

The Study on the Design Characteristics, Craftsmanship, and Modern Application of Bamboo Chairs in Southwest China in the 20th Century

Xingchuan Shu and Eakachat Joenurairatana

Silpakorn University, Thailand

Corresponding Author, E-mail: shu xingchuan@gmail.com

Abstract

This research aims to explore the design characteristics, craftsmanship, and modern applications of bamboo chairs in Southwest China during the 20th century. The study focuses on a selected sample of bamboo chairs from various regions within Southwest China, including Sichuan, Yunnan, and Guizhou provinces, known for their rich traditions in bamboo craftsmanship. Research instruments include field investigations, literature analysis, and case studies. Data collection was conducted through on-site observations, interviews with local artisans, and the analysis of historical documents and existing research. Data analysis involved qualitative analysis and descriptive statistics to identify patterns, trends, and unique features in bamboo chair design and craftsmanship.

The research results found that bamboo chairs from Southwest China exhibit distinct regional characteristics, combining practical design with deep cultural significance. The use of sustainable bamboo materials, traditional mortise-and-tenon joints, and intricate decorative techniques were highlighted as key elements that contribute to the enduring appeal and functionality of these chairs. Additionally, the study suggests that modern applications of bamboo chairs can be enhanced by integrating traditional craftsmanship with contemporary design principles, promoting both cultural preservation and innovation in furniture design.

Keywords: Design Characteristics; Craftsmanship; Modern Application; Bamboo Chairs; Southwest China

Introduction

In the 20th century, bamboo chairs from Southwest China, as a type of traditional furniture, carried rich regional culture and folk wisdom. However, with the acceleration of modernization, traditional craftsmanship has faced unprecedented challenges and crises. Bamboo chairs, once an indispensable part of traditional life in Southwest China, have seen their design and craftsmanship gradually marginalized in the modern furniture market, even nearing extinction. Despite this, bamboo chairs continue to play a significant role in the daily lives of local people, not only due to their excellent practical functions but also because they embody deep cultural heritage and historical memory (Tian, 2021).

Currently, research on the design characteristics and craftsmanship of bamboo chairs in Southwest China remains limited. Although there has been increasing academic attention to traditional craftsmanship with the growing awareness of cultural preservation, systematic studies specifically focusing on bamboo chairs from Southwest China are still scarce. Existing research has primarily concentrated on the physical properties of bamboo, basic bamboo weaving techniques, and the preservation and inheritance of a few traditional bamboo products. However, in-depth exploration of bamboo chairs in terms of design, cultural connotations, and

craftsmanship details is lacking. Moreover, how the traditional design and craftsmanship of bamboo chairs can gain new vitality in modern furniture design has yet to be fully explored.

This research gap leads to several issues. Firstly, the unique design characteristics and craftsmanship of bamboo chairs from Southwest China have not been sufficiently recognized and promoted, resulting in the underappreciation of their cultural and artistic value. Secondly, modern furniture designers attempting to integrate traditional bamboo chair elements into contemporary design often lack systematic theoretical guidance and case studies, which to some extent limits the application and innovation of bamboo chairs in the modern design field.

The significance of studying the design characteristics and craftsmanship of bamboo chairs in Southwest China in the 20th century lies not only in the preservation and transmission of this traditional craft but also in exploring how to combine traditional cultural elements with modern design concepts to achieve cultural innovation and industrial upgrading. As a major bamboo resource province in China, Southwest China has immense potential for the development of its bamboo industry. Bamboo chairs, as an important component of traditional bamboo craftsmanship, offer significant insights into the high-value development of the bamboo industry through their cultural connotations and design features.

The design and craftsmanship of bamboo chairs not only reflect the unique regional culture and lifestyle of Southwest China but also showcase the exquisite skills of Chinese traditional craftsmanship. By studying these design characteristics and techniques, it is possible to further excavate and promote traditional Chinese culture, enhancing cultural confidence. Additionally, the regional characteristics and traditional craftsmanship of bamboo chair design provide rich inspiration for modern design. By systematically studying the design language and craftsmanship of bamboo chairs, new elements can be integrated into modern furniture design, achieving a harmonious blend of tradition and modernity.

With the growing global focus on sustainable development, bamboo, as an eco-friendly and renewable natural resource, is gaining increasing attention. Studying the design characteristics and craftsmanship of bamboo chairs not only helps promote the application of bamboo in modern design but also provides practical guidance for achieving green design and low-carbon living. In the context of heightened global environmental awareness, the modernization and innovation of bamboo chairs as traditional craft products are of great practical significance.

Finally, the study of bamboo chair design characteristics in Southwest China can provide theoretical support and innovative ideas for the development of the bamboo industry. The design and craftsmanship of traditional bamboo chairs, having been passed down for centuries, have formed unique styles and systems, offering valuable experience for the growth of the bamboo industry. By researching these characteristics and applying them to modern design, it is possible to facilitate the upgrading and transformation of the bamboo industry, thereby enhancing its market competitiveness.

Research Objectives

1. To analyze the design characteristics of bamboo chairs in Southwest China during the 20th century.
2. To explore the transmission and development of bamboo chair craftsmanship and to expand new applications.

Research Methodology

1. Population and Sample

The population for this study includes bamboo chairs produced in Southwest China during the 20th century, with a focus on their design characteristics and craftsmanship. The sample selection was based on the representativeness of the bamboo chairs in different regions, including Sichuan, Yunnan, and Guizhou provinces. These regions were chosen due to their rich tradition of bamboo craftsmanship, ensuring that the study captures the diversity and cultural significance of bamboo chair designs across Southwest China.

2. Research Tools

Field Investigation: This method involved on-site visits to bamboo chair manufacturing sites in Southwest China to collect first-hand data. Researchers observed the bamboo chair-making process, conducted interviews with local craftsmen and experts, and documented the methods and tools used in the production. This approach allowed for a comprehensive understanding of the design styles, craftsmanship, and cultural contexts of bamboo chairs.

Literature Analysis: To provide a solid theoretical foundation, the study included an extensive review of existing literature, including historical documents, design materials, and academic research related to bamboo chairs in Southwest China. This method helped in understanding the historical evolution of bamboo chair design and the theoretical underpinnings of their craftsmanship.

Case Study: Representative bamboo chairs from different regions were selected for in-depth analysis. Case studies provided detailed insights into the unique design features, structural elements, and decorative aesthetics of these chairs, contributing to a broader understanding of their artistic and practical value.

3. Data Collection

Field Investigation: Researchers conducted field visits to various bamboo chair manufacturing sites. This included observing the entire process of bamboo chair-making, from material selection to final assembly, and interviewing local artisans about their techniques and the cultural significance of their craft. Photographic documentation and descriptive statistics were also employed to capture and quantify the craftsmanship details.

Literature Review: Historical records, previous research studies, and design documentation were systematically analyzed to gather background information and contextualize the findings from the field investigations. This analysis provided insights into the traditional and modern applications of bamboo chairs.

Case Studies: Detailed case reports were compiled based on the selected bamboo chairs. These reports included analyses of the materials used, the structural design, decorative elements, and the cultural implications of the designs. Case studies helped in identifying patterns and trends across different regions and time periods.

4. Data Analysis

Qualitative Analysis: Data from field investigations, interviews, and case studies were analyzed to identify recurring themes and unique characteristics of bamboo chair designs. This included the examination of design principles, material usage, and the cultural symbolism embedded in the craftsmanship.

Descriptive Statistics: Quantitative data, such as the frequency of certain design features or the types of materials used, were collected and analyzed to provide a statistical overview of the commonalities and differences in bamboo chair designs across various regions.

5. Conceptual Framework

The conceptual framework of this study integrates traditional bamboo chair craftsmanship with modern design principles, aiming to preserve cultural heritage while promoting innovation in contemporary furniture design. The framework is built on the following key elements (Figure 1):

Material Utilization: Emphasizes the sustainable use of bamboo, highlighting its environmental benefits and its potential for modern applications in furniture design.

Structural Design: Focuses on the mortise-and-tenon joints, a traditional construction technique that enhances the durability and cultural value of bamboo chairs, suggesting its application in modern furniture for both practical and aesthetic purposes.

Decorative Aesthetics: Encourages the integration of traditional decorative elements, such as bamboo weaving and carving, into contemporary designs to maintain cultural continuity while appealing to modern tastes.

Cultural Integration: Advocates for the reinterpretation of cultural symbols and motifs found in bamboo chair designs, ensuring that modern furniture products resonate with contemporary consumers while preserving their traditional roots.

By applying this conceptual framework, the study aims to provide practical guidance for the innovation and modernization of traditional bamboo chairs, ensuring their continued relevance and appeal in today's design landscape.

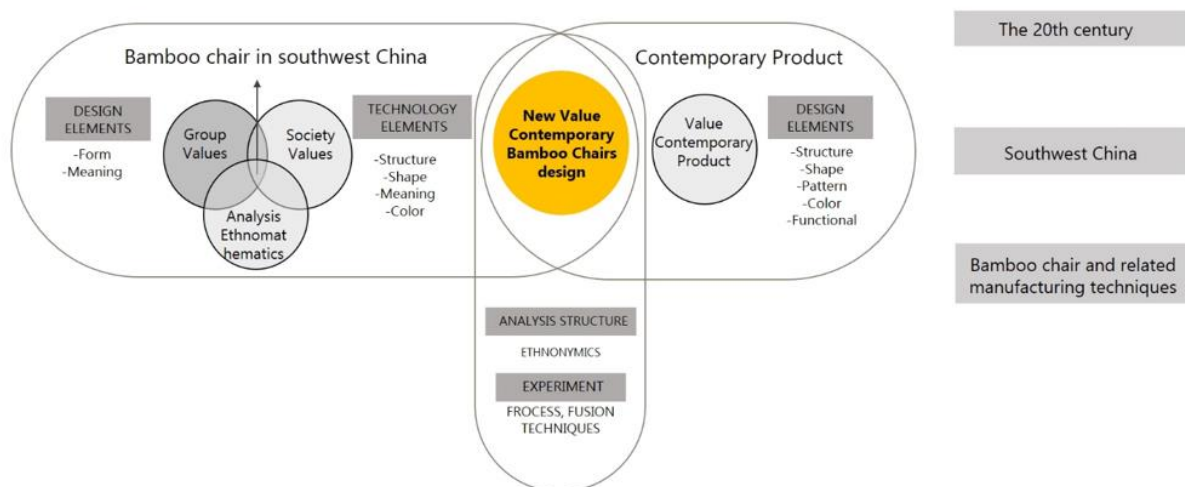


Figure 1 Conceptual Framework.
 Source: Constructed by the researcher, 2024

Research Results

1. Design Characteristics of Bamboo Chairs in Southwest China during the 20th Century

1.1 Material Usage and Structural Design

The unique natural environment of Southwest China provides an abundant supply of bamboo, making it an ideal region for the design of bamboo chairs. Bamboo, as a renewable resource, is not only environmentally friendly but also has excellent flexibility and durability. These characteristics make bamboo an ideal material for furniture production, especially for

bamboo chairs. In Southwest China, bamboo chairs are not only practical items for daily use but also important cultural symbols that reflect the region's ecological philosophy and traditional craftsmanship.

The selection and use of bamboo are crucial in the design and production of bamboo chairs. Bamboo's natural properties, such as its light weight, toughness, and durability, offer unique advantages for bamboo chair design. Craftsmen in Southwest China have fully utilized these characteristics, creating bamboo chairs that are both economically practical and environmentally sustainable through skillful design and craftsmanship. These bamboo chairs not only meet the daily needs of local people but also reflect the cultural essence and aesthetic principles of the region through their unique designs.

In terms of material selection, the bamboo chair-making process in Southwest China demonstrates a deep respect for and effective use of natural resources. For example, the bamboo weaving craftsmanship in the Wengda region of Yunnan Province has a history of over 400 years. This traditional craft emphasizes the natural attributes of materials and meticulous craftsmanship. Local artisans typically choose mature, sturdy, and pest-free bamboo for making bamboo chairs, usually harvested between 3 to 5 years of age. At this stage, the bamboo has sufficient strength while maintaining good elasticity. After harvesting, the bamboo is peeled, roasted, or sun-dried to prevent cracking and decay, ensuring the quality and durability of the bamboo chairs (Figure 2)..

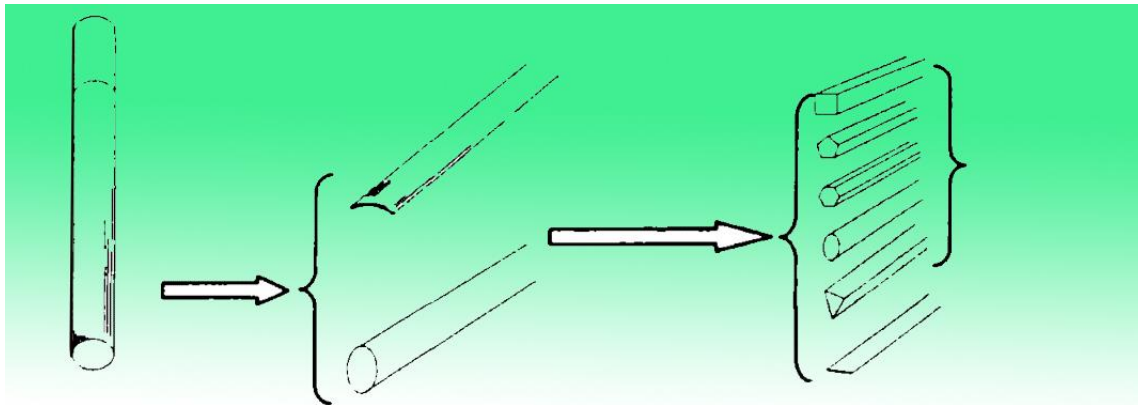


Figure 2 Production of Bamboo Slats as Preliminary Material for Chairs.

Source: Constructed by the researcher, 2024

The framework of bamboo chairs typically uses the main trunk of the bamboo, connected through precise mortise-and-tenon joints to form a sturdy structure. Mortise-and-tenon joints are a traditional connection method that does not require nails or glue, relying instead on the natural properties of the wood or bamboo to create a strong bond. This design enhances the structural stability of the chairs while also making them more environmentally friendly and sustainable. Given the lightweight nature of bamboo, bamboo chairs are also easy to transport and move, making them well-suited to the needs of modern households.

In the structural design of bamboo chairs, the frame is a key element. The frame is usually made from strong bamboo, connected using mortise-and-tenon joints to ensure the stability and durability of the chair. Mortise-and-tenon joints are an important technique in traditional Chinese woodworking, serving not only as a connection method but also as an

artistic expression. Through this structural design, the creators of bamboo chairs preserve the essence of traditional craftsmanship while incorporating new elements into modern design, giving bamboo chairs both deep cultural heritage and the ability to adapt to modern life.

Bamboo chair designs in Southwest China also place a significant emphasis on portability. Bamboo is naturally lightweight, and with careful design and processing, the resulting chairs are not only sturdy and durable but also easy to transport and use. This portability allows bamboo chairs to be used flexibly in various environments, both indoors and outdoors, showcasing their unique charm. Designers have maximized the lightweight nature of bamboo through thoughtful structural designs, ensuring that these chairs offer both comfort and stability.

Overall, the use of materials and structural design in bamboo chairs from Southwest China reflects the deep understanding and skillful application of natural materials by local craftsmen. Through careful selection of bamboo and the use of traditional mortise-and-tenon joints, bamboo chairs achieve exceptional stability and durability while maintaining a light and agile design. These characteristics make bamboo chairs highly relevant in modern living spaces and provide valuable insights for contemporary bamboo furniture design.

1.2 Form, Style, and Decorative Aesthetics

Bamboo chair designs in Southwest China are renowned for their rich variety of forms and unique decorative styles. These designs not only reflect the cultural connotations of the region but also showcase the creativity and craftsmanship of local artisans. The form of bamboo chairs is closely related to their function and also reflects the lifestyle and aesthetic preferences of the local residents.

The design of bamboo chairs in Southwest China exhibits great diversity in form, including both traditional straight-line designs and bamboo-woven chairs with graceful curves. Traditional straight-line designs are typically simple in structure, with clean and strong lines, embodying a strong sense of practicality, making them well-suited for everyday use. In contrast, bamboo-woven chairs with flowing curves have a softer appearance, with backrests and armrests intricately woven from fine bamboo strips, creating a distinctive aesthetic. This type of design not only conforms to ergonomic principles, providing comfortable seating, but also enhances the artistic value of the furniture.

The diversity in the form of bamboo chairs meets different functional needs. For example, armchairs provide extra support, making them suitable for prolonged use; armless chairs are more simplistic, easy to move and place; folding chairs combine portability with practicality, making them ideal for flexible use in both indoor and outdoor environments; rocking chairs are favored for their comfort and relaxation, particularly in the outdoor settings of Southwest China. Each type of bamboo chair is carefully designed to meet specific functional requirements, while also reflecting the designers' creativity in form innovation.

In terms of decorative aesthetics, bamboo chairs from Southwest China adhere to the design philosophy of "natural and simple," which is closely connected to the region's natural environment and way of life. The decoration of bamboo chairs often involves the use of natural materials, such as bamboo strips and vines, which are transformed into decorative patterns and textures through techniques like weaving and carving. For instance, the backrests and armrests of these chairs are often adorned with intricate woven patterns or carved designs, enhancing the visual appeal of the chairs and adding artistic value.

The decorative elements of bamboo chairs often embody the unique cultural symbols and folk traditions of Southwest China. For example, in some regions, the backrests of bamboo chairs are engraved with auspicious symbols or ethnic motifs, which are not only visually appealing but also carry deep cultural significance, reflecting the local people's aspirations for a good life. While the decorative techniques may be simple, they are rich in meaning, maintaining the natural simplicity of bamboo while showcasing the designers' craftsmanship and ingenuity.

Furthermore, the decoration of bamboo chairs emphasizes harmony with the natural environment. The natural color of bamboo is usually preserved, highlighting the material's inherent texture and beauty. Designers skillfully combine the natural aesthetics of bamboo with artistic carvings, creating chairs that exude an understated elegance. Decorations not only serve as embellishments but also convey the designers' respect for nature and understanding of art, making each bamboo chair a unique work of art.

The design of bamboo chairs in Southwest China is deeply influenced by regional culture. The form and decoration of these chairs often embody the cultural significance and historical heritage of the area. For instance, in some minority-inhabited regions of Southwest China, bamboo chair designs incorporate rich ethnic elements, including traditional totems, religious symbols, and specific color schemes, showcasing the unique cultural characteristics of the region. Bamboo chairs are not just practical furniture items; they are also symbols of social culture and ethnic customs.

Additionally, bamboo chair designs in Southwest China emphasize the combination of practicality and comfort. Designers carefully consider ergonomic principles when designing these chairs. The height of the chair, the angle of the backrest, and the position of the armrests are all meticulously designed to ensure maximum comfort for the user. Bamboo's natural breathability ensures that these chairs remain comfortable even after prolonged use, especially during the summer months when the coolness of bamboo is highly appreciated.

2. Inheritance and Application of Bamboo Chair Craftsmanship

2.1 Ethnic Adaptability and Environmental Suitability

Bamboo chairs are well-suited to the climatic conditions of Southwest China, offering excellent resistance to moisture and heat. Through these design characteristics, bamboo chairs from this region in the 20th century not only embody a blend of practicality and aesthetics but also reflect the cultural traditions and lifestyle of the local communities.

Taking the design and craftsmanship of bamboo chairs among the Wa ethnic group in Yunnan, Southwest China, as an example, it is evident that the Wa people have a deep connection with bamboo, which has played a significant role in their material culture. "The cultural form of the Wa people is very unique; due to the geographical isolation, their cultural customs and designs have retained a simple and primitive style. For bamboo craftsmanship, ethnic material culture is an indispensable soul." (Chen & Feng, 2024). Throughout the formation and development of traditional handicrafts, the Wa people have integrated ethnic elements into their bamboo craftsmanship, which is reflected in the techniques, patterns, colors, and uses of bamboo products, showcasing a natural and unpretentious richness. Wa people accumulated extensive traditional knowledge about bamboo, understanding and utilizing it in diverse ways, leading to the development of a multifaceted Wa bamboo culture. This also reflects the Wa people's reverence for nature and their appreciation of the environment. The raw material for bamboo stools and chairs comes from the solid bamboo found in the

mountains, a material that carries rich cultural symbolism and possesses excellent performance. The chairs made from this material are not only practical and beautiful but also make excellent gifts due to their careful craftsmanship.

The bamboo chair-making process involves several key stages, including material selection, processing, assembly, and decoration (Figure 3), which showcase the wisdom and skills of folk craftsmen. The rattan bamboo chairs from Wengda in Yunnan Province, a distinctive product of the Wa ethnic group, are known for their natural simplicity and dynamic, rugged artistic style, serving as carriers of both the material and spiritual culture of the local Wa people. The bamboo craftsmanship of the Wa people in Gengma County has been passed down through generations and has been used in a practical and sustainable manner. However, as societal demands for better living conditions have grown, the functionality of products like bamboo chairs also requires continuous improvement. Bamboo chairs, while made from natural materials, have inherent drawbacks such as being difficult to clean, prone to deformation, and flammable. The simple traditional processing techniques are often insufficient to overcome these performance limitations.



Figure 3 Bamboo Chair in the Making
Source: Photographed by the researcher, 2024

As a traditional handicraft, bamboo chairs carry the long history and exquisite craftsmanship of Chinese culture. In the process of inheriting and developing the craftsmanship of bamboo chair production, it is essential to emphasize the wisdom embedded in traditional folk creations. The Chinese traditional creation philosophy advocates the principle of "assessing the material and distinguishing the artifact," which means adapting to the characteristics of the material during the manufacturing process (Sun, 2014). Bamboo, as a natural ecological material, has many limitations during its processing. Skilled bamboo artisans are adept at working with the properties of the available materials, splitting the bamboo, layering, scraping the outer skin, and more (Figure 4), to produce bamboo filaments or slats of varying sizes. These are then combined organically, according to their thickness, width, and flexibility, to create products that are in harmony with the material's inherent characteristics.



Figure 4 Bamboo Material Processing Procedure
Source: Liu & Li, 2022

Different types of bamboo are used for different purposes. For instance, water bamboo, known for its cooling properties, produces bamboo slats with qualities described as "thin as paper, bright as jade, smooth as water, and soft as silk," making it ideal for crafting summer mats. Moso bamboo, known for its hard and durable qualities, is an excellent material for making bamboo chairs, as it can be split into wide slats necessary for many bamboo products. Additionally, Moso bamboo can be split into multiple layers; the top layer, known as "green slat," is firm and smooth, while the second layer, called "next to the green," is flexible and perfect for weaving delicate bamboo crafts. "Bitter bamboo," known for its easy splitting properties, can be made into fine bamboo threads that are easy to dye and bleach, making it suitable for small and medium-sized three-dimensional bamboo weaving" (Liu & Li, 2022). The top layer of bamboo shoots, known as "bamboo shoot slat," is soft and smooth, often used for finishing edges. Through a deep understanding and knowledge of the materials, artisans determine the forms and craftsmanship of bamboo products and their structural components, allowing them to accumulate experience through production, adapt to circumstances, and handle materials flexibly. This has resulted in the functional and diverse bamboo woven products we see today.

2.2 Innovative Approaches in Modern Bamboo Chair Design

The innovative approach in modern bamboo chair design is reflected in the transformation of traditional design concepts, requiring a shift in perspective and the introduction of new design ideas. Current trends in bamboo chair design innovation are primarily focused on: firstly, combining emotion with high technology, emphasizing the integration of new technologies, new craftsmanship, and natural materials; secondly, moving towards the use of composite, diverse, and natural materials; thirdly, ensuring that products meet green design requirements, reducing energy consumption and costs during the production process, and trending towards intelligent and less material-intensive products; fourthly, designing products that are multifunctional, detachable, continuously upgradeable, and adaptable (Luo, 2021).

Based on research, it can be concluded that bamboo as a material has significant design adaptability. The innovation in modern bamboo chair design should be rooted in a deep understanding of bamboo's internal structure, natural characteristics, and material adaptability. This should be combined with rational construction methods, craftsmanship features, emotional content, and traditional cultural concepts, applying modern product design principles to bamboo chair design. Consideration should not only be given to the functional aspects of bamboo products but also to their symbolic, cultural, and aesthetic functions. The production process of bamboo products, within the context of informatization, forms an open and fluid system closely integrated with modern lifestyles, consumption patterns, and consumer culture. Bamboo chair design is no longer merely a single craft but a fusion of traditional furniture manufacturing techniques, original bamboo chair-making processes, panel furniture manufacturing methods, and other furniture-making techniques. Such product innovation is no longer isolated but is the result of the combined influence of technology, craftsmanship, materials, culture, and consumer trends.

Discussion

1. Research Objectives

The primary objectives of this research were to analyze the design characteristics of bamboo chairs in Southwest China during the 20th century, explore the craftsmanship involved in their production, and investigate their modern applications. The study aimed to bridge the gap between traditional bamboo chair-making techniques and contemporary design principles, offering insights into how these traditional elements can be preserved and innovatively applied in modern furniture design.

2. Research Results

The research findings revealed that bamboo chairs from Southwest China are characterized by their sustainable use of bamboo, the application of traditional mortise-and-tenon joints, and the incorporation of intricate decorative aesthetics. These chairs not only served practical purposes but also held deep cultural significance, reflecting the local customs and traditions of the regions they originated from. The study also found that the integration of traditional bamboo craftsmanship with modern design principles offers a viable pathway for the continued relevance and innovation of bamboo chairs in contemporary furniture markets. The results suggest that these traditional designs can be adapted to meet modern needs while preserving their cultural essence.

3. Reflection

The findings of this study emphasize the importance of preserving traditional craftsmanship in the face of modernization. The detailed analysis of bamboo chairs in Southwest China highlights the richness of cultural heritage embedded in these traditional designs. The use of sustainable bamboo materials and environmentally friendly production methods aligns well with current global trends toward sustainability and green design. This research underscores the potential of traditional crafts to contribute to modern design practices, particularly in creating products that are not only functional but also carry cultural and aesthetic value.

Moreover, the study reflects on the challenges of integrating traditional designs with modern requirements. While the traditional mortise-and-tenon joint technique provides durability and cultural value, adapting this technique to meet the demands of contemporary design requires innovation and flexibility. The research suggests that a careful balance between tradition and modernity is crucial for the successful application of these traditional elements in modern furniture design.

4. Consistent and Inconsistent with Previous Research

Consistent Findings:

The study aligns with previous research that highlights the cultural significance of traditional bamboo craftsmanship. Similar to the findings of Tian Zongya(2021), this study confirms that bamboo chairs are not merely functional objects but also serve as cultural symbols that reflect the history and traditions of the regions in which they are made.

The emphasis on sustainability and the use of bamboo as a renewable resource is consistent with Luo Yuqing(2021), who argued for the importance of integrating environmentally friendly materials into modern design. This study supports the notion that bamboo, due to its renewability and low environmental impact, is a valuable material for sustainable design practices.

Inconsistent Findings:

While previous studies, such as those by Chen Ran and Feng Shaochun(2024), focused more on the ethnic adaptability and environmental suitability of bamboo products, this research places a stronger emphasis on the potential for innovation within modern design frameworks. It suggests that, beyond environmental suitability, bamboo chairs can be reimagined and adapted to meet contemporary design trends, a point that is less emphasized in earlier research.

Another area of divergence is in the application of traditional craftsmanship techniques. While Sun ji(2014) emphasized the challenges of maintaining traditional methods in modern production, this study found that with proper adaptation, traditional techniques like mortise-and-tenon joints can be successfully incorporated into modern designs, providing both cultural value and structural integrity.

Conclusion

This study focuses on the design characteristics and craftsmanship of bamboo chairs in Southwest China during the 20th century, aiming to provide theoretical support and practical references for the modern application and design innovation of traditional bamboo chairs through an in-depth analysis of their forms, structures, decorative styles, and cultural connotations. The main findings are as follows:

Material Utilization and Structural Design: The study reveals the uniqueness of bamboo chair design in Southwest China, particularly in terms of material utilization and structural design. Bamboo, as a renewable and environmentally friendly natural resource, has been fully utilized in bamboo chair design. The traditional mortise-and-tenon structure not only enhances the stability and durability of bamboo chairs but also reflects the wisdom of Chinese traditional craftsmanship. This discovery provides important insights for material selection and structural innovation in modern furniture design.

Diversity in Form and Decorative Style: The study provides a detailed analysis of the diversity and uniqueness of bamboo chairs in terms of form and decorative style in Southwest China. The form design of bamboo chairs is not only diverse, meeting different functional needs, but also reflects the cultural connotations of the local area through simple yet artistically

rich decorative styles. This finding offers new ideas for modern design, demonstrating how product diversity and artistic expression can be achieved through innovative design while preserving the essence of traditional culture.

Cultural Symbols and Modern Lifestyles: The study explores the integration of cultural symbols in bamboo chair design with modern lifestyles. As traditional furniture in Southwest China, bamboo chairs contain cultural symbols and historical memories that are of significant heritage value. The research shows that by reinterpreting these symbols, bamboo chairs can gain new vitality in modern design, serving as a bridge between cultural heritage and contemporary living.

Social and Ecological Significance: The study also emphasizes the social and ecological significance of bamboo chair design. The environmental friendliness of bamboo gives bamboo chairs an important role in the concepts of green design and sustainable development that are promoted today. The findings indicate that promoting the use of bamboo in furniture design not only helps in environmental protection but also fosters sustainable economic development in local communities, while strengthening people's identification with traditional culture.

Suggestions

1.Theoretical Suggestions

1.1 Strengthen Theoretical Research on Traditional Craftsmanship

Further in-depth theoretical research on the design characteristics and craftsmanship of traditional bamboo chairs is essential, particularly in the areas of material science, structural mechanics, and design aesthetics. By deeply analyzing the physical properties of bamboo, scientific evidence can be provided for bamboo chair design, optimizing material selection and processing techniques. Structural mechanics research will help further enhance the stability and durability of bamboo chairs, while design aesthetics research can inspire new forms and decorative styles for modern bamboo chairs.

1.2 Integration of Interdisciplinary Research

Bamboo chair design should be integrated with disciplines such as cultural anthropology, ecology, and sociology to explore the evolution of bamboo chair design in different cultural contexts and its impact on social life. This interdisciplinary research approach will help comprehensively understand the role of bamboo chairs at various historical stages and provide theoretical support for their redesign in modern society.

1.3 Application of Modern Design Concepts

It is recommended to incorporate more modern design concepts into theoretical research, such as green design, user experience design, and intelligent design. By introducing these concepts, the study can explore how to make bamboo chairs more adaptable to modern lifestyles and needs while preserving the essence of traditional craftsmanship..

2.Policy Suggestions

2.1 Establish Cultural Heritage Protection Policies for Bamboo Craftsmanship

The government should strengthen the protection of bamboo craftsmanship, particularly the traditional skills involved in making bamboo chairs, by formulating specific policies and regulations to ensure the effective transmission and development of this traditional craft in modern society. Specific measures could include establishing special funds to support the inheritance and innovation of traditional bamboo crafts, protecting bamboo craftsmanship

with significant cultural value, and encouraging the application and protection of intangible cultural heritage.

2.2 Promote Sustainable Development Policies for the Bamboo Industry

The government is advised to implement relevant policies to promote the extensive application of bamboo in modern industrial design and support the comprehensive development of the bamboo industry chain. This includes encouraging bamboo processing enterprises to innovate technologies, increase the added value of bamboo, and promote the application of bamboo in furniture design, architectural decoration, and other fields. Additionally, policies should support the integration of the bamboo industry with modern design and technology, driving the sustainable development of the bamboo industry.

2.3 Strengthen Support and Training for Traditional Craftsmen

To prevent the loss of traditional bamboo chair-making skills, the government should enhance support and training for traditional craftsmen, establish a bamboo craftsmanship inheritor system, and recognize and reward experienced craftsmen. Furthermore, efforts should be made to modernize the teaching of traditional bamboo craftsmanship by incorporating it into vocational and continuing education curricula, thereby cultivating a new generation of designers and craftsmen who can combine traditional craftsmanship with modern design.

3. Further Suggestions

3.1 Explore Cross-Cultural Dissemination of Bamboo Chair Design

Future research could explore the paths of cross-cultural dissemination of bamboo chair design globally, particularly its acceptance and adaptability in different cultural contexts. This research could investigate how to apply the design concepts and craftsmanship of traditional Chinese bamboo chairs to the international design market and explore potential cultural adaptation and innovation methods in the process.

3.2 Investigate Innovative Development of Bamboo Chairs in the Age of Intelligence

With technological advancements, intelligent design is becoming a new trend in furniture design. Future research could explore how to integrate intelligent technology with bamboo chair design, expanding the functionality and enhancing the user experience of bamboo chairs. For example, research could focus on incorporating sensor technology, intelligent adjustment features, or developing composite applications of bamboo with new materials to meet the needs of modern smart homes.

3.3 Conduct In-Depth Research on Modern Processing Techniques for Bamboo

It is recommended to further investigate the application of bamboo in modern processing techniques, particularly how modern technological means can improve the physical properties of bamboo, such as moisture resistance, anti-corrosion, and durability. Research on the composite application of bamboo with other materials will also help expand the use of bamboo chairs in modern furniture design.

References

- Chen, R., & Feng, S. C. (2024). Innovative design strategies for Wa ethnic group's rattan bamboo drum stools in Yunnan. *World Bamboo and Rattan Newsletter*, 2024 (010).
- Liu, Y. Z., & Li, L. T. (2022). The inheritance and development of bamboo weaving art in southwestern Hubei from the perspective of traditional culture. *World Bamboo and Rattan Newsletter*, 2022 (05), 01.
- Luo, Y. Q. (2021). Bamboo chairs—Application and innovation in modern design forms. *Peony*, 2021 (02), 160-162.
- Sun, J. (2014). *Ancient Chinese material culture*. Beijing: Zhonghua Book Company.
- Tian, Z. Y. (2021). *Research on the application of bamboo weaving culture and aesthetic characteristics in bamboo brand image design (Doctoral dissertation)*. Southwest Jiaotong University. <https://doi.org/10.27414/d.cnki.gxnju.2021.000260>