

# Study on Sustainable Philosophy and Revelation to Modern Design of Folk Furniture

Zhe Chen<sup>1</sup>, Jiaqi Guo<sup>2</sup>, Shan Xian<sup>3</sup>

306065706@qq.com<sup>1</sup>, 3335024985@qq.com<sup>2</sup>, 1164053270@qq.com<sup>3</sup>

South China Agricultural University, No.483, Wushan Road, Tianhe District, Guangzhou, China

**Abstract:** Folk furniture is a type of furniture that appear among the common people and was mainly handmade with locally sourced materials. The harmonious relationship between nature, society and users embodied in folk furniture can be used as a reference for contemporary furniture design, and useful inspiration can be gained from it. This paper takes folk furniture as the research object, analyzes its definition and attributes, and explores its design concept and the connotation of the idea of sustainable development: original ecological design, regional design, human-centered design, moderate design, and design for daily use/need. This paper provides new ideas for improving the modern furniture design theory and realizing the sustainable development of furniture.

**Keywords:** Folk furniture; Sustainable development; Primitive ecology; Moderate design

## 1. Introduction

Folk furniture, as an important part of Chinese traditional culture, contains rich cultural connotations and artistic value, reflects a strong sense of life and the spirit of originality. Many folk furniture will be with local folklore and traditional culture, with different forms and styles from other regions. Nowadays, with the rise of nostalgia around the world, people are beginning to realize the collection value of traditional folk furniture, due to its moderate price, abundant quantity and artistic charm, many people are beginning to study its appreciation space and artistic value, and regard it as ornamental works of art. Traditional folk furniture plays a special role in modern times, it is an important material for inheritance and development of China's excellent traditional culture, study of traditional history, culture and art, etc. It also plays a positive role in modern furniture design<sup>[1]</sup>.

With the gradual increase of people's awareness of environmental protection, the concept of sustainable development, mankind has entered the era of co-development, cultural coexistence, coexistence of man and nature, coexistence of man and technology and so on. The sustainable development of furniture is also a specific expression of the concept of "coexistence", the use of sustainable concepts in furniture design is also more and more common, more and more favored by people. Furniture as an indispensable appliance for human beings, carrying the life of human beings, under the concept of coexistence, through the influence of the sustainable concept of furniture design, and gradually realize the idea of harmonious coexistence between human beings and nature. This paper will focus on analyzing the concept of sustainable

development embedded in Chinese folk furniture and, on this basis, point out its intentional revelation to modern furniture design.

## **2. Connotation of sustainable development**

With the development of science and technology, human beings have made brilliant achievements in economy, science and society, and productivity has developed rapidly. However, human beings and the environment interact and influence each other, and human beings consume resources to achieve economic development and at the same time bring great pressure on the environment. With the increasing environmental pollution, the traditional mode of economic development to mankind caused by a variety of dilemmas and crises began to show, the main problems are: resource crisis (such as fresh water, oil, coal, natural gas, metal ores, etc.), environmental pollution (including atmospheric pollution, water pollution, solid pollution, noise pollution, nuclear pollution, etc.), the land desertification is getting more and more serious, the problem of global warming, the extinction of species and a large reduction in the area of forests. It is these crises that pose a serious threat to mankind's own survival and development, and people have begun to realize that simply pursuing economic growth while ignoring environmental and ecological issues will not work, so there is now an urgent need to seek a new model of development that will not only improve economic efficiency but also protect resources and improve the environment. As a result, a new development model was born ---- sustainable development.

In 1987, the World Commission on Environment and Development (WCED) published a report entitled "Our Common Future", which formally put forward the strategic idea of "sustainable development" and defined the concept of "sustainable development". The report defines sustainable development as "meeting the needs of the current generation without compromising the ability of future generations to meet their own needs". It clearly puts forward the strategy of sustainable development, stating that the fundamental purpose of protecting the environment is to ensure the sustained development of mankind. Its content involves the harmonization of the economic, ecological and social aspects, requiring human beings to pay attention to economic efficiency, ecological harmony and the pursuit of social equity in development. The basic feature of the theory of sustainable development is that it is based on economic sustainability, ecological sustainability as a condition and social sustainability as a goal. "Common development, coordinated development, equitable development, efficient development and multi-dimensional development are the rich connotations of sustainable development. "From its inception to its formation, the concept of sustainable development has emphasized not only harmonious coexistence between human beings and the natural and social environments, but also a sense of responsibility on the part of the people, who should take due responsibility for nature, society and future generations.

## **3. Characteristics of Folk Furniture**

When it comes to "Folk Furniture", most people think of Ming and Qing style furniture that is collectible and made of precious wood. Then how to define "folk"? From the "folk craft" point of view, the "Modern Chinese Dictionary" on its interpretation: working people to adapt

to the needs of life and aesthetic requirements, with local materials, mainly handmade production of an arts and crafts, such as bamboo weaving, straw weaving, wood carving and so on. And "folk dance" in the "Modern Chinese Dictionary" interpretation is: in the masses of people widely circulated, with a distinctive national style and local characteristics of the traditional dance form. From the explanation of folk craft and folk dance, it can be seen that folk furniture can be defined in this way:folk furniture that appears in the common people to meet the needs of people's lives and is mainly produced by hand using local materials, and its production process, styling, carving and decoration, and inheritance, etc., all show obvious regional characteristics and national styles.

In contemporary society, often to folk traditional furniture craft backward production methods and economic and cultural background to negate the need for its reasonable continued existence, but undeniably, folk furniture embodied in the harmonious relationship between nature and society, can be used as a reference for contemporary furniture design, from which to gain useful insights. Folk furniture emphasizes the harmonious coexistence of man and nature, and its ideas still play a positive role in contemporary furniture design, which is an undeniable fact for any furniture designer. Folk furniture is mainly produced in the life of ordinary laborers to meet the requirements of the use of their lives, so many of the furniture will be affected by the local culture, customs, environment and other influences, with strong local characteristics and local flavor. The author believes that folk furniture should have the following characteristics <sup>[2]</sup>: 1. non-standardized: such as random, small batch or single piece, handmade or semi-mechanical processing of the production behavior; 2. non-systematic; such as the use of local materials, directly aimed at the user to produce, basically there is no commercial production, artisan skills from the masters of the teachings; 3. non-expert phenomenon: such as the needs of daily life, imitation or follow the tradition. lack of innovation in form, mostly adapting to the material or keeping things simple.

## **4. The ideal of sustainable development in folk furniture**

### **4.1 Original Furniture**

Due to the influence of modernism, the production of traditional furniture from handmade to modern large-scale mechanized processing production. The birth of new equipment, new technology, to solve a variety of new furniture complex processing technology, for people to design a variety of furniture modeling provides a good processing conditions, so that the shadow of the traditional furniture gradually disappeared. The current furniture design has a luxurious and cumbersome modeling, exaggerated alternative avant-garde design, designers through the use of a variety of new materials in the furniture manufacturing to highlight the personality. Designers pay too much attention to external decoration in order to pursue artistic effect and visual effect, which causes unnecessary waste of human, material and financial resources. Although people are aware of the rapid development of modernization and urbanization has caused damage to resources and the environment, people will be furniture modeling simplicity in order to help save materials and protect the environment, but compared with the traditional folk furniture appears to be a lack of vitality, indifference, so that people and furniture invariably produce a sense of distance. When a piece of work has no sense of

intimacy and affinity, it means that the design can not convey the designer's thoughts and feelings well, and can not fundamentally satisfy people's needs.

The term "original ecology" refers to the form that has not been specially sculpted, exists in the folk primitive, exudes the local flavor, the term "original ecology" represents people's desire to return to nature and live in harmony with nature. Requirements for the real original ecology is unlikely, but we can choose the resources, the effective use of materials and resources, eliminate unnecessary waste, reduce consumption in the process, reduce costs is the basic requirements of sustainable design [3], in the manufacturing process to take certain means to try to maintain the original characteristics of the thing to reduce the need for man-made processing. Original ecological furniture in the design should pay attention to the following aspects: First, in the design, should make full use of the object itself inherent form, natural color, texture, etc., and then according to the characteristics of the material using the corresponding process, to achieve the "material for the art". Such as tree roots, stumps, branches according to its original morphological characteristics, cutting, splicing, in addition to the requirements of the surface leveling, but also to retain the original edge, branches and knots as a modification, to create the natural beauty of furniture (Figure 1., Figure 2.). second, try to highlight the object's intrinsic natural beauty, to create a natural atmosphere of the furniture to the people; The third, as far as possible, to highlight the local culture in the design, to meet people's the idea of returning to nature and getting close to nature.



**Figure 1.** Original Furniture



**Figure 2.** Original Furniture

## 4.2 Furniture for Regionalism

Folk furniture is mostly made and used by ordinary people, which can directly reflect the local economy, culture, geography, etc. Regional furniture is developed through the long-term accumulation of various aspects, as a kind of furniture form popular among local residents, it contains the essence of the local culture, permeated with the feelings of the local people. The so-called regionality refers to the design to absorb the local, national, folk style and the cultural traces left by the history of the region. Regionality is to some extent ethnicity is more narrow or exclusive, and has a strong recognizability. As the saying goes, "Ten miles of different winds, a hundred miles of different customs." The vast expanse of China, due to the differences in terrain, landforms, climate and the uniqueness of the local customs of the more than fifty ethnic groups in China, forming a rich and colorful national folklore phenomena as well as the unique personality of different regions of the furniture orientation (Figure3.). In the northern region, due to the cold weather, every family has a kang bed, and people eat, chat, meet guests, do their daily work and sleep on the kang, forming a kang-centered life style. As a result, local folk furniture includes kang-centered kang tables, low cabinets and other furniture series. The southern regions of Jiangxi and Zhejiang are rich in bamboo and rattan resources, thus producing a large number of bamboo and rattan furniture (Figure 4.).



Figure 3. Tujia Drip Bed



Figure 4. Jiangxi Bamboo Frame Bed

Scandinavian furniture and Southeast Asian furniture as an example, they follow the principle of locally sourced materials in the selection of materials, designers use the wood with its color, texture and natural texture into furniture design. Because of living in northern hemisphere's high latitude, the long term living in cold areas, Scandinavia people use some good insulation properties in the construction of the house wood, so the local designers are fond of wood, they

believe that each wood has its own soul, in the selection of materials and collocation of the injected considerable energy, from the wood of the special texture of the most perfect side of the search for, give people a very natural, comfortable, friendly visual and tactile sense, therefore, wood has an important position in the hearts of local people. In southeast Asia, due to the hot, humid climate brings rich plant resources, such as Indonesia's rattan, Malaysia's river water plants and Thailand's wood veneer and other pure natural materials [4]. The use of these materials in furniture exudes a strong regional flavor.

#### 4.3 Human-centered furniture

The idea of "human-centered design" has gradually penetrated into all aspects, human-centered design is to "people" as the main design, requiring designers to design reflects the care for people, give full consideration to people's physiological needs and psychological needs. Folk furniture's human-centered design thinking is also reflected in its compliance with the needs of various conditions of use. Taking the sitting furniture which is most closely connected with human production and life as an example, its complicated and diversified products are the best illustration, only the types of stools are bench, high stool, crescent stool, half-round stool, matzah, seating pier, bar stool, pillow stool, juicing stool, rice-planting stool (Figure5.), shaving stool (Figure 6.), drawer stool (Figure 7.), and so on.



**Figure 5.** Rice-planting bench



**Figure 6.** Shaving bench



**Figure 7.** Drawer stool

Folk furniture has always used the construction method of human-centered design, which is reflected in its function, modeling and materials, the human-centered design of folk furniture will be based on the user's age, needs and other aspects of the production. For example, in the design of the chair for the elderly, the designer should need to take into account that some of the elderly may be mobility problems, sitting down and getting up will be difficult, so the design of the chair can be added to the side of the armrests, in order to help the mobility problems of the elderly.

Human-centered furniture is designed to meet the user's mobility and psychological needs to the best of its ability, which may seem to limit the development of furniture today, but as a universal construction method, ergonomics as a measure of the construction method will bring great convenience to the sustainable development of furniture. Ergonomic design brings limitations to furniture and humanization at the same time. Under the limitations, the design shape of folk furniture molds a subtle relationship with people, making the furniture humane. This humanity does not only exist on the spiritual level, but also makes it possible to repair and replace the furniture partially on the material level. The construction method of humanistic design will greatly extend the service life of the furniture and enable it to be renewed and revitalized.

#### **4.4 Furniture of moderate design**

Undeniably, with the development of society, the progress of science and technology and the great abundance of material, the improvement of living standards, people's traditional aesthetic value of the connotation of the standard of judgment has changed, people began to pursue consumerism, luxury, mainstream style and fashionism, and enterprises in order to attract more consumers, the appearance of the product and the packaging has spent a lot of thought, so as to make its modeling more rich, more attractive. It is people's over-consumption that causes some bad social trends and distorts people's aesthetics, leading to the prevalence of over-design.

Everything has a degree, things in the world are the unity of quality and quantity, quantitative change causes qualitative change, and the degree is the critical point of qualitative change of things, the quantity exceeds the range of the degree, things will change qualitatively<sup>[5]</sup>. Moderate design is proposed for luxury design, excessive design, excessive formalization, stylization, and artistic. Moderate design is to require the minimum use of resources, but also to meet the reasonable use of human and aesthetic needs. The "moderateness" of furniture also advocates an attitude of design that is opposite to excessive demand and technology. What "moderateness" advocates is that human beings should carry out design activities that are conducive to future development within an appropriate and reasonable range. Under the principle of moderation, the beauty of a piece of furniture is no longer measured in terms of so-called high grade, luxury or new type. Such moderation means moderation for the overall development of economy, society and environment.

Moderate furniture in the design process should pay attention to a single mode of thinking, do not seek novelty, claptrap; only to master the design of the "degree", highlighting the design focus, detailed and appropriate, to avoid decorative cumbersome; to reduce or eliminate the use of non-renewable natural materials, and advocate the use of renewable or recyclable, reuse of materials, and at the same time, we must Focus on detail processing, reduce complicated

processing technology and material loss. The moderate design of furniture calls for people to get out of the past aesthetic ideas of luxury and visual enjoyment, and to establish a moderate and sustainable design aesthetic to realize the harmony and common development of people and the environment (Figure8., Figure 9).



**Figure 8.** Three-compartment Shelf



**Figure 9.** Crescent Moon Stool

#### **4.5 Design for daily use/needs**

Design for daily needs is based on the needs of people's production and life, for the use of the crowd, the use of the design, emphasize and focus on the practical function of the product. In furniture design, practicality is the primary purpose of the craftsmen of the first purpose of making things, "The most important thing about making cabinets is that they have a lot of capacity and are easy to store". Tables, chairs and tables, beds and screens, boxes, cabinets and other furniture is made for people's living needs.

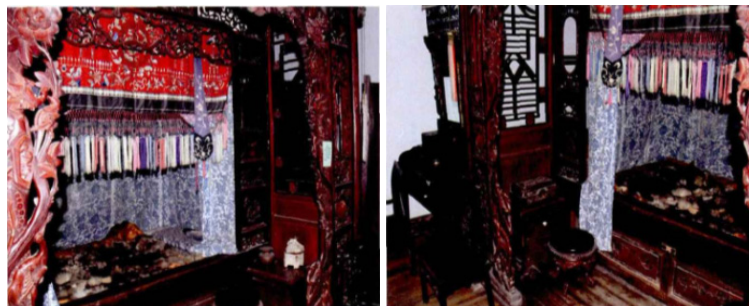
As in Figure10., bamboo chairs, some have a backrest, some do not have a backrest, which is based on the different habits of daily life and produce different shapes, work does not need to use the backrest, then people in the production of chairs will not waste materials to increase a backrest, inadvertently realize the purpose of sustainable development. Will also be used for the use of the crowd, the use of aspects of the same type in the number of enrichment, to achieve each major category of furniture and many small categories of furniture [6]. Such as crockery chairs, square-backed chairs, round-backed chairs and so on.





**Figure 10.** Chairs with Different Backrests

There can also reflect the principle of function to the top of the bed is toggle bed. The uniqueness of the Batten bed is that it forms a small enclosed gallery in front of the bed. On both sides of the gallery, various utensils and items such as small tables, benches, and blue washing utensils can be placed for daily use. The wooden toilet in the gallery allows you to use the toilet without getting out of the bed, which is a good solution to the problem of going to the toilet at night while sleeping. It is very convenient to set up a dresser in the gallery so that you can get up directly in the morning to freshen up<sup>[7]</sup>. The richness and accuracy of the function of the toggle bed furniture brings imaginable convenience to the people's home life (Figure11).



**Figure 11.** Inside the Drip Bed

## 5. Conclusions

As an important folk art, the distinctive production characteristics and artistic style of folk furniture is an important part of traditional Chinese culture<sup>[8]</sup>. It still exists in many places, and it still meets the needs of people's daily life with the lowest environmental consumption. Folk furniture contains the original ecological, regional, people-oriented, moderate design concept, embodies the concept of sustainable development of man and nature in harmony. It has deep impact to modern furniture design. We should integrate these good ideas into modern design, so that modern furniture presents more natural, simple, rather than cumbersome, excessive design expression, let modern furniture also on the road of sustainable development.

## References

- [1] Liu Digong. Redesign of Chinese Traditional Folk Furniture in Modern Context[J]. Furniture & Interior Design, 2019,(06):59-61.
- [2] Yang Jik. A Reexamination of Folk Furniture. Furniture and Interior Decoration, 2005,(05):57.
- [3] Lian Shanzhi,Xu Baoming. Construction of design indexes for sustainable design of modern furniture[J]. Furniture,2019,40(03):69-74.
- [4] Wang Ying. Furniture humanization design from regional culture. Art Sea, 2012, (05): 116-117.
- [5] Zhou Xiaxia. Research and application of moderate design for product design [D]. Nanjing University of Aeronautics and Astronautics, 2011.
- [6] Zhang Kenxu. Innovative Design of Contemporary Hunan Folk Furniture [D]. Zhongnan University of Forestry Science and Technology,2020.
- [7] Zhang Qiumei. Research on Traditional Folk Furniture in Western Hunan [D]. Central South Forestry University of Science and Technology,2016.
- [8] Zhu L,Yan Y,Lv J. A Bibliometric Analysis of Current Knowledge Structure and Research Progress Related to Sustainable Furniture Design Systems[J]. Sustainability,2023,15(11).