

# *The Application of Plant Weaving Materials in the Indoor Space of Rural Tourism Resorts*

Ning Zhang\*

*Eurasian Art and Design School (EAaD School), Xi'an Eurasian University, Xi'an, Shaanxi, China*  
*zhangning@eurasia.edu*  
*\*Corresponding author*

**Keywords:** Plant Weaving Materials, Local Tourism and Vacation, Indoor Space, Application

**Abstract:** The quality of human living environment is closely related to the use of materials in interior design. This article will elaborate the environment embodied by plant weaving materials in the interior design of rural tourism resorts by analyzing the characteristics of plant weaving materials, interior interface decoration, and the application of interior space segmentation value. Plant woven materials have the characteristics of natural and green environmental protection. With the popularization of people's awareness of environmental protection, plant woven materials have been applied to interior design as an innovative environmental protection concept, which not only realizes the scientific concept of sustainable development but also creates low-cost Carbon ecology, healthy and comfortable living environment.

## 1. Introduction

The use of "green materials" in current and future interior design has good practical efficiency and high resource utilization. Green plants themselves are an environmental substance capable of absorbing large amounts of carbon dioxide, converting it into biomass energy and releasing carbon dioxide through photosynthesis. The course "Materials and Crafts" of the Environmental Design major of Ed Art and Design College of Xi'an Eurasia University has also expanded the teaching of materials in design and craftsmanship in the process of interior design practice. As a local material, plant woven material is original and simple, and has multiple characteristics such as ecology, environmental protection, sustainability, and antibacterial green. At present, most tourists in the tourism market like to participate in the production and viewing process of local cultural characteristics and ecological handicrafts when they go on rural tourism. Based on plant weaving materials and the overall tonality of rural resorts are similar, therefore, in many rural tourism resorts indoors in the design of the space, plant weaving materials have been widely used.

## **2. Characteristics of plant Woven Materials**

### **2.1. Safety**

More and more people are beginning to pay attention to the health and safety of their living environment. When decorating a room, we will choose decorative materials that are durable, beautify the room and are harmless to the body. This is not only a requirement for plant fabrics, but also a All trim materials required. Different from industrialized products, plant woven material itself is a kind of natural environmental protection material with a long history of development. The processing of wood from raw materials to finished products not only does not pollute the environment, but also purifies the air. On the one hand, plant woven materials are mainly processed manually, without additives and machine operations, without harmful substances and without damaging the environment. It is precisely because of the safety of plant-woven materials that it is currently sought after by many people and is widely used in interior design[1].

### **2.2. Cyclic Properties**

Currently, LCA techniques (Life Cycle Analysis Techniques) are commonly used to test the environmental accuracy of materials from raw materials to waste disposal to determine their environmental impact. The use of this technology is ultimately for the study of increasingly prominent environmental issues, including the energy consumption of raw materials and generated waste, the energy required for the process of generating waste, product use or consumption, and waste disposal energy. (eg landfill, incineration, recycling or reuse) energy demand and waste generated. The emergence of the energy crisis has made the public understand that the concept of circular design is the key to sustainable development. The raw materials of plant weaving materials come from green plants in nature, they will not damage the ecological environment and have the characteristics of recycling and regeneration, from the extraction of raw materials to the disposal of waste. Dissolution follows a natural progression.

### **2.3. Common Features**

There is a one-sided view that the overall quality of the room space is closely related to the quality of the materials used. The cheaper the material, the lower the spatial quality of the room. First of all, there are many types of woven plant materials, and the extraction of raw materials is also very simple. Its basic characteristics are versatility, economy and practicality. People use local materials for production and processing into a variety of interior decorations. Plant weaving materials are inexpensive and prefer durable materials when selecting products. This method reduces very useful material exchanges and waste. Number of processing operations [2].

## **3. Application of Plant Woven Materials as Interior Decoration Materials in Rural Tourism Resorts**

Through the basic review of plant weaving materials, we can understand that the types of plant tissue products have shown different trends for a long time. Next, we will deeply understand the application of plant weaving materials in the interior space decoration design materials of rural tourism resorts.

### 3.1. Rural Tourism Resort Interior Interface Decoration using Woven Plant Material

After the main structure of the rural tourism resort is completed, the decoration of the space interface is the display of the use effect of the interior space. Usually, it starts from the surface and the wall. The plant woven material has great plasticity, and the combination with the space will increase the personalized visual effect. , the use of plants in tourist resorts with local themes will promote the creation of an ecological sense of the entire resort environment, and the combination and innovative design of different materials will also increase its openness, so designers often use relatively regular materials for secondary Processing to meet the requirements of space usage. A common processing method is to cut the finished woven plant material on a flat surface and combine it with the space through insertion and winding [3].

The decoration of the local interface is to decorate a part of the general space interface in a small area, which is expressed through the natural properties of the color and texture of the plant material, emphasizing the particularity of the decorative part in the space interface. In the design of an organic restaurant in the Spanish suburbs, in order to attract more tourists to visit and consume, the back wall of the restaurant is designed with traditional straw materials, and a partial decorative interface is created on the wall through the diamond collage of wooden tape. , becoming the visual centre of the general space, the Spanish suburban organic restaurant contrasts with decorative wood trim panels made of straw materials and white wall shapes from local interfaces. The decorative object of the general interface is a complete wall and upper surface space. The whole is decorated with plant woven materials to create a unified visual effect; the overall decoration of the interface is very different from that of the local interface. The first focuses on the properties of the material with a visual impact on the participants, and the second focuses on the local. According to the selection of plant tissue materials, starting from the general interface image, the plant weaving materials with different regional and cultural characteristics should be carefully selected to highlight local characteristics and strengthen cultural tourism symbols, so that according to the different indoor space characteristics of rural tourism resorts, it is convenient to When people come into contact with space, they will have a feeling of being in harmony, as shown in Figure 1.



Figure 1: Decoration of woven plant material in interior interface of rural tourist resort

### 3.2. Division of Interior Space

As a structural material inside the space, plant woven material can not only show rich decorative effects, but also divide and share the space interface. In the interior design of rural tourism resorts, in order to meet the viewing and living needs of tourists, it is very important to carry out functional interior management. It can also provide a better space atmosphere. Secondly, the plant weaving

material mainly comes from the natural environment, which carries a strong natural atmosphere, so it can bring a unique humanistic atmosphere experience to the occupants and provide a natural and simple space effect in line with the theme of rural tourism. The separation effect of plant woven materials in three-dimensional space far exceeds that of artificial decorative materials. The spatial layout of the partition interface makes the space more layered, and it is better in terms of sound insulation effect. Designers can carry out innovative operations and combinations according to different materials to purify the air environment while meeting the partition effect. Different materials have Different features, should consider their usage. Reasonable and appropriate processing methods can make the overall spatial interface more attractive. Some materials of high consumption and high simplicity should be processed locally so that they can construct a complete spatial interface and transform irregular and free-standing material forms into comfortable composite forms [4].

Absolute segmentation is the most common form of interface segmentation in interior design. More precisely, this is a very limited interface segmentation, as it can accurately limit sight lines, sound source intensity, temperature and humidity, and other factors that affect interior space. In the use of woven plant material, there are few forms of absolute segmentation. Generally speaking, materials are just regularly combined, arranged or arranged to create a relatively absolute state of division in the interior space. For example, we can use thick or soft fabrics and divide the space by combining, wrapping or filling with modern industrial materials to create overall coherent areas that are closely located in dense areas. Rattan and wicker raw materials are often used in homestays with regional characteristics and focusing on nature and primitiveness. They are woven into the curves of modern materials, randomly fabricated and carefully arranged like fish scales in order to accurately divide the functional areas within the interior space, making each functional area opposite to each other; at the same time, the general interface created by the absolute height system limits the interior of the exhibition hall The line of sight makes the woven material truly achieve the effect of absolute space division.

Relative segmentation needs to limit the size of the interface and the visual extensibility. It has a certain fluidity and the ambiguity of the space boundary. The size, material and shape of the plant woven material will divide the "fuzzy" space boundary. In the modern indoor living environment, we will see that some designers will intersperse and combine different materials, and the irregular arrangement forms are staggered with each other to leave a changeable gap. This natural state makes the view unrestricted, and the gap can be the contextual relationship of the map is displayed in the larger environment, thus making the space more vivid and flexible, as shown in Figure 2.



Figure 2: The division of the interior space by the woven plant material

## **4. The Expression of Plant Materials in the Interior Design of Rural Tourism Resorts**

### **4.1. Expression of Nature**

Plants have their own natural forms due to the difference between the environment and the regional environment in which the plants themselves arise. This is a natural form, an organic form that can be seen, touched, and regenerated. It has the function of growth and will not change at will with human will. It can give people a sense of nature, harmony, comfort and simplicity; it can also be a static, non-evolutionary form and function that results from subsequent artificial processing. Plants grow out of control and we consider this natural form of growth to be a "random type". Its direct and practical application can show a feeling of natural growth and change. The survey concluded that the forms and decorative materials currently used, and more obviously, a material style dominated by artificial nature, which retains the natural morphological characteristics of local plants.

### **4.2. Expression of Natural Colors**

In recent years, with the rise of environmental material theory, the understanding of material color has changed and has begun to support nature and a return to simplicity. The colors of nature, such as the color of the ocean, the color of sand, the color of fields, the color of wood, the color of grass, stones and soil, and other natural colors are recommended by humans. The colors of these materials will not undergo any artificial reprocessing in the project, using their natural colors, a large amount of information can be uploaded to the surface of the space form, which has good economical and ecological benefits. When people see a space, the general color of the space is the first part people see. Unlike the decorative materials of the industrial age, the fabric itself has the characteristics of a large number of color primitives, and the primary color of the plant determines the overall tone of the woven material. Sometimes the surface color of the material changes with the plant species. Different colors give people different feelings, cause different aesthetic emotions, and enrich the composition of colors. According to recent research on plant fibers, it is clear that the color form of plant fiber fabrics is mainly solid, with lower color purity, mainly in the mid-gray color spectrum. In this way, the grey raw bamboo material shows color at the top of the room. In this way, gray can improve people's visual comfort without having a strong impact on people. This promotes a soft, simple, clean and healthy visual environment and tangibly enhances the quality of the entire resort.

### **4.3. Expression of Natural Texture**

Texture properties are unique. It mixes many elements such as materials, textures, textures, structures, patterns, etc. It belongs to a field with ill-defined boundaries. The structure of woven plant material has more to do with the tissue structure of the material, ie. Variations in the form of inhomogeneity of the composition produced during weaving and weaving, including the unique natural characteristics of the composition's own texture, the surface graphics produced by the subsequent weaving process, etc. In the field of art, the design of materials is closely related to texture. For its material, texture refers to the rough or smooth texture on the surface of the material, that is, the difference in texture caused by different components of the material. In addition, the weaving method is also different. When we use a certain weaving technique to process materials, the order between materials and the way of vertical and horizontal penetration is different, and the form is also different. The raw material is characterized by a bulging feel on the surface. In the interior space design of rural tourism resorts, the use of materials with different texture

characteristics can better highlight the structure of the space.

## **5. Advantages of using Woven Plant Materials as Decorative Materials for Interior Design of Rural Tourism Resorts**

Plant material itself is a work of art with a unique material clarity, independent of all materials in society. It is not an isolated property, but has advantages different from other decorative materials.

### **5.1. Strengthen the Overall Indoor Space of the Resort and the Spiritual Fit of Tourists**

At present, a single space type, old forms and spaces and the use of common materials are no longer enough to meet the needs of tourists who are keen to experience different regional characteristics, and the demand for more diverse functions of the interior space of the resort is becoming more and more intense. Plant textile materials are rich in variety, and the natural properties conveyed in the material types are also different. By showing the characteristics of soft and strong bamboo woven vertical curtains in different interior spaces, we can obtain psychological feelings such as dexterity or bravery. Through the subtlety or elasticity of these material characteristics, it provides a way to create inner peace and enrich the spiritual world of travelers. Good medium [5-6].

### **5.2. Artistic Expression**

Plant materials have unique material properties and are works of art endowed by nature. Through reasonable design, we can serve this artistic expression flexibly. For example, when designing a rural tourism resort, in the selection of materials, some unique local materials can be combined for the design. For example, the use of bamboo and rattan materials can be used to make dry-type underground continuous wall buildings. The interior space of the rural tourism resort is asymmetrically arched, and the interior top and walls are in the arc shape of rattan and rattan, which will have a strong impact on the people who enter the resort. Visual effects[7]. The public space is dominated by rattan and bamboo, showing the ecological, natural, free and smooth space beauty to visitors.

### **5.3. Plant material Regulates the Humidity of Dry Air**

In the research work, considering that indoor humidity levels are closely related to the comfort we experience in the space environment, related scholars have pointed out that plant woven materials are more sensitive to humidity, such as our daily life mattresses, rattan sofas and walls. Curtains have loose material properties, which can store water molecules and release water molecules when necessary to adjust the internal microclimate. Therefore, the use of relevant plant woven materials for the interior of rural tourist resorts can be more convenient for the overall environment. The natural adjustment of comfort is conducive to optimizing the tourist impression of tourists and creating a high-quality local tourist resort [8].

## **6. Conclusions**

In this paper, from the perspective of interior decoration materials of local tourism resorts, the author discusses the advantages of plant weaving materials in the design of related resort interior decoration materials with the unique material characteristics of plant weaving materials, and applies them in the spatial layout. The different application methods are divided and summarized in detail.

Through the research on plant weaving materials, it is of great significance to expand students' cognition and application of new environmental protection materials by intervening the research into the teaching of "Materials and Crafts".

## Acknowledgements

Xi'an Eurasian University 2018 School-level Key Course Materials and Technology Construction Project (2018KC016)

## References

- [1] Maganioti, A.E., Chrissanthi, H.D., Charalabos, P.C., Andreas, R.D., George, P.N. and Christos, C.N. (2010) Cointegration of Event-Related Potential (ERP) Signals in Experiments with Different Electromagnetic Field (EMF) Conditions. *Health*, 2, 400-406.
- [2] Botorabi, F., Haapasalo, J., Smith, E., Haapasalo, H. and Parkkila, S. (2011) Carbonic Anhydrase VII—A Potential Prognostic Marker in Gliomas. *Health*, 3, 6-12.
- [3] Hen Yifei, Shi Jie. *The application of traditional fast-growing plant weaving in modern furniture—Traditional fast-growing plant weaving as an example* [J]. *Design*, 2020, 33(1):131-133.
- [4] Hen Qiuchen. *Research on the application of fast-growing plant weaving in household products* [D]. Beijing Forestry University, 2018.
- [5] Hu Lin, Zhang Zhongfeng, Zhang Jijuan. *The application of wheat straw weaving art in the design of household products* [J]. *Packaging Engineering*, 2021, 42(18):247-252.
- [6] Anhui Shengshi Bimei Industrial Co., Ltd. *A seamless natural Manila hemp plant fiber material woven wall covering* [P]. N201920663884.7, 2020-06-05.
- [7] Li Xuayan, Ren Xinwei, Cen Yating. *Research on the application of local materials in homestay interior design* [J]. *Furniture and Interior Decoration*, 2021, (12):5.
- [8] Hen Mengmeng. *The application of local culture in homestay design under the background of new rural construction* [D]. Zhejiang University of Technology, 2017.