

A Study on the Alternative Aesthetic Characteristics of Spontaneous Rural Construction in Guangfu Area

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Abstract: The rural of Guangfu areas experienced the spontaneous construction process in the long-term, after "differentiation and integration", "screening and regeneration" stage, many construction forms with regional characteristics have been generated under the influence of spatial inheritance and shape superposition of "historical stage". Its construction image breaks through the standard threshold of traditional aesthetics and shows unique aesthetic characteristics. From the perspective of phenomenal architecture, this paper examines various special types of local spontaneous construction, and then interprets the logical relationship between functional needs and aesthetic appeals hidden behind the rural construction representation under the specific regional cultural background.

1. Introduction

The rural of Guangfu areas have generated much construction form with regional characteristics in the long-term spontaneous construction process. These unique forms are the result of continuous repair and renewal around the functional and aesthetic needs, while along with the updating of technology and materials under the background of regional culture of Pearl River Delta region. In this process, the countryside has formed its own construction law and aesthetic consciousness based on the local materials and construction method system. Therefore, recognize the construction logic and aesthetic characteristics that hidden after the identification of its phenomenon is beneficial to deepen the aesthetic cognition of Guangfu village.

2. Spontaneous Construction and Vernacular Architecture of Guangfu Area

Rural spontaneous construction mainly refers to the self-organized construction behavior among rural groups. Dr. Lu Jiansong explores the regional characteristics of architecture under spontaneous construction mode, and points out that "community spontaneous construction" is the behavior or result of making decisions on the location, form and investment of houses independently, that taking the family as the decision-making unit and not subject to the control of specific external instructions in order to improve their living environment[1]. The research defines the subject and self-organization characteristics of spontaneous construction. Wang Shuxiao thinks that spontaneous construction is: "a bottom-up behavior under certain restrictions. Community residents

actively participate in the process of scheme design and construction, and adjust or maintain the house according to their own needs in the later use"[2], which further clarifies the continuous transformation characteristics in the later stage of spontaneous construction. The concepts above are all based on the self-organization of rural family units. Dr. Li Teng further proposed the broad connotation:"construction behavior led by the the subjects in social fields, which effectively complements the construction in the political field and the market field, while accepting the guidance of the subject in the right field, and participating in the market field together[3]." It reveals the existence form of spontaneous construction of multi community formed by social organizations as decision-making subject, and establishes the research scope in the fields of "village in city, slum, community spontaneous public space, illegal building, new rural construction, and self-established residence ".

Based on the above research and the topic orientation of this paper, the author defines the connotation and category of rural spontaneous construction as follows: "1. The self-organizing construction behavior of rural subject mainly taking family as the unit without the guidance of public planning. That includes both group behavior and individual behavior; 2. It includes villagers' self construction and the maintenance, addition and reconstruction of original buildings, but it does not completely exclude the possibility of professional participation."

Guangfu area mainly refers to the Pearl River Delta (PRD) region. Its vernacular architecture can be divided into two categories according to the age. One is the blue brick house from the Ming and Qing dynasties to the Republic of China, with three rooms and two corridors and Ming Zi house as typical representatives. The Folk houses's external walls are made of green bricks, with herringbone sloping roof covered grey tile, and the structure is brick wood structure (Figure 1),



Figure 1: Three rooms and two corridors.

The other type is the red brick house, lime sand house and stone rice house successively produced after the people's Republic of China founding. The early red brick house is a story, the roof is a wooden rafter lap two sides of the gable to form a sloping roof truss, covered with earth tiles. Later, it gradually developed into a two-story red brick house with balcony (Figure 2).



Figure 2: Red brick house.

After the 1960s, the villagers painted a layer of sand on the exposed outer wall of the red brick house, and created more decorative details, gradually forming the shape of the sand lime house. In the 1970s, stone rice houses appeared with concrete frame structure, and that external wall material is stone rice (Figure 3).



Figure 3: Stone rice house.

3. The Esthetic Characteristics of Spontaneous Construction in Guangfu Village

Lu Yuanding Professor pointed out four characteristics for Lingnan culture in his book 《Lingnan culture, character and architecture》 : compatibility, pragmatism, secularity and innovation. These characteristics are reflected in the local construction of practical concepts, which go beyond the conventional standards and norms, often avoid the threshold of professional thinking standards, and inevitably generate morphological characteristics different from the conventional aesthetic rules. Through the investigation of Shawan old town, Xiantang village, Shabei village, Liantang village and majianlong village in Guangfu area, according to its unique construction phenomenon, the author induce the aesthetic characteristics of its Construction form, village interface and construction details and so on.

3.1. Heterogeneous Isomorphism: Eclectic Vocabulary Expression



Figure 4: Heterogeneous isomorphism.

Heterogeneous isomorphism refers to the abnormal construction mode formed by the different types and attributes of things or elements. In the settlement environment, on the one hand, it shows the confusion and overlapping of different forms and volumes. As shown in Figure. 4, the red brick house is superimposed Pine Barks house on the second floor, forming a mixture of the old and the new. The simple connection of the two different construction vocabularies breaks through the original construction form of red brick house, showing a form sense full of grotesque characteristics;

on the other hand, it shows the collage relationship of different materials on the surface of residential buildings: the local part of the building is patched with various materials and sizes to make up for the lack of detail function.



Figure 5: Material mix.

As shown in Figure 5, the house is made of red brick, green brick, stone and other materials, which gives the building a distinct narrative tendency. Because of the similarity of materials, historical buildings get harmony between individual buildings, and because of the difference and transformation of internal order, they form the mixed change of local construction.

3.2. Order Misplacement: Random Space and Hybrid Interface



Figure 6: Spatial hybrid interface.

From the macro-level of the settlement, "the coexistence of architectural phenomena in various historical periods" forms the "hybrid disorder" of the street interface, which is not only the deconstruction of the overall state formed by the blending of different monomer forms, but also the special-shaped roadway space caused by the individual orientation dislocation. As shown in Figure 6, in the main street interface of Xiantang village, from left to right are white porcelain brick houses, red brick houses, ash sand houses, red brick and green brick mixed houses, etc. At the top of the interface, the skyline is formed by flat roof, sloping roof and terrace. There are similar guardrails, wooden doors and windows, cement windows and other components between the houses. The differences and identity of the shapes reflect the architectural evolution of the village from green brick house, red brick house, lime sand house to stone rice house. When discussing order, Gombrich put forward the "continuity" theory: "when observing a certain pattern, the viewer will master a certain special law and imagine it repeatedly. When there is a "interruption" in one or several places during the continuation of this law, the attention of the viewer will be stimulated. This kind of accident or deviation will bring visual pleasure to the viewer [4]. The subversion of the

order under the mixture of materials makes the traditional space cause a variety of "accidents" and constantly arouses the aesthetic awareness of the viewer. The aesthetic feeling of separation is shown in the mixed interface (Figure 6).

3.3. Proliferation and Variation: Abnormal Evolution of Functional Space

Proliferation and variation refers to the new state of routine things due to the increasing function. Firstly, the spatial proliferation formed by repeated superposition of local functions of structures. Traditional village buildings in Guangfu mainly rely on the South-North courtyard lighting, but in the streets and alleys of Shawan ancient town, you can see the balcony space extending out to obtain the "transparent surface". Due to the appropriate environment, the building selects different balcony volumes with different heights, which not only obtains daylighting, but also increases the use area, forming the seemingly "strange" space proliferation in the streets (Figure 7);



Figure 7: Balcony extending out of the roadway.

Secondly, due to the deviation and dislocation of the structural sequence of individual buildings, the overall shape of the building has changed. As shown in Figure 8: the original structure is a traditional green brick building with sloping roof. In the later stage, it spontaneously created a circle of balcony space by breaking through the original shape on the second floor, and built an additional lime house by using the front balcony space. The side of the balcony was overlapped with iron scaffolding to form the side slope roof. The connection and juxtaposition of many elements such as green brick, white ash, platform and scaffolding forms a multi-dimensional construction sequence, which subverts the spatial sequence of the original green brick house.



Figure 8: Balcony extending out of the roadway.

3.4. Exaggeration of Modeling: Immature Structural Form

The local elements of things are exaggerated in proportion or unconventionally combined to form a strange and strange overall relationship. The concrete performance is the random coupling and exaggerated proportion of the local volume of the building. As shown in Figure 9, the combination of doors and windows, and the combination of building blocks and Western style roofs constitute a unique style different from conventional regional buildings. In Figure. 10, the ratio of the gate post to the gate is exaggerated, the comparison is childish, and the volume of the cabin and the gate in the picture is funny. The above situation shows the randomness and activity of the construction under the limited material conditions. This kind of non academic and non professional construction activity breaks through the limitation of norms, but presents another vivid grass-roots aesthetic taste.



Figure 9: Grotesque forms.



Figure 10: Naive gate.

3.5. Juxtaposition and Superposition: Composite Function of Components

Juxtaposition is a composite functional form formed by the superposition of old and new local functional components. As shown in Figure 11, an iron hollow door is added to the door to facilitate the internal and external ventilation when the wooden door is opened. At the same time, the iron door is designed to be folded to adapt to opening in narrow alleys. There are many locks on the wooden doors of many residential buildings, including modern iron door pin, traditional knob lock, external lock, wire lock, etc. (Figure. 12). In Figure. 13, corresponding steel is added to the exterior of the original building. The ladder not only increases the traffic channel, but also expands the outdoor viewing space. The above cases reflect the compound phenomenon of local functions of the building. The added different components do not interfere with each other, and the former is not banned due to the emergence of new things. These components are constantly enriched, but also reflect the thickness of life accumulation.



Figure 11: External folding iron door.

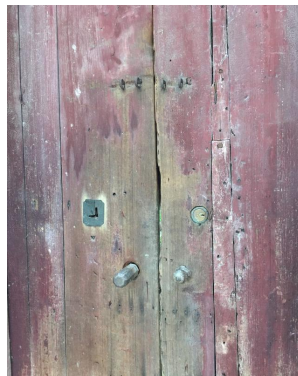


Figure 12: Juxtaposed door locks.



Figure 13: Additional steel ladder.

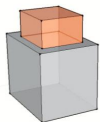
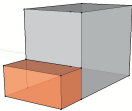
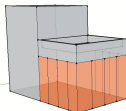
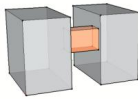
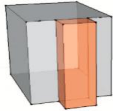



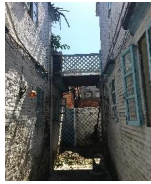

4. Logical Analysis of Rural Spontaneous Construction

Reconstruction and addition are the normal conditions of rural spontaneous construction. Driven by daily function, they mainly use the roof platform, balcony and adjacent building space of the original building, and through the means of growth, expansion, embedding, enclosure, connection, etc., the volume of the original building is integrated with blocks and controls. Zhang Bin, an architect, calls it "the phenomenon of functional spillover."

Growth: the structure derives independent space from the top of the original residence, forming the vertical relationship between the new space unit and the original building. Growth increases the volume and level of the building height, which is manifested in the form of roof loft and other space forms; expansion: the construction behavior of extending and covering to the surrounding to form a

new space on one or more sides of the original building. Expansion increases the coverage area and sense of domain of the building base; enclosure: the closure of the local gap range of the building to form an independent unit space; connection: refers to the corridor communication between two or more buildings to make the connected monomer become a closely related unity. As a medium of space connection, the relationship between the form, location and architecture of stairs is dynamic (Table 1).

Table 1. Growth, expansion, encirclement and connection.

Growth	expansion	encirclement	connection	
				
				

5. Aesthetic Characteristics of Spontaneous Rural Construction

Spontaneous construction reflects the inborn instinct of rural subjects to build houses in order to meet the needs of life[5]. Everyone is a builder while building a different life style, the construction behavior will certainly break through the stylization rule of elite aesthetics, so that the construction pattern, scale and connotation that meet the original needs of life will be revealed.

5.1.The Anti Classical Aesthetic Characteristics of Construction Form

Under the limited economic and social conditions, villagers naturally interact with land and production mode. The construction form does not need to bear or symbolize too many labels beyond the life itself, but more reflects the relevance between construction itself and lifestyle. In the evolution of time, the construction fragments of different periods are integrated into a settlement site of heterogeneous elements. The dislocation and variation of different materials and the correlation of decorative components make the traditional order full of deviation and dislocation. However, the immature and random construction forms often break through the conventional norms and popular schemata. In addition to the unconventional and astonishing visual feeling, these features also show new, strange and different aesthetic images. They are different from the classic aesthetic principle of "harmony, balance and unity", and show the anti-traditional aesthetic characteristics of "grotesque, separation and mixture". As the scholar Du Dongzhi said: "those ancient, simple and even strange, dangerous vigilance, in fact, has increasingly become a secret place and treasure land for people to get rid of urban civilization and transcend the secular ideal [6]". Therefore, its aesthetic attribute is quite different from the closed and single ultimate model of elegant design, which is non professional and ambiguous.

5.2. The Order and Anti Order Characteristics of Construction Mode

From the perspective of generative model, local construction is constantly deriving new patterns based on paradigm imitation and reference. Monomeric morphology has the isomorphic characteristics of mutual imitation and prototype reference, and the heterogeneous tendency of modification and evolution based on individual subjective will. On the other hand, from the micro deductive level, the architectural pattern and decoration have been generated, inherited and updated around the local construction prototype and culture. In the evolution process of the new and the old, it is less impacted by foreign culture, and has not been interfered by too much institutionalization and standardization of superstructure. Farmers are associated with land, life and construction, and constantly expand new possibilities. Therefore, the construction process is a contradictory interaction process of "order and anti order" and "system and anti system".

5.3. Finiteness and Individual Adaptability of Construction Process

The finiteness of construction is embodied in the simple、 economical and practical construction mode under the limited material conditions, including the limitation of materials and construction methods and the limitation of architectural meaning expression. Under the limited economic and technical conditions, " The design process is a process of pattern adjustment or variation, and individual changes and variations are more than the original buildings "[7]. The way and content of each household's construction are continuously transformed according to their own conditions and needs, and new forms are constantly derived on the basis of the imitation of the construction paradigm, showing the aesthetic taste of the ordinary groups at the bottom of the society. Therefore, it has the of individual adaptability characteristics of material technology and aesthetic.

6. Conclusions

Kant(Immanuel Kant) pointed out: "it is impossible for a perfectly correct face to have characteristics, but that's not the archetype of beauty, that only with the correctness of the school learning." It expounds the vastness territory of beauty, In addition to the classic aesthetic principles of integrity, unity and elegance, there maybe have great beauty in even the opposite strangeness, difference and ugliness.

The local context shows its unique visual form in the spontaneous and original state: the juxtaposition of different style and images, the blending and collage of various materials, the organic superposition of different functions, etc. which show the aesthetic characteristics of the local place sense. Reexamining the special aesthetic types of spontaneous construction will be beneficial to see the connotation of rural construction from another side, and even have the possibility of expanding new aesthetics. And this's the nutrition must be absorbed for designers when they recognize, integrate and promote the village.

During the design of rural building, apply it to integrate and refine the aesthetic characteristics in the place, and combine with modern design language to transform the spontaneous state into the "conscious" state, so as to make the low-level "strange" to the high-level "new and strange" aesthetic transformation, which may be an effective way to promote the innovation of local construction.

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