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# Regeneration Research on the Rural Landscape on the Basis of Cultural Gene

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**Abstract:** Under the background of response to the call of rural civilization, it aims to solve the problems of serious cultural deficiency and withered of the rural landscape in the village folklore. By means of analysis on the overall of the basic conditions in the village of Tianzhu where She-ethnic minority group inhabiting in, the thesis cleared and analyzed the culture from the perspective of material and immaterial level in the rural landscape on the basis of a cultural gene. And then the atlas of the cultural gene in the area of She-ethnic minority group in Fujian will be constructed. Through the combination with the design elements for the rural landscape, the thesis puts forward solutions relatively for the five landscape elements including architecture, service facility, formation, plant, and water body.

## 1. Introduction

Cultural gene is generated from the concept of biology, which is called as Meme in the Western countries, and it is the basic unit for the culture delivery by means of the biological imitation and other non - genetic means[1-3], while besides, a cultural gene also bears the inheritance of cultural heritage and the feature of variation[4-6].

As to the definitions to the terminologies of “gene”and”cultural gene”at home and abroad, they are totally different, while the foreign research on them was started early, with wild scale and diverse conclusions; however, the domestic research was lagging compared with it, and most of the researches have been integrated into the type of language and literature. There are fewer researches for the field of culture, most of them are started from the aspects of analysis on the historical development and logic analysis, and it explains the problems for national culture or cultural inheritance with the assistance of the theory of meme ( cultural gene ). In the thesis, it attempts to have clearance on the culture in the village of She-ethnic minority group in Tianzhu in accordance with the sequence of the system order of cultural genes, which are psychological culture → behavior culture → system culture → material culture[7-12].

## 2.Regional Overview

The village of She-ethnic minority group in Tianzhu is located in the northern mountainous area in Donghu Town, Lianjiang County, Fuzhou, Fujian Province, which is one of the 19 administrative



villages of She-ethnic minority group in Lianjiang Country. And it has the features of convenient transportation and boundary on all sides. The village of She-ethnic minority group in Tianzhu is in the place of valley and hill, there is profound soil in it, and besides, it has high content of the nutrient and abundant natural resources, including forest, Tianzhu Mountain, Fairy Footprints, Tianzhu Reservoir, and Farmland Landscape, where there are advantaged landscape. As to the humanistic and cultural tourism resources, there is a cultural center of She-ethnic minority group and cultural square, where there are profound historical and cultural deposits, and high value for resource development. However, at present, it is growing more serious for the damage on the cultural inheritance in the village of She-ethnic minority group in Tianzhu, there are ruins for the preservation of tangible cultural heritage and intangible cultural heritage of She-ethnic minority group, it has low recognition on the cultural protection, and the popularity of traditional She-ethnic minority group cannot be carried forward.

As to this research, it selects the village of She-ethnic minority group in Tianzhu as the object, on the basis of the perspective of cultural gene, it has analysis and research on the gene in the landscape of the village of She-ethnic minority group in Tianzhu, and then with the combination of the application of the strategy of the regeneration design for the rural landscape, it can solve the problems on the revitalization for rural culture under the background of rural revitalization.

### **3.Extraction Method of the Cultural Gene in Rural Landscape**

By means of the extraction of the cultural gene in a rural landscape, in accordance with the simulation on the gene inheritance of biology, it can have a continuation on the life and cultural inheritance on the culture in a rural landscape.

Based on the summary of the extraction methods of the cultural gene, such as the associate professor of Shen Xiuying[4-6] and other scholars, the limitation of the extraction of the gene in a single way is considered. Under this case, the study will adopt three research methods, including the drawing extraction method, meaning extraction method and element extraction method. The cultural elements in the rural landscape are extracted from the level of the physical form.

#### *3.1. Drawing Extraction Method*

As to the faith cultures of She-ethnic minority group, there are “ Panhu ”worship ( dog worship ), snake worship, and also the hunting god faith, and most of them are demonstrated in the totem, which takes the costume, ornament, and headwear as the carrier of a totem. As to the extraction of the cultural pattern, by means of the carrier of material, it can demonstrate the special folk characteristics and cultural elements, which can express the expectation of people on good life and also the zeal of them to life.

#### *3.2. Meaning Extraction Method*

She-ethnic minority group takes agricultural production as the main source, there are none of the stable writing systems, in the early stage, the civilization of people of the word is from the simple hieroglyphics, and they can have expression and record by means of simple letter symbol. As to the application of the meaning of some letter symbols in the current record into the rural landscape, it can express the struggle of people of She-ethnic minority group to the evolution of word meaning in the development of culture.

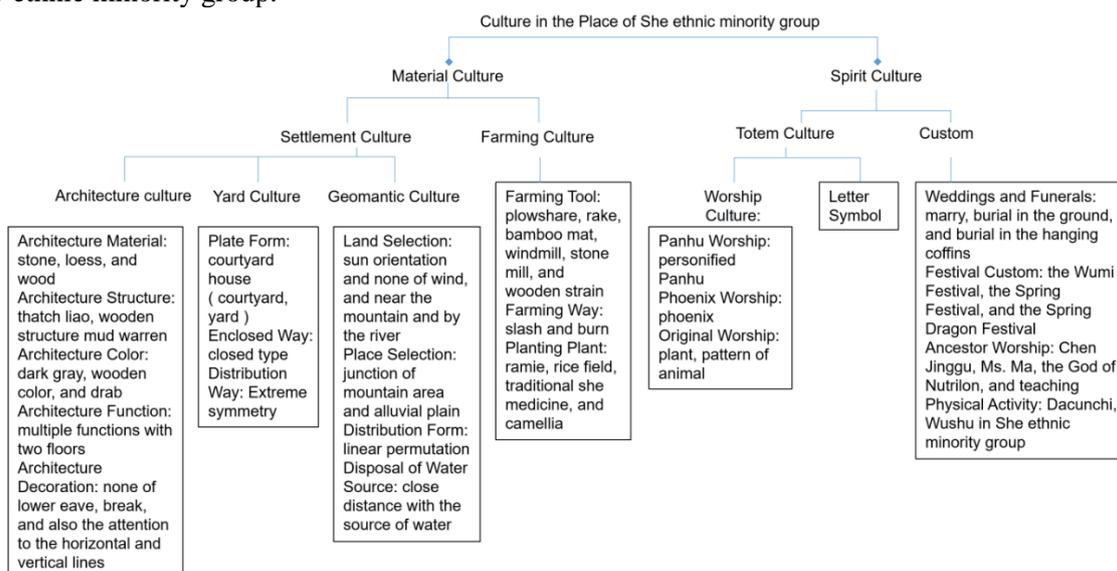
#### *3.3. Element Extraction Method*

As to the component element of architecture, distribution of street, warped form of the roof, form of totem, and culture scene in the material cultural carrier of traditional She-ethnic minority group, it has simple extraction on these elements, which concentrates on the material landscape elements of traditional village of She-ethnic minority group. And then the culture of the rural landscape of She-ethnic minority group through the combination of the design elements of the landscape will be reappeared.

#### 4. Analysis on the Cultural Gene in Rural Landscape

The thesis analyses and summaries the design elements of the landscape in the village of She-ethnic minority group in Fujian from the perspective of physical form. In the material cultures in the design elements of the landscape in the village of She-ethnic minority group, there are mainly two types, which are settlement culture and farming culture. Among them, as to the settlement culture, it includes the architecture culture, yard culture, and geomantic culture, while the architecture culture takes the stone, loess, and wood as the materials for construction; the thatch, wooden structure and mud-walled house as the structure of the construction; the dark gray, wooden color, and drab as the colors for the construction; the multiple functions with two floors as the function of storage of the construction. And there are also the features of none of the lower eave, break (it is the coefficient obtained through dividing the vertical distance between the two adjacent purlin of the wood structure by the corresponding horizontal spacing between purlins length, which makes the roof present a concave curve. With the height rising, it gets steeper and steeper, which is conducive to lighting and drainage), and the attention to the level and vertical lines. As to the yard culture, it takes the courtyard house (courtyard and yard) as the plate form; the closed type as the form of the enclosure; and the extreme symmetry as the feature for the distribution. While for the geomantic culture, it takes the sun orientation and none of wind, near the mountain and by the river as the selection of the land; the junction of mountain area and alluvial plain as the selection of place; the linear permutation as the form of distribution, and the close distance with the source of water as the feature for the disposal of water source. For the farming culture, it takes the plowshare, rake, bamboo mat, windmill, stone mill, and wooden strain as the tool for farming; the slash-and-burn cultivation as the form of farming; the ramie, rice field, traditional drugs of She-ethnic minority and camellia as the feature of the planted plant.

Analysis of intangible culture and carrier: in the intangible culture in the design element of landscape in the village of She-ethnic minority group, there are mainly two types, which are totem culture and custom, while totem culture is the original Panhu worship in personification, phoenix worship of phoenix graphic, plant, and the original worship of pattern of animals, and it takes the language of She-ethnic minority, folk song, and letter symbol as the composition of the language culture. As to the custom, it is composed by means of the activities of weddings and funerals, festival custom, ancestor worship, teaching, Dachicun, and the physical activity of martial arts in She-ethnic minority group.



## 5. Regeneration Strategy for Rural Landscape

### 5.1. Architecture

The materials and colors of the original She-ethnic minority group architecture will be used in both of the architecture design and facade reconstruction. As to the materials for the wall of the architecture, the stone is the basic part for the architecture, loess is put in the upper side like the body of the wall, and the wooden structure can support the pier construction. There are three different support forms for the wooden structure, while the regeneration of the architecture takes the form of Chinese character “Ge” as the reference for the form of the architecture. By means of the combination with the current brick building, it has modifications on the wall, external wall, and roof on the architecture in the current village of She-ethnic minority group.

### 5.2. Landscape sketches

It integrates the traditional element of literal meaning into it, and also the font meaning of “X”(day), “◇”(pregnant, smooth), and “卍”(worship) into the design of the sketches of landscape, in the collocation of the external wall of the architecture, it means that everything goes well and worship to the sun. As to the design on the display wall and the design on the landscape wall, in accordance with the drawing extraction on the character “She”, it can integrate the concrete image of the Chinese character into the shape of the design. As to the sketches of bench table, and spotlight, in accordance of the element extraction, it has some abstract design, but concretely, and it takes the function feature of the sketches at the core, which pursues the sense of similar appearance, and forms the spirit of the times and feature.

### 5.3. Pavement

Simplify some letter symbols and totem patterns of She-ethnic minority, such as phoenix totem and tiger totem. And combine them with the flower street paving mode and paving materials of Chinese classical gardens. After abstraction and simplification, these patterns will be used in the important node of landscape design and the pedestrian road of tourists. As to the selection of the material, it takes the local materials with the combination of cobblestone and macadam mainly, and these can be economic and substantial, and also pursue the ecologically environmental protection.

### 5.4. Plant

As to the selection of plant, it should take the local species in the village of She-ethnic minority group as the basis, which has some changes on the traditional conditions of indigenous tree species, and it also plants some landscape tree species in the important scenic spots (including peach blossom, erythrina crista - Galli, camellia, and Magnolia denudata Desr.). It has changed on the original plant community, increases the changes on the canopy line and forest fringe line of the plant community, enriches the viewing perspective of plant, beautifies the shape of the plant, and maximizes the ecological function of the plant.

### 5.5. Water Body

There are two existed ponds and one reservoir in the village of She-ethnic minority group in Tianzhu, for the regeneration design, it should take the ecological thought to have design and processing on the revetment, weakens the over rigidification on the current pond in the village of She-ethnic minority group in Tianzhu, strengthens the hydrophilia of people, and increases the quantity of the hydrophile plank road of water. For the design of the landscape sketches and service facility in the surrounding of the water, it increases the totem element and selects the puce log as the material, which pursues to create the atmosphere of leaning against mountains and water in the traditional village of She-ethnic minority group in Tianzhu.

## 6. Summary and Prospect

### 6.1. Summary

The thesis sorts out and analyses the culture of She-ethnic minority village in Fujian, meanwhile, summarizes its common features and forms of cultural gene in the rural landscape design elements, which contains settlement culture, farming culture, totem culture and custom. Besides, it constructs the atlas of the cultural gene of She-ethnic minority group in Fujian. By means of the element, drawing, and symbol extraction methods, it takes the cultural genes with common feature and applies detailed design to the five landscape elements, including architecture, service facility, pavement, plant, and water. For instance, it takes the courtyard house ( courtyard and yard ) as the plate form and the closed type as the form of enclosure. And it takes the extreme symmetry as the feature for the distribution. While for the geomantic culture, it takes the sun orientation and none of wind, near the mountain and river as the selection of the land; the junction of mountain area and alluvial plain as the selection of place; the linear permutation as the form of distribution, and the close distance with the source of water as the feature for the disposal of water source.

### 6.2. Prospect

It tries to find the solutions on the problems of ignorance of cultural inheritance, none of characteristic culture of landscape, formalized landscape for tourism, by means of the attempt on the innovation combination of the concept of general gene and the design element of landscape, it puts forward the design strategy of cultural landscape of She-ethnic minority group, tries to create a rural landscape of She-ethnic minority group with cultural spirit, and hopes to provide some related theoretical references for the construction of landscape pf traditional folk villages.

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