# The Characteristic Design of Interior Furniture and Furnishings of Residential Buildings in the Southern Mountainous Area of Laiwu

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**Abstract:** Furniture and furnishings are the necessities of people's daily life, and they are the main body of indoor space environment shaping. They play an important role in shaping the entire space atmosphere. Starting from the characteristic design of furniture and furnishings, this article fully explores the regional culture of the mountainous area in southern Laiwu, and at the same time combines the regional characteristic culture with modern lifestyles, using innovative thinking and modern design techniques to create a strong regional characteristic and a sense of the times The indoor space environment can improve the quality of life of villagers and provide new ideas for the construction of beautiful villages.

#### 1. Introduction

The furniture and furnishings used in the residences in the southern mountainous area of Laiwu can be divided into sitting and sleeping furniture: benches, horses, chairs, sofas, beds; relying furniture: square tables, coffee tables, writing desks, sewing machines; storage furniture: such as hangers, Washbasin stand, wardrobe, combination cabinet, treasure box, etc. Rural furniture is mostly self-made by villagers or self-employed, and processed in small factories, mostly imitating the shape, function and structure of market furniture, and lack of furniture that meets the needs of local villagers. In addition to the above furniture, mountain villagers also have some special living utensils that are different from urban residents' lives, which also belong to the scope of furniture and furnishings, such as: urns for storing grain, tanks for storing water, stoves for cooking, and farming utensils.

#### 1.1 Single Function of Furniture and Furnishings

At present, most of the furniture used by villagers in the mountainous area of southern Laiwu is outdated, and the design of furniture lacks consideration of the multi-functional life of the villagers. For example, coffee tables, chairs, and stools lack storage and folding functions. At the same time, they are large, relatively fixed, inconvenient to move, and lack humanized design.

#### 1.2 Traditional Single Structure of Furniture and Furnishings

Residential indoor furniture in the southern mountainous area of Laiwu, especially sitting and sleeping furniture, are mostly traditional frame structures, which are not flexible enough to use. The design of some seats and cabinets does not conform to ergonomic principles, and there is a problem of inconvenience in use. Most of them are traditional materials such as wood and metal, which lack contemporary characteristics.

#### 1.3 Appearance Lacks Regional Characteristics

The interior furnishings of the residences in the southern mountainous areas of Laiwu do not pay attention to the design of appearance, and some only consider to meet the basic functional needs, and the shape is monotonous. The appearance of most furniture and furnishings is to imitate the appearance of market furniture, and does not have regional characteristics. In the rural residential space, it gives people a sense of nonsense.

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# 2. Renovation of Regional Characteristics of Residential Interior Furniture and Furnishings in Mountainous Areas in Southern Laiwu

The mountainous ravines in the south of Laiwu are vertical and horizontal, with beautiful scenery and beautiful ecological environment. Laiwu has "eight ancient sceneries", of which 5 are located in the southern mountain area. In the mountainous area of southern Laiwu there are scenic spots such as Lianhua Mountain Scenic Spot, Huanglongguan Scenic Spot, Yuntai Mountain, Xianren Mountain, Wang Xizhi Bijia Mountain, Phoenix Village, Liu Zhongying's Former Residence, Chaoyang Cave, Shangjiazhuang Reservoir, Yedian Reservoir, etc., as well as the Great Wall of Lu and Huangchao Laoma Chu, Jiagu Huimeng and other cultural monuments were revolutionary anti-Japanese base areas during the Anti-Japanese War and the Liberation War. They have strong red genes and unique folk culture.

"One side of the water and soil raises the other side", the mountains in southern Laiwu have beautiful natural features, rich historical and cultural heritage, precious red cultural heritage, and colorful folk culture. In the context of rural revitalization strategy and beautiful rural construction, attention to local characteristics and regional culture is of utmost importance. At the same time, it is a very important aspect to improve the quality of life of rural residents. Furniture and furnishings are closely related to people's daily life and are the main body of interior space design. [1] P143 [The culturally rich interior furnishings can be pleasant and have high spiritual value.] Its layout and style have a vital influence on the division of the entire interior space, the creation of the space environment, and people's behavior and psychological activities.

The residences in the mountainous areas in southern Laiwu need to fully excavate the material and intangible cultural heritage of their regional characteristics and farming characteristics. And apply these regional cultural elements to the design of furniture and furnishings in the shape, color, material, craftsmanship, etc., to create a rural residential indoor space environment with strong regional characteristics and humanistic care.

#### 2.1 Regional Design of Furniture and Furnishings

The appearance of furniture and furnishings and the proportions of length, width and height will have a great impact on the psychology of users. When designing furniture and furnishings, extract morphological elements from local natural features, humanities, history, customs and culture, natural objects and man-made objects in agricultural culture, and apply the extracted linear elements concretely or abstractly to the design of appearance morphology in, create a space atmosphere that combines regional characteristics and a strong sense of design. For example, there are many toon trees in the mountainous area of southern Laiwu, and they are famous for their delicious taste. Use modern design techniques to apply the shape of toon leaves to furniture and furnishings such as lamps and seating, or apply the shape of toon leaves or toon trees in patterns to fabric furnishings such as bedspreads, bed sheets, curtains, etc. Another example is the local abundance of prickly ash, which uses the shape of prickly ash as a design element. According to the principles of furniture and furnishings and modern design thinking, the old forms of small stools and sofas are innovatively designed to produce a new look and reflect its regional characteristics.

# 2.2 Regional Design of Furniture and Furnishing Colors

Color is regarded as the first element of vision, which can most quickly evoke people's various psychological emotions. When choosing colors for residential interior furniture and furnishings in the mountainous areas of southern Laiwu, you can base yourself on the local culture, farming culture, and folk culture, and fully express the local culture in the form of colors to inherit, cultivate, improve, and comfort the villagers' native land feelings. The main food crops in the southern mountainous area of Laiwu are wheat, corn, sweet potatoes, etc. The main cash crops are cotton, pepper, etc. They are rich in colors and have strong regional characteristics. The colors are extracted, and decorative colors, color reconstruction and other color expressions are used. Method, flexibly applied to the design of furniture and furnishings. For example: You can choose the colors of sweet potato seedlings, sweet potato skins, and sweet potato flesh to apply subjective induction or

objective induction to furniture and furnishings. You can also apply the colors of different food crops and cash crops according to color contrast and harmonization methods. According to the personality characteristics of the villagers of different ages, genders, etc., make scientific and reasonable matching to meet the spiritual needs of the villagers and improve the quality of life of the villagers.

## 2.3 The Regional Design of Furniture and Furnishing Materials.

Each material has its own unique texture and texture, forming a unique language and giving people different feelings. People's perception of material is mainly reflected in the sense of touch and the perception of visual perception. The texture of furniture and furnishings is reflected in two aspects: [2] P59 [One is the natural nature of the material itself; the other is: the texture of the material after different processing.] The regional design of indoor furniture and furnishings in the mountainous area of southern Laiwu can be made using local building materials, crop straws, cash crops and other raw materials, for example, wheat straws are used to make cushions or furnishings. It can also extract the characteristic elements of the main local food crops and cash crops, enlarge their texture and texture, and express different thoughts and emotions with images and symbolism. For example: the softness and texture of cotton can be used to enlarge it, and this texture can be applied to mattresses, bed sheets, sofa backs, cushions and other furnishings. The texture of corn on the cob and corn kernels can also be combined with modern new materials to reflect its texture in the form of patterns.

Furniture and furnishings can adjust the indoor color and space scale, making the space level richer and more vivid; at the same time, it also expresses people's tastes and hobbies and affects people's mood. Different furnishings play different roles in setting off the indoor atmosphere. The regional design of furniture and furnishings requires in-depth exploration of the local natural landscape and cultural characteristics, and the use of modern design techniques to create a unique and beautiful rural living environment.

# 3. The Contemporary Design of Indoor Furniture and Furnishings in Residential Buildings in Southern Laiwu

Residential indoor furniture in the southern mountainous area of Laiwu is relatively outdated, with single functions, more traditional structural craftsmanship, chaotic style, and random layout. Most of the furnishings are Chairman Mao's hanging portraits, spring couplets, cross stitch, mirrors, wall calendars, certificates, etc., without redundant decoration. In recent years, with the development of society and the implementation of the rural revitalization strategy, the living standards of rural residents have been continuously improved, and their lifestyles such as the production mode, family mode, and communication mode of rural residents have also changed. In order to adapt to the new rural lifestyle, the original the furniture and furnishings of China are in urgent need of transformation and innovation to modernize the rural life style.

Indoor furniture and furnishings are designed for residents to live in the living space environment. Therefore, the design of furniture and furnishings needs to consider the relationship between people, furniture and the environment, handle the relationship between "furniture-people-environment", and adhere to the principle of "people-oriented design".

# 3.1 Multifunctional Design

Multifunctional design is to integrate the functions of a single piece of furniture, adopt adjustable structural design, and carry out innovative transformations in structure and form to meet the different needs of occupants at different times and spaces. In terms of form, it can achieve the best condition for sitting, lying, leaning and other activities. For example: rural furniture beds can add storage functions to the head and foot parts of the bed. The stool, seat, and sofa can be a modular combination. The design of the kitchen cabinet can scientifically integrate its washing, cutting, storage and other functions. When carrying out multifunctional design, it is necessary to choose reasonable furniture size and functional space based on the principle of ergonomics, according to

the static and dynamic dimensions of the human body.

### 3.2 Intelligent Design

Technology makes people's lives more and more relaxed. Intelligent furniture helps to improve the quality of our lives. Residential indoor furniture in the mountainous areas of southern Laiwu should also keep up with the times, take regional culture as the theme, and extract its characteristic elements, and use science Technical means, specializing and intelligent design of indoor furniture and furnishings. For example: lamps can be sound-controlled, faucets can be sensed, etc. to provide convenience for rural life. At the same time, when designing voice controllers and sensors, regional characteristic elements can be applied to their appearance. The unique furniture that farmers in mountainous areas have is farm tools. At present, most farmers in plain areas have realized intelligent farming, such as intelligent harvesters. However, due to the characteristics of the mountainous terrain in southern Laiwu, most of the fields are on the hillside, and the area of each household is small, which is not suitable for large-scale operation of machines. Some intelligent farming tools suitable for farming in small areas should be designed. This kind of intelligent farm tools should also be a part of farmers' lives, a part of regional culture, and the subject of design creation.

#### 3.3 Innovation of Structure and Process

The furniture furnishing structure in the southern mountainous area of Laiwu is relatively traditional and simple, mostly frame structures. With the development of science and technology in today's society, furniture has a variety of structural forms, such as folding structure, inflatable structure, disassembly structure, thin shell structure, etc. The furniture and furnishings in the mountainous area of southern Laiwu should also be diversified in structure, based on ergonomic principles. The foundation is based on the texture and texture of local materials, and the structural form that better reflects the regional characteristics of the material is selected to make it both modern and regional. For example, the sofa adopts the form of filling structure, the soft material of the surface layer is fabric material, and the fabric material pattern is printed and dyed, and the characters and costumes in the Laiwu Bangzi drama are adopted with strong regional cultural patterns. In terms of craftsmanship, using advanced craftsmanship, the original traditional craftsmanship can also be improved to make it more distinctive.

#### 3.4 Characteristic Design of New Materials

Most of the materials used in the indoor furniture and furnishings of the houses in the southern mountainous area of Laiwu are traditional materials, such as wood, stone, ceramics, metal, glass and other materials. With the continuous progress of science and technology, many special new materials continue to emerge with excellent performance. Even the same material has several excellent properties. Such as special metal functional materials, high-end metal structural materials, advanced polymer materials, new inorganic non-metallic materials, high-performance composite materials, etc. In the future indoor furnishings in the southern mountainous area of Laiwu, when choosing materials, new materials can be integrated with regional cultural innovations. Applied in specific design practice, it provides convenience for rural life and poetic space for residential environment.

#### 4. Conclusion

The improvement of the quality of life of rural residents in the new era is not to blindly imitate the urban living environment, but to integrate modern and technological means with regional characteristics and culture, to build a living environment with rural cultural characteristics, and to combine residents' modern needs for life. Innovative design, to create an environmental landscape that can cultivate people's spirit, but also an indoor space environment that is full of times, rural and regional characteristics.

The characteristic design of residential interior furniture and furnishings in the southern

mountainous area of Laiwu mainly includes two parts. One is the regional design, which excavates regional elements from the aspects of shape, colour, and material. The second is contemporary design. Consider the modernization of rural lifestyles in terms of function, structure, craftsmanship, and materials. Through the research on the regional and contemporary design of residential interior furniture and furnishings in the southern mountainous areas of Laiwu, the spatial quality of local villagers' residences has been improved, and a new residential style with regional design features has been formed.

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