

The Return of Local Materials

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Abstract:

In recent years, some villages are slowly “disappeared”, and some data show that there are hundreds of villages “disappearing” every day from 2010 to 2020. Taking Luoshidi Village, Huanggang City as the research object, we take local culture, natural resources, and customs as the starting point, return to the local landscape with local materials as the starting point, design and respond to the local problems, design and transform the rural landscape, to build a rural landscape with local cultural characteristics and local cultural heritage.

Keywords:

Local Materials, Rural Landscape Design, Rural Transformation

1. Introduction

The development of urbanization makes the development of cities more and more outstanding, and as people's living standards improve, people in rural areas tend to choose to settle in cities with better resources, and at the same time, people living in cities prefer to go to the countryside to experience the “natural beauty” for the prosperity in the city, to pursue spiritual rest, to feel nature, and to enjoy the endless fun brought by nature. The rural landscape can show us the charm of the natural landscape of the countryside human landscape, which is full of natural charm, unlike the landscape places in the city, the rural landscape is natural, only need a little modification, everything is natural. Building and renovating rural landscapes can not only drive the rural economy, increase rural vitality and labor demand, but also beautify the rural environment and create a unique regional cultural landscape. The village landscape construction needs materials, the village discarded, forgotten bricks and stones, mud, grass, and trees, and even the daily necessities are all local materials that can be used. To let the countryside be preserved, we need to let the vernacular landscape return and let the local materials return.

2. The Concept of Local Materials

The term ‘local land’ is interpreted in ‘Cihai’ as ‘the land of one's hometown. By referring to one's hometown’. Native materials are those that grow in a foreign land or come from a local area, have obvious regional characteristics and traditional cultural imprints, have unique natural and cultural characteristics of the region, have a wide

range of materials, low cost of materials, strong ecological and environmental protection, strong integration with the local area, and have the renewable ability.

3. Types and Characteristics of Local Materials

3.1. Types of Local Materials

Local materials can be divided into local building materials, local waste, local plants, and so on based on their types; Geographically, it can be divided into traditional local materials and local materials; From the perspective of material properties, it can be divided into natural materials such as stone, bamboo, and soil that have not been artificially processed, and artificial materials such as bricks and tiles.

3.2. Characteristics of Local Materials

Compared with widely used modern materials such as concrete and steel structures, local materials have more profound cultural accumulation and historical sedimentation, and can better and fully reflect regional culture. The use of local materials is not only an interpretation of local culture, but also has ecological adaptability, economy, and safety.

3.2.1. Ecological adaptability

Local materials have excellent recycling performance and are easily integrated with the rural natural environment. Most dismantled materials can also be reused. Local building materials are widely used in village construction. These materials are processed and utilized, and when collapsed, damaged, and the "task" ends, they return to nature, and the entire process can continue to circulate. Local plant materials are also the main aspect reflecting this feature, and plants need to adapt to the natural environment to grow quickly and well. Because most local materials are renewable, the use of local materials is of great significance for the protection of the local ecological environment. Using local materials for landscape design can minimize the damage to the existing local environment caused by construction, as local materials are used with less transportation.

3.2.2. Economy

Different ethnic groups have their own different cultures, and regionalism is one of the important reasons. Different regions and resources have created different cultures. As the saying goes, "relying on mountains to eat mountains, relying on water to eat water", rural areas are basically operated by a natural economy and self-sufficient model. The layout of villages is also tailored to local conditions. Due to these reasons, building materials are very suitable to obtain from the local area, and local materials have become the best choice for rural construction. At the same time, the acquisition of local materials is relatively easy and the construction method is also relatively simple. Local materials are used, greatly saving transportation and costs, which greatly reduces resource consumption in these areas.

3.2.3. Simplicity

The use of local materials often does not require excessive processing, and their inherent texture, color, texture, and form can reflect the natural style and historical charm. At the same time, the operation of local material construction is also relatively

simple, without too many complex techniques, mostly stacking, paving, etc., which is convenient for local residents to process and utilize.

4. The Significance and Value Of Returning Local Materials

4.1. The significance of returning local materials

4.1.1. Cultural aspect - Continuation and inheritance of rural culture

With the current economic development and improvement of quality of life in rural areas, many traditional old brick and adobe houses have been replaced with “small tall buildings” made of reinforced concrete with some magnificent shapes. These types of houses are widely used in rural construction, causing farmers’ houses and the overall design style of the village to not match, thus gradually losing the natural style of the countryside, especially in rural planning without considering the actual situation. Blindly imitating urban residences leads to a decrease in the original local culture and a gradual disappearance of folk regional characteristics. The use of local materials plays a very important role in preserving and protecting regional historical and cultural heritage. Applying local materials to rural landscapes, and continuing and inheriting local culture, is the cultural return of local materials.

4.1.2. Spiritual aspect - avoiding the trend of "one village, one appearance"

According to the survey, some regions blindly follow the trend and formalism when developing villages, resulting in the situation of “a thousand villages with one appearance”. The reasons for these situations are various. The infrastructure is not perfect enough, the lack of professional operation and management talents, and the lack of reasonable planning and investment in the early stage, results in a single and boring rural landscape, and even the landscape facilities are very poor no matter which village you go to. The countryside is our root, and returning to the countryside is more important than giving people a sense of belonging. We need a medium to make people feel spiritually returning to the countryside, and local materials are the best choice. The landscape comes from nature and also needs to return to nature. The rural landscape presents us with a beautiful cultural landscape in the countryside, which is different from the landscape created in cities. It is natural and contains mostly natural endowments, requiring only slight modifications. The return of local materials, on the other hand, is also the reuse of local materials, abandoning blind and simple replication and imitation, maintaining the principle of adapting to local conditions, combining modern technology with local materials to form a regional landscape, allowing people to feel the different charm of rural areas, which can be said to be the spiritual return of local materials.

4.1.3. Material Level - Retrieving Rural Landscape

Through on-site investigations and observations in recent years, it has been found that many rural areas have not received environmental treatment, with garbage, waste, and soil piles everywhere. Plants grow randomly, and power lines are connected and pulled randomly. As time goes on, the population in rural areas is decreasing. Houses that no one lives in have been repaired, some have been damaged by wind and rain, and some have even collapsed without attention. It is not difficult to see that these rural landscapes are very lacking. Building and transforming rural landscapes can not only drive the rural economy, increase rural vitality and labor demand, but also

beautify the rural environment and create unique regional cultural landscapes. The construction of rural landscapes requires materials, and the discarded and forgotten bricks, stones, soil, plants, and even daily necessities in villages are all local materials that can be utilized. Retrieving rural landscapes is the return of local materials from a material level.

4.2. The value of returning local materials

4.2.1. Beneficial for reflecting the spirit of rural places

The concept of place spirit was proposed by the famous Norwegian urban architect Norbert Schutz in 1979. Through understanding, place spirit refers to the concentrated expression of a series of characteristics that endow certain places with a specific emotion or personality. Some places are considered special or memorable due to their unique physical characteristics or iconicity, or because they are related to important events. Local materials, as local materials, can evoke people's longing for their hometown and arouse their longing for the countryside. Between people and the countryside, personal experiences and memories make people deeply attached to the countryside, generating a sense of belonging and identification.

4.2.2. Beneficial to highlighting the spirits of the place in the rural

Regionality refers to the differences between regions, with different local colors. The use of local materials is conducive to expressing the regional characteristics of rural areas. Local materials are extracted from the local countryside, and each rural local material is a precious treasure that has been selected and preserved throughout history. Due to different regions, the types of local materials also vary, such as the well-known Luoyang peonies and Shanxi caves, which are all examples of local materials expressing regional characteristics.

5. Analysis of Soil Material Application - Taking Luosidi Village as an Example

5.1. Local Building Materials

5.1.1. Bamboo

Huanggang City is rich in bamboo resources, and the beautiful bamboo forests add many stories to Huanggang. Huanggang City expert Yu Yanwen said, "When it comes to natural resources, there is nothing more abundant in Huangzhou than bamboo." After being exiled to Huangzhou, Mr. Su Dongpo recited the first line of poetry, which was "The beauty of fish is known around the Yangtze River, and the fragrance of bamboo shoots is felt even in the mountains." "It is better to eat without meat than to live without bamboo. When Wang Yucheng, a literary figure of the Song Dynasty, was exiled to Huangzhou, he wrote the famous "Record of Huanggang Bamboo Tower". The first sentence read "There are many bamboo trees in Huanggang", which is enough to demonstrate the charm of bamboo trees in Huangzhou. The natural geographical advantages and hydrological conditions allow bamboo to grow well here, providing abundant bamboo resources for the rural areas of Luosidi. Although bamboo is a commonly used landscape material, research has found that the application of bamboo has not been well reflected in Luosidi rural areas. Analysis can be used to make fences, fences, or bamboo corridors for Luosidi rural

dwelling, and bamboo can also be used as local plants, Planting can be carried out in the landscape to create a beautiful bamboo forest landscape.

5.1.2. Bricks and tiles

Most of the residential buildings in Luosidi Village use bricks and tiles as the main construction materials. Some of the residential buildings in Luosidi Village are made of gray cement walls paired with gray tiles, some of which are slightly whitewashed. There are unused bricks and tiles near the residential buildings, which can be used for building some wall landscapes and laying the ground.

5.2. Local Plants

In June 2021, Huanggang City passed the “Double City Trees and Double City Flowers” proposal. The city trees are beech trees and ginkgo biloba, and in the survey, beech trees and ginkgo biloba also account for the majority of the plant population in the rural areas of Huanggang City. Therefore, it is no longer suitable as local plants in the rural areas of Huanggang City.

5.2.1. Beech Tree

The beech tree has a dignified posture, and its overall shape is tall and majestic. Its autumn leaves are brownish red, making it an excellent tree species for viewing autumn leaves. Mixed planting with evergreen tree species as a scenic forest can reduce noise and dust. Wood has a fine grain, a hard texture, and can withstand water. It can be used as a material for bridges and furniture, and its stem fibers can also be used to make artificial cotton and ropes. Due to the homophonic sound of “beech” and “ju”, China has been known for its titles such as “ju ren” in scientific research since ancient times. Therefore, beech trees contain auspicious and auspicious omens. Beech trees are resistant to drought and barrenness, and have good soil and water conservation and wind resistance. The bark and leaves of beech trees can also be used as medicine, and in the rural areas of Luosidi, the quantity, and quality of existing beech trees can be improved to better exert protective and economic benefits.

5.2.2. Ginkgo biloba

Ginkgo biloba is a plant of the Ginkgo family and genus. Arbor, up to 40 meters tall, with a diameter at a breast height of up to 4 meters. The crown of the tree appears conical in youth and adulthood, and broadly oval in old age. Ginkgo biloba is a fast-growing and precious timber tree species, with a fine structure, light and soft texture, rich elasticity, easy processing, and luster. It is an excellent wood that can be used for construction, furniture, carving, and other purposes. Its seeds can also be consumed and used for medicinal purposes. Its leaves can be used for medicinal purposes, insecticides, and fertilizers, which has certain economic benefits. Ginkgo biloba has a beautiful tree shape. In spring and summer, the leaves appear light green, and in autumn, they turn golden yellow, which is very beautiful. Ginkgo biloba can be used for landscaping and greening in rural areas of glucoside.

5.3 Local waste

5.3.1 Wood

Through field investigations, it has been found that there are idle whole round logs in the rural areas of Luosidi, which are randomly discarded in various corners of

residential buildings. After observation, they have a good appearance and can be processed to make a log landscape or wooden decorations.

5.3.2. Old bricks and tiles

There are a large number of old bricks and tiles in the rural areas of Luosidi, which can be used for parking lot flooring or small fences for plants. Slightly damaged old bricks are used as flooring materials to avoid any conflicts. Green grass can grow from the damaged old bricks to fill the gap, which can be reused without large-scale damage to the natural environment of the countryside.

5.4. Other materials

5.4.1. Tile jar

There are idle clay jars in Luosidi Village that can be used to create scenic walls, or plants can be planted in them, or combined to form a corner of the landscape. As an indispensable living tool for villagers, adding clay jars to the landscape can enhance their sense of familiarity.

5.4.2. Grinding disc

Stone mills are commonly found in villagers' homes, and after prolonged use, they are inevitably worn out. After replacement, many grinding discs are left behind, which can be placed upright as decorations for green edges or combined with bricks and stones to create scenic walls.

5.4.3. Snail Shell

The village was named after the shape of the land that resembled a snail (scientific name: *Margarya melanioides*) when former people moved to the area. The Happiness Reservoir is rich in natural resources, and reservoir aquaculture has always been done by humans and nature. Relying on natural aquaculture, it can not only meet the living needs of local people, but also attract a large number of tourists to come fishing, drive the development of the local tourism industry, and improve local economic benefits. Luosidi Village is backed by the Happy Reservoir and has excellent reservoir resources. It is rich in aquatic resources, which can cultivate snails and enhance the reputation of Luosidi Village. The material of snail shells not only reflects the rich aquatic resources here but also corresponds to the place name of Luosidi Village. At the same time, it promotes economic development. After being treated or weathered, snail shells can appear white and can be simply stacked to form a wall, they can also be mixed with soil for small-scale landscape construction and can be used to make some souvenirs to increase commemorative significance.

6. Conclusions

We need to strengthen the importance of local culture and the use of local materials, using personalized and targeted design methods and construction techniques. I hope that the return of local materials can enhance the importance of local culture. Through the analysis and application of local materials in Luosidi Village, we can organically combine local materials with Luosidi Village culture, better reflecting the beauty of local culture. This article is based on the local materials of Luosidi Village. It is hoped that each village can start from its own unique local materials, research, and explore

its unique value, to slow down the "disappearance" of the countryside, leaving behind the beautiful scenery of the countryside, and retaining the beautiful rural memory.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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