

Promoting Contemporary Ming Furniture Design Through Sustainable Development

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Abstract. Since the 18th National Congress of the Communist Party of China, the CPC Central Committee has attached great importance to cultural progress, and put forward that paying attention to cultural self-confidence is very important. With people's increasing attention to environmental protection, cultural heritage and social development, the concept of sustainable development has gradually be-come one of the important topics in the design field.

Taking Ming-style furniture as the starting point, this paper explores how to promote the design of contemporary Ming-style furniture through sustainable de-velopment. This paper analyzes the historical background, cultural characteristics and challenges faced by the design of contemporary Ming style furniture, puts forward the idea that people should pay attention to sustainable development of Ming-style furniture, and discusses how to promote the design of contemporary Ming-style furniture through sustainable development, so that Ming-style can show its unique charm, and at the same time make contributions to cultural in-heritance and environmental protection.

Keywords: Ming-style furniture; sustainable development; cultural inheritance; environmental protection; contemporary design

1 Introduction

Since the industrial revolution, the living standard of human beings has been greatly improved. At the same time, it has also brought serious problems such as environmental damage. Therefore, people began to pay attention to sustainable development, and ad- vocated environmental protection and social responsibility. In the contemporary design field, sustainable development has become a hot topic. With more and more people paying attention to cultural inheritance, traditional cultural elements in contemporary furniture design are getting more and more attention. Ming-style furniture has always been loved by people because of its unique aesthetic characteristics. Taking Ming-style furnitureas an example,

this paper discusses how to promote the design of contempo- rary Ming-style furniture through sustainable development. [1]

1.1 Background of the Study

Contemporary furniture design, as one of the important industries in modern society, has become an indispensable part of people's lives because of its unique aesthetic stand- ards and development mode of keeping pace with the times. With the improvement of people's living standards, the requirements for the quality and design level of furniture are getting higher and higher. In the past few years, various styles of furniture designhave swept the world, among which Ming-style furniture has become one of the im- portant categories of furniture design because of its simplicity, elegance and oriental cultural characteristics.

However, with the development of society, the traditional Ming-style furniture is facing some difficulties, which need to be solved urgently. How to combine traditional Ming-style furniture with contemporary furniture design, excavate its cultural connotation, and make it fully show its charm and value is a topic worthy of discussion by contem- porary furniture designers.

1.2 Research Objectives and Significance of the Study

This paper aims to explore the influence of sustainable development on the design of Ming-style furniture and improve the understanding of traditional Ming-style furniture. Based on the analysis of the origin, development, characteristics and design principles of Ming-style furniture, combined with the concept of sustainable development, this paper discusses how to promote the contemporary Ming-style furniture design, thus providing some reference and enlightenment for the development of contemporary fur- niture industry.

2 The Cultural Connotation and Characteristics of Ming-style Furniture

2.1 The Origin and Development of Ming-style Furniture

Ming-style furniture originated in the Ming Dynasty (1368 - 1644). During the Ming Dynasty, the furniture manufacturing technology was significantly developed, and at- tention was paid to details and carving skills. During the Ming Dynasty, China's econ- omy developed rapidly and there was a shortage of wood, so the exquisiteness of fur- niture was low. However, literati can still produce simple and durable furniture. Contemporary Ming-style furniture absorbs in traditional hand-made technology, com- bines contemporary design concepts and technology, and shows diversified styles. In the new era, Ming-style furniture reinterprets many cultural elements such as nobility, literati life and folk life in a

long history, showing more styles and features, and has become an integral part for people to decorate their home and show their taste.

2.2 The Characteristics and Cultural Connotation of Ming-style Furniture

Ming-style is a furniture style that rose in the Ming Dynasty. It is characterized by elegance, simplicity, practicality and exquisiteness. It absorbs in the ancient furniture, ancient architecture, sculpture, ancient painting and ancient calligraphy in China. The specific features are: simple lines, stable structure, elegant shape and exquisite carving. [2] The overall form is not flashy, and the meticulous carving skills are one of the most important characteristics of Ming furniture. In addition, the color of Ming-style furni- ture is mainly mahogany.

Designers also attache great importance to the inheritance of traditional culture, especially the cultural connotation:

- **2.2.1 Respect for nature:** Ming-style furniture pays attention to harmony between hu- mans and nature, and makes use of the texture and color of wood to make the furniture show natural beauty; Avoid excessive waste of raw materials in design and production as much as possible.
- **2.2.2 Simple style:** The style of Ming-style furniture is very simple, without using too many decorations and lines, emphasizing the overall aesthetic feeling and practicality. In addition, other traditional cultural elements are also widely used, such as squares, tenons and arches.
- **2.2.3 Excellent skills:** Ming-style furniture is exquisite in craftsmanship, complicated in procedures, and requires many professional skills, so the production process reflects the serious attitude of craftsmen.
- **2.2.4 Ergonomics:** This kind of furniture can adapt to people's body structure and usage habits to the maximum extent, and encourage physical and mental comfort and natural relaxation.

2.3 Principles and Methods of Promoting Ming-style Furniture Design

As one of the representatives of traditional furniture in China, Ming-style furniture has been widely praised for its beautiful lines, unique structure and exquisite craftsmanship. However, in the modern furniture market, the market share of Ming-style furniture have gradually shrank. In order to promote Ming-style furniture design, we must follow the design principles and methods of Ming-style furniture. In response to the challenges faced by furniture design, designers can learn from and innovate the Ming-style furniture. The following are some principles and methods of Ming-style furniture design based on the concept of sustainable development:

First of all, when designing Ming-style furniture, we must pay attention to its lines. The lines of Ming-style furniture are smooth and beautiful, emphasizing simplicity and el- egance, and paying attention to details. Lines should not be rigid, but should be soft. Therefore, in Ming-style furniture design, the smoothness of lines is very important. Therefore, when designing Ming-style furniture, designer must pay attention to lines and highlight the unique aesthetic characteristics of Ming-style furniture, which coin- cides with the modern minimalist style.

Secondly, the structure of Ming-style furniture is very strict and fine, and it pays atten- tion to balance and stability. Ming-style furniture generally adopts the structure of "lou- tai, bed board and wing back", with stable structure. Therefore, designers need to deeply understand the Ming-style furniture structure, and innovate it to make it more compat- ible with modern life.

At the same time, Ming-style furniture should also pay attention to the use of color. Red, black, yellow, green and blue are commonly used in traditional Ming-style furni- ture, showing the overall harmony. In the modern furniture market, in order to meet the needs of the market and potential consumers, designers can integrate some modern color elements, highlighting more beautiful, fashionable and artistic elements.

Finally, in the design of Ming style furniture, designers need to pay attention to the use of materials. Wood is the main material of Ming-style furniture, so it is necessary to choose high-quality wood. At the same time, in modern design, in order to adapt to different environments and personal needs, materials such as glass and metal can be added to make the materials of furniture more colorful, thus helping to understand the needs of modern consumers.

In short, to promote Ming-style furniture design, designers need to follow the design principles and methods of Ming-style furniture, innovate at the same time, and pay at-tention to the needs of modern consumers and market demand, so as to win consumers' love and recognition.

3 The Concept of Sustainable Development and Contemporary Furniture Design

3.1 Concept, Goal and Significance of Sustainable Development

Sustainable development refers to meeting the needs of modern society without de-stroying the environment, exhausting resources and affecting the development of the next generation. The goal of sustainable development is the balance and coordination among economy, society and environment, so as to ensure that we not only meet the current needs, but also preserve a good economic, social and natural environment for the future. In addition, sustainable development also requires all parties to share their responsibilities and use innovative methods and technologies to create a future of eco-nomic prosperity, social justice and environmental protection. [3]

Ming-style furniture is an important part of China furniture culture, and its traditional craft, artistic style and profound cultural connotation are highly respected. Ming-style furniture has attracted wide attention because of its simplicity, comfort and practicality, and has become an important formal language of contemporary furniture design, which is in line with the concept of sustainable development.

3.2 Application of Sustainable Development in Ming-style Furniture

The design of Ming-style furniture should pay attention to the concept of sustainable development, which is not only to meet the market demand, but also to achieve the goals of environmental protection, energy saving and low carbon. This paper discusses the sustainable development design of Ming-style furniture with practical cases.

3.2.1 Rational Utilization of Wood Resources

In Ming-style furniture design, natural wood is the first choice. In order to achieve the goal of sustainable development, it is necessary to make rational use of wood resources. For example, furniture designers can use abandoned materials in temples.

1. In the pro- duction process, environmental protection materials and processes can be used to re- duce environmental pollution. At the same time, give priority to local suppliers and raw materials to reduce energy consumption and carbon emissions during transportation.

3.2.2 Intelligent Design Practice

In the design of Ming-style furniture, combined with smart home technology, we can innovate furniture products with high added value and unique style. The Ming-style TV cabinet combined with intelligent system meets the needs of modern life.

3.2.3 Realization of Circular Economy

The waste materials generated in the process of Ming-style furniture production can be recycled and made into different spare parts, partitions, etc., so as to reuse the resources. [4] For example, a new type of walnut chair is made by recycling the materials of Ming-style leather chair. Ming-style furniture can apply the concept of sustainable development in the process of production, transportation and use. When the furniture reaches the end of its life, it can be reused or recycled. When the old materials are decomposed, the pollution is reduced as much as possible and the waste materials are recycled to promote the sustainable development of circular economy.

In conclusion, sustainable development can be applied in the whole life cycle of Ming- style furniture to reduce the impact on the environment and promote sustainable eco- nomic and social development.

3.3 The Role and Influence of Sustainable Development on Ming-style Furniture

Sustainable development is the strategic goal for human society to realize the coordinated development of economy, society and environment without destroying environmental resources. In the process of modernization, its influence scope is more and more related to people's life, which also has an impact on Ming-style furniture. [5]

For Ming-style furniture, the concept of sustainable development is first reflected in the choice of raw materials. Because wood is the main material in furniture production, the concept of sustainable development is very important. The economy and production capacity of renewable resources such as bamboo, recycled wood and reed have been strengthened, which has had a profound impact on the production and design of Ming-style furniture.

Secondly, the concept of sustainable development also requires the formulation of pol- icies and regulations. For enterprises, the concepts of environmental protection, health and sustainability are highly valued, so the formulation of policies and regulations grad- ually tends to protect the environment. The same applies to Ming-style furniture, be- cause a lot of wood needs to be cut down to obtain, in order to achieve the goal of sustainable development, the severity of policies and regulations is getting higher and higher. If it is clearly stipulated that production enterprises must use resource-saving methods to produce wooden furniture, forest resources must be protected to ensure the continuity, durability and recyclability of the production.

In addition, the concept of sustainable development also promotes the innovation of design. With the promotion of environmental protection materials, Ming-style furniture has more space in design. Pollution-free and recyclable materials are the symbol of sustainable development. For Ming-style furniture, the promotion of new materials not only meets the market demand, but also pays more attention to the environmentally - friendly nature of the products.

Finally, the concept of sustainable development has also brought new opportunities to the sales of Ming furniture. Consumers naturally tend to buy environmentally-friendly Ming-style furniture with high quality, cultural value and collection value. In addition, the practice of sustainable development also has had a profound impact on Ming style furniture. [6] By discussing the importance of sustainable development, the contemporary furniture design industry is guided to pay extensive attention to sustainable application.

4 Conclusion

With the development of society, modern furniture has become an essential element in people's lives, and in this process, furniture design is also facing many challenges. The first is the market demand. Modern furniture market has a large demand, and the needs of different groups of consumers should be met. Secondly, the functionality and life of the design. In addition to aesthetics, modern people's

demand for furniture pays more attention to its functionality and service life, which requires designers to give consid- eration to aesthetics, practicality and durability. Finally, sustainable development and environmental protection. With the development of modern industry, the problems of environmental pollution and waste of resources have become serious. Designers need to consider environmental protection issues, adopt environmentally friendly materials, and reduce waste. Promoting Ming-style furniture design through sustainable develop- ment is an important issue that must be paid attention to in the field of contemporary furniture design. By analyzing different cases, this paper demonstrates the sustainable development practice of Ming-style furniture from environmental protection materials, intelligent design and circular economy. The concept of sustainable development will lay a solid foundation for the development of Ming-style furniture and promote the inheritance and development of Ming-style furniture. Although the appearance of Ming-style furniture have not changed, its materials are more environmentally-friendly, and the ecological benefits of furniture have been improved, which gradually meets the needs of modern people for environmental protection, health and safety.

In a word, Ming-style furniture, as a representative of traditional furniture in China, has a unique charm different from western furniture. Its rich cultural connotation and practical design make Ming-style furniture not only have ornamental value, but also have practical value. It is also the carrier of inheriting human cultural traditions and represents the elegance, nobility and exquisite arts and crafts of China culture. Combining the concept of sustainable development can bring various benefits to Ming-style furniture and inject new vitality into modern design. Combining Ming-style furniture with the concept of sustainable development can create higher quality, environmentally- friendly and popular products, and also bring new opportunities for the long-term development of the furniture industry.

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