issue 4,2021, pp. 121-125.
6. Yang Manhua, MA Quanbao, YAO Hongfeng: Traditional Construction Techniques of Folk Houses in Southern Fujian [M], Hefei: Anhui Science and Technology Press, 2013, pp. 4-5.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

