

THE RESEARCH ON APPLICATION OF ZHUANG GUANGXI BROCADES INNOVATIONS IN CONTEMPORARY TEXTILES

การวิจัยการประยุกต์ใช้นวัตกรรมผ้าลายจ้วงกว้างซีในสิ่งทอร่วมสมัย

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Abstract

Background and Objectives: The Guangxi Zhuang Autonomous Region, located in southern China, is home to various ethnic minority groups. The Zhuang ethnic group, the largest ethnic minority in China, possesses a rich and enduring cultural history, particularly reflected in their traditional textile art. Zhuang brocade is recognized as one of the four most renowned brocades in China, with its distinctive patterns and embedded cultural meanings making it highly significant in terms of culture, technology, aesthetics, and social value. This research aims to deeply explore the history and cultural diversity of the Zhuang people in Guangxi through literature review and field research. It also seeks to analyze the production processes and artistic characteristics of Zhuang textiles, as well as investigate how traditional Zhuang patterns can be integrated into contemporary design concepts.

Methods: The study utilizes documentary research by collecting and reviewing a wide range of various sources related to thesis topic, including academic articles, research papers, books, and both domestic and international scholarly literature. Comparative analysis was conducted to examine the distinctive patterns of the Zhuang people in Guangxi. In addition, field research methods were employed, combining theoretical concepts with practical implementation. These methods included observation, empirical data collection, statistical recording, photography, and detailed descriptive analysis.

Key Findings: The study found that the design, color schemes, and patterns of Zhuang textiles are deeply influenced by Zhuang culture and reflect national history and aesthetic philosophies. The research also explored the integration of traditional Zhuang textile patterns into contemporary design through the creation of the collection “*Butterfly Rhythm of Zhuang Township*.” This contemporary textile collection, designed by the researcher, demonstrates the potential for cultural application and artistic value in modern textile design. It also contributes to the preservation and innovation of Zhuang culture while responding to contemporary aesthetic standards and market demands.

Research Article

Received: 20 December 2023

Revised: 27 April 2024

Accepted: 15 May 2024

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How to cite:

Zhu, G., & Khiaomang, K. (2025). The research on innovative application of Zhuang brocade pattern from Guangxi in contemporary textiles. *Fine Arts Journal: Srinakharinwirot University*, 29(1), 19-42.

Keywords: Guangxi Zhuang brocade, Zhuang brocade pattern, contemporary textiles, innovative application

คำสำคัญ: ผ้าจ้วงกว้างซี; รูปแบบผ้าจ้วง; การประยุกต์ใช้นวัตกรรม; สิ่งทอร่วมสมัย

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Significance of the Study: Zhuang weaving is a traditional craft with profound historical and cultural significance. Its unique patterns and artistic features make it an important part of ethnic cultural heritage. The intricate and precise production techniques reflect the exceptional skill of Zhuang artisans. Every step in the textile-making process serves as a medium for transmitting traditional culture and history.

Conclusion and Future Directions: The integration of traditional Zhuang textile patterns from Guangxi into contemporary textile design reflects a fusion of culture and innovation. This demonstrates the potential for future product development and highlights a promising direction for further exploration and experimentation. Expanding the use of Zhuang textiles requires innovation and integration, with an emphasis on preserving regional and cultural identity. Blending traditional patterns with modern design elements can lead to the creation of regionally distinctive and culturally meaningful works.

บทคัดย่อ

ภูมิหลังและวัตถุประสงค์: เขตปกครองตนเองกว่างซีจ้วง ซึ่งเป็นพื้นที่ของชนกลุ่มน้อยทางชาติพันธุ์ ที่อาศัยอยู่ทางตอนใต้ของประเทศจีน กลุ่มชาติพันธุ์จ้วงเป็นชนกลุ่มน้อยที่มีประชากรมากที่สุดในประเทศจีนและมีประวัติศาสตร์ทางวัฒนธรรมมายาวนาน ซึ่งสะท้อนให้เห็นในหลายแง่มุม โดยเฉพาะอย่างยิ่งในเรื่องของศิลปะการทอผ้าแบบดั้งเดิมของกลุ่มชาติพันธุ์จ้วงเป็นที่รู้จักในฐานะ 1 ใน 4 ผ้ายกที่มีชื่อเสียงของจีน รูปแบบที่เป็นเอกลักษณ์และความหมายแฝงทางวัฒนธรรมของผ้าโดดเด่นและสะดุดตา มีความสำคัญอย่างยิ่งในแง่ของวัฒนธรรม เทคโนโลยี สุนทรียภาพ และคุณค่าทางสังคม โดยการวิจัยครั้งนี้มีวัตถุประสงค์เพื่อสำรวจประวัติศาสตร์และความหลากหลายทางวัฒนธรรมของชาวจ้วงในกว่างซีอย่างลึกซึ้งผ่านการวิจัยวรรณกรรมและการลงพื้นที่สำรวจ วิเคราะห์กระบวนการผลิตและลักษณะทางศิลปะของผ้าจ้วง รวมถึงการสำรวจวิธีผสมผสานลวดลายผ้าจ้วงแบบดั้งเดิมเข้ากับแนวคิดการออกแบบร่วมสมัย

วิธีการศึกษา: ผู้วิจัยได้ใช้วิธีการวิจัยเชิงเอกสารในการค้นคว้าและรวบรวมข้อมูลจากแหล่งต่างๆ ที่เกี่ยวข้องกับหัวข้อวิทยานิพนธ์ โดยมีการเปรียบเทียบข้อมูลในหลากหลายแง่มุม ทั้งจากงานวิจัย บทความวิชาการ หนังสือ ตำรา และวรรณกรรมทางวิชาการทั้งในประเทศและต่างประเทศ เพื่อนำมาวิเคราะห์เนื้อหาที่เกี่ยวข้องกับลวดลายเฉพาะของกลุ่มชนชาติจ้วงในเขตกว่างซีและผู้วิจัยได้นำวิธีการวิจัยภาคสนามมาใช้ โดยเน้นการผสานแนวคิดทางทฤษฎีกับการปฏิบัติจริงผ่านการสังเกต การเก็บรวบรวมข้อมูลเชิงประจักษ์ การบันทึกสถิติ การถ่ายภาพประกอบ และการบรรยายลักษณะแบบละเอียด

ผลการศึกษาที่สำคัญ: พบว่าการออกแบบ สีเส้น และลวดลายของผ้าทอจ้วงได้รับอิทธิพลอย่างลึกซึ้งจากวัฒนธรรมของชาวจ้วง และสะท้อนถึงประวัติศาสตร์ของชาติและแนวความคิดด้านสุนทรียภาพ ได้มีการสำรวจวิธีผสมผสานลวดลายผ้าจ้วงแบบดั้งเดิมเข้ากับแนวคิดการออกแบบร่วมสมัยผ่านชุด “Butterfly Rhythm of Zhuang Township” ซึ่งเป็นสิ่งทอร่วมสมัยที่ออกแบบโดยผู้วิจัย ซึ่งแสดงให้เห็นถึงศักยภาพในการประยุกต์และคุณค่าทางวัฒนธรรมในการออกแบบสิ่งทอร่วมสมัย ช่วยในการสืบทอดและพัฒนาวัฒนธรรมจ้วงและตอบสนองความต้องการร่วมสมัยและความต้องการของตลาด

นัยสำคัญของการศึกษา: ผ้าทอจ้วงเป็นหัตถกรรมดั้งเดิมที่มีความหมายลึกซึ้งทางประวัติศาสตร์และวัฒนธรรม ด้วยลวดลายและลักษณะทางศิลปะที่เป็นเอกลักษณ์ ผ้าทอจ้วงจึงสำคัญในวัฒนธรรมชาติพันธุ์ การผลิตผ้าทอจ้วงที่ซับซ้อนและละเอียดถี่ถ้วนสะท้อนถึงทักษะที่สูงของช่างทอจ้วง และทุกกระบวนการในการผลิตผ้าทอจ้วงถือเป็นการถ่ายทอดวัฒนธรรมดั้งเดิมรวมทั้งยังเป็นตัวกลางในการถ่ายทอดวัฒนธรรมและประวัติศาสตร์

สรุปผลและแนวทางการศึกษาในอนาคต: การนำลวดลายเฉพาะของผ้าทอจ้วงจากกวางซีมาผสมผสานในการออกแบบสิ่งทอร่วมสมัยนั้นสะท้อนให้เห็นถึงการรวมตัวระหว่างวัฒนธรรมและนวัตกรรม ซึ่งแสดงให้เห็นถึงความเป็นไปได้ในการพัฒนาผลิตภัณฑ์ในอนาคตและเป็นทิศทางที่ควรมีการสำรวจและทดลองเพิ่มเติมในการพัฒนาผ้าทอจ้วงในอนาคต การขยายการใช้ผ้าทอจ้วงจากกวางซีต้องการนวัตกรรมและการบูรณาการ โดยเน้นการสืบทอดลักษณะทางภูมิภาคและวัฒนธรรม การผสมผสานลวดลายดั้งเดิมเข้ากับองค์ประกอบสมัยใหม่สามารถสร้างผลงานที่มีลักษณะเฉพาะทางภูมิภาคและมีความหมายทางวัฒนธรรม

1. Introduction

Guangxi Zhuang Autonomous Region, located in southern China, is a minority settlement district dominated by Zhuang people. The Zhuang people are the most ethnic minorities in China. They have a long history ethnic culture. These cultures are reflected in all aspects, such as national costume decoration culture, ethnic dance culture, Huashan Mural, wind and rain bridge, Drum Tower and other architectural culture, Folk Song Arts, Liu Sanjie culture etc. Among them, it is particularly worthy of attention to the traditional handmade brocade art of Zhuang people. It is known as one of the four famous brocade in China. It is known for its unique patterns and deep cultural connotations (Fan, 2013).

Zhuang brocade is a long-established textile craft used for making dresses, blankets, backpacks and so on. Its cultural connotation, knowledge of production technology, aesthetic art and social and cultural value are all very high, and it is the treasure of Guangxi's national culture. It is also an art form that carries national history, culture and aesthetic concepts. The distinctive features of Guangxi Zhuang brocade craftsmanship are primarily reflected in its exquisite hand weaving techniques and rich pattern designs, rather than digital graphic printing. It focuses more on conveying the ethnic culture and spiritual connotations through patterns, rather than merely pursuing the finesse of the brocade craftsmanship. From the perspective of contemporary textiles, the materials and techniques of Guangxi Zhuang brocade still retain their traditional characteristics, which is a key reason

why it maintains its unique charm and value in modern society (Fan, 2013). Its main traditional patterns include cloud colors, water patterns, sawtooth shapes, reversal pattern and animal and plant patterns. After thousands of years of development, in the long-term labor practice of the Zhuang people, who created many delicate and beautiful Zhuang brocade, which further reflecting the love of the Zhuang people for life and nature, respect for national culture, the Zhuang people's mind and wisdom, and the longing for a better life (Zhang, 2016).

In contemporary times, facing the rapid advancement of modernization and the loss of traditional craftsmen, the development of Zhuang brocade in Guangxi is facing new challenges and opportunities. On the one hand, the wave of globalization and modernization has prompted traditional culture to face the problem of protection and inheritance, and the development of Zhuang brocade needs to be studied for its deep cultural meaning and connotation, and deeply understand and in series connection the factors such as social environment traceability, cultural background and production thinking mode of Zhuang brocade; On the other hand, the innovation application of traditional cultural elements shows huge potential and value in contemporary design. Zhuang brocade development urgently needs to explore through multi-channel, cross-domain, and multi-angle.

Based on the interpretation of the above background, this study will explore the characteristics of the Zhuang brocade pattern art, analyze, extract and summarize the cultural connotation and artistic characteristics of the traditional Zhuang graphic elements, excavate the semantically rich graphic elements, and combine them with the contemporary design concepts and aesthetic trends, so that they can become the unique ethnic graphic visual symbols. And using this as a starting point, the application of graphic elements in contemporary textiles is studied in depth with regard to the requirements and characteristics of contemporary textiles. The focus is on analyzing the aesthetic forms of Zhuang brocade patterns, as in contemporary textiles, preserving and developing them in new forms in order to enhance the image of contemporary textiles, while at the same time endowing them with a unique national cultural connotation. Then design contemporary textiles that meet the needs of contemporary aesthetics. Such as modern aesthetic standards and principles

and artistic tastes that prevail in today's society. This concept is particularly important when incorporating traditional elements, which are rich in cultural symbolism, into modern textile designs. Contemporary aesthetics involves a fresh interpretation and reinvention of traditional designs - imbued with cultural meanings and associations - to suit current trends, preferences, and technological advancements, ensuring that they meet the expectations and tastes of today's consumers. This integration not only preserves cultural heritage but also revitalizes it, making traditional art forms relevant and attractive in a modern context.

2. Objectives

2.1 To study the historical and cultural diversity of Guangxi Zhuang people, understand the cultural foundation of Guangxi Zhuang ethnic groups, and analyze the artistic style and aesthetic value of Zhuang brocade pattern.

2.2 To study the production process and artistic characteristics of Zhuang brocade, as well as the important role in the spiritual life and social activities of Guangxi Zhuang people.

2.3 To explore the method of combining traditional Zhuang brocade patterns and contemporary design concepts, provide specific design and application solutions to apply Guangxi Zhuang brocade elements into contemporary textiles.

3. Research Hypothesis

This research explores effective ways to integrate traditional Zhuang brocade patterns from Guangxi with modern design concepts by analyzing their historical and cultural diversity, production processes, and artistic characteristics. This integration aims to preserve the cultural essence of Zhuang brocade while revitalizing it in contemporary textiles. By doing so, Zhuang brocade can showcase its unique cultural value in contemporary textiles, meeting modern market aesthetics and demands. The "Zhuangxiang Butterfly Rhyme" series will explore this integration, demonstrating its potential and cultural value in contemporary textile design. This contributes to inheriting and developing the culture of Zhuang brocade while satisfying contemporary aesthetics and market needs.

4. Scope of study

Combining the historical development and cultural diversity of the Zhuang people in Guangxi, this study explores the lifestyle and cultural characteristics of the Zhuang people and their significance in contemporary society, focusing on the cultural symbolism and style of the characteristic patterns of the Zhuang people in Guangxi, with the aim of understanding their central position and historical evolution in Zhuang culture. Through the study of the techniques and characteristics of Guangxi Zhuang brocade, in-depth analysis of the artistic characteristics and production process of Zhuang brocade, exploring its possibilities and application strategies in contemporary design, and proposing specific design and application solutions for application and innovation in contemporary serialized textiles to realize the contemporary transformation and cultural inheritance of traditional crafts.

5. Methodology

5.1 Literature research method

Finding and organizing all kinds of information related to the thesis and comparing them in many aspects, researching and analyzing the domestic and foreign information and literature related to this study, such as thesis, related books, academic writings, etc., so as to understand the background and research basis of the characteristic patterns of Guangxi Zhuang, thus grasping the direction of the research and understanding the current situation of the traditional ethnic patterns.

5.2 Field investigation method

Adopting the research method of field investigation and research, and combining theory with practice. Through observation, collection of documents, description of statistics, picture records and other ways, field visits to the Zhuang brocade production concentrated areas in Guangxi Zhuang Autonomous Region, so as to have an all-round understanding of the production process, style characteristics, folk connotation and other aspects of Zhuang brocade in Guangxi.

6. Outputs and benefit

6.1 Analyze the historical and cultural diversity of Zhuang brocade, understand the foundation of Zhuang culture, analyze the artistic style and aesthetic value of Zhuang brocade patterns, and provide a theoretical basis for integrating traditional and modern design.

6.2 Explore the production process and artistic characteristics of Zhuang brocade, as well as its important role in the spiritual life and social activities of the Zhuang people, and promote society's understanding and appreciation of Zhuang culture.

6.3 The method of combining traditional Zhuang brocade patterns with modern design concepts provides specific design and application solutions to apply Guangxi Zhuang brocade elements into contemporary textiles to create market appeal and cultural value.

7. Results

7.1 The historical development and cultural exploration of Guangxi Zhuang people

7.1.1 History and cultural diversity of Guangxi Zhuang people

The Zhuang people have more than 16 million people, and they are the most populous ethnic minorities in China. In the Guangxi Zhuang Autonomous Region, 80% of the Zhuang population is distributed in cities such as Baise, Hechi, Liuzhou, Nanning, Qinzhou, Fangchenggang and other cities. According to historical records, the Zhuang people have experienced three stages: the independent development in the pre-Qin and ancient times, the survival and development in the gap with other ethnic groups from the Qin-Han to the Republic of China periods, and the regional ethnic autonomy after the founding of the People's Republic of China, and the earliest can be traced back to the pre-Qin period of the "Xiou" and the "Luoyue" and other ethnic groups (Guo,2008). It is the earliest inhabitants of the southern region of China, concentrated in the Pearl River Valley. The climate of this region is subtropical, with hot summers and abundant rainfall in spring. It is conducive to the reproduction of plants and animals, as well as the formation of biodiversity, creating favorable conditions for the future life of human beings.

Over time and with the development of production and living practices, the Zhuang people have developed a unique view of natural ecology and indigenous life, and through exchanges and integration with different neighboring ethnic groups, they have jointly nurtured a rich regional culture in the southern region of China. For a long time, the ancestors of the Zhuang people have created spiritual and material civilizations with distinctive ethnic flavor by virtue of their wisdom, and these distinctive ethnic cultures are very characteristic of the nation, which show the rich cultural heritage of the Zhuang people. The folk culture of the Zhuang people is influenced by the unique region of southern China, and shows open and tolerant ethnic characteristics. These distinctive ethnic features include: the spiritual culture of the Zhuang language, the belief in the worship of many gods and goddesses, and the unique collective singing polder culture; and the material culture of the Zhuang brocade culture, the embroidered ball culture, the rice cultivation culture, the dress-making culture, the glutinous rice eating culture, the dry-rail building culture, the Huashan rock painting culture, and the bronze drum culture.

In terms of dress culture, the clothes of the Zhuang people are mainly blue, brown and black, reflecting their unique aesthetic (Figure 1). Zhuang women have the habit of spinning cotton, spinning yarn, weaving and dyeing fabrics, which is almost an essential craft for Zhuang women. They grow their own cotton and hemp trees, and then pick the flowers and stems of these plants to cook, dye, and weave them into a piece of cloth, which they usually call “Tu Zhiwu” (native fabric) or “Tubu” (native cloth) (Qin, 2021). These fabrics are thick, hard-wearing, and comfortable to wear, and are very popular among the Zhuang people. Although the colors of the fabrics are the same, there is a clear distinction between men and women in dress, depending on gender, age, and status; men and women, as well as unmarried women, have different headdresses.



Figure 1 Zhuang clothing
(G. Zhu, China, 2022)

7.1.2 The characteristic patterns and cultural meaning of Guangxi Zhuang people

Guangxi Zhuang characteristic pattern is not only an important part of its national culture, but also a rich cultural resource. From the pattern form can be divided into animal pattern, plant pattern, geometric pattern, figure pattern and so on. It covers paper, textiles, and arts and crafts such as ceramics, bronzes and lacquer ware. Deeply rooted in the historical roots of national flavor, politics, economy and religion, it carries far-reaching cultural values. Its spiritual core covers prayer, sacrifice, well-being, memory, personal upbringing, etc. It is the spiritual support of the Zhuang people in the face of natural disasters and social conflicts, as well as an important carrier of national history and an expression of personal feelings. The spiritual core of the Zhuang people in Guangxi is either to pray for the protection of the gods to eliminate their inner fears and pray for racial peace when facing natural disasters, insect and animal attacks, or foreign invasions; or it is

of cultural commemorative significance for preserving the history of the ethnic group; or it is to use these graphics to support and convey some personal feelings (Guo, 2008).

The art styles of Zhuang patterns are diverse and rich, reflecting the creativity and artistic skills of the Zhuang people. There are various legends about their origins, such as sorcery worship and real-life drawings, indicating that Zhuang culture is closely related to ethnic beliefs and daily life. The Zhuang people incorporate elements from their daily lives into their artistic creations, creating simple compositions with rich content and abstract colors, giving new and deeper meaning to their daily lives.

These characteristic patterns truly reflect the way of life, production images and ideological movements of the Zhuang people. They objectively depict the changes in ethnic unity and social development in the Guangxi region, and have become an encyclopedia of the folk customs of the Zhuang people in Guangxi. The development of patterns began when human beings learned how to use tools, and it is a simple, intuitive, and concrete way of expression, reflecting the aesthetics and communication methods of ancient and primitive societies. With the development of society, pattern design plays an important role in clothing, food, housing, transportation, and other aspects, reflecting people's thought dynamics and living condition from the side.

7.2 The techniques and characteristics of Guangxi Zhuang brocade

7.2.1 The production process of Guangxi Zhuang brocade

Among the cultural arts of the Zhuang people in Guangxi, Zhuang brocade stands out with its rich colors and exquisite craftsmanship, becoming an outstanding representative of Guangxi handicrafts. Zhuang brocade is not only a kind of decoration, but also a carrier of Zhuang people's emotion, memory, and culture. The patterns of Zhuang brocade are vivid and varied, demonstrating the high skills and deep understanding of life of Zhuang folk artists.

The technique of making Zhuang brocade has a long history, and through nearly thousands of years of development, it has become an important inheritance of local historical crafts. Its production technology and process are complex and tedious, fully reflecting the high level of craftsmanship and artistic talent of Zhuang women.

The production technology and process of Zhuang brocade is a boring and tedious technology, which is made on a Zhuang brocade loom called “bamboo cage” (Figure 2). This loom is very old, as we can see from the shape of the existing loom, which consists of four parts: the support, the transmission device, the mixing device, and the picking device, including the flower cage, the thread-splitting cylinder, and other devices (Su & Xu, 2020). The weaving process takes tens of thousands of mechanical movements before compilation is completed, which is a great test of the brocade weaver’s tolerance, meticulousness, and proficiency.



Figure 2 Zhuang brocade loom
(G. Zhu, China, 2023)

The first step in the production of Zhuang brocade is to draw a draft of the pattern according to the design on a square of paper, then enlarge it in equal proportions and color it according to the pattern. This is also to prepare for the next step of pick out flowers and knot the book (also called through the warp and weft, the warp line corresponds to the longitudinal grid on the map of the artisan, the weft line corresponds to the horizontal grid on the map of the artisan, and jacquard cards are made into the pattern samples “jacquard cards”), and each square on the square paper represents the number of warp and weft threads. When drawing the draft, we also need to consider the color scheme of the brocade, and the basic requirement of the color scheme is to have clear colors, strong contrasts, and a sense of hierarchy between the color blocks and the color blocks.

The brocade weaver will pick out the pattern with a picking tool according to the draft drawing, then use bamboo and cotton and linen threads to weave on the flower cage, and then pick and weave according to the weaving rounds (Figure 3). When weaving Zhuang brocade, the flower cage is also slowly rotated (Figure 4), so that the pattern can be reflected on the surface of the brocade by pulling the cotton and linen threads.



Figure 3 Tapestry weaver picks out the flowers
(G. Zhu, China, 2023)



Figure 4 Weaver who weaves brocade and turns flower cages
(G. Zhu, China, 2021)

Zhuang brocade is the only brocade among the brocades of Chinese ethnic minorities that requires picking and knotting, which can be done directly on the loom, and the flowers are knotted directly on the bamboo cage, and the picking and knotting are done at the same time. Because most of the Zhuang brocade is a complete pattern with bipartite continuity and quadripartite continuity, only one complete pattern needs to be picked out, and then the pattern on the bamboo loom can be used to pick and weave in a cyclical manner. To put it simply, picking a flower is the initial design step, and the weaving process is carried out in accordance with this program, picking a flower knotting is the most core technology in the process of Zhuang brocade weaving.

Zhuang brocade weaving process is a very tedious and complex process, its weaving method, the principle of weaving with other fabrics weaving method is the same, the same to go through the process of feeding, opening, casting, hitting the weft. But in the process of basic operation and has its own unique weaving characteristics. The origin and development of Zhuang brocade is a process of continuous improvement and refinement in response to the requirements of the times, in which the essence of the technique is precipitated, and the core technology is preserved. At the same time, it also meets the aesthetic demands of the times and constantly adjusts and improves the patterns of weaving, so it is inherited and developed.

7.2.2 Artistic Characteristics of Guangxi Zhuang Brocade

The patterns of Zhuang brocade are vivid and varied, famous for its decorative geometric forms. In addition to the abstract and generalized characteristics of individual patterns, influenced by traditional Chinese aesthetics, the structural style of the picture pays much attention to the overall symmetry and balance, and these forms are usually visually composed by continuous techniques such as bipartite continuity and quadripartite continuity, forming regular rhythmic characteristics (Wei, 2023). At the same time, this form is a flexible way of composition that changes according to the actual fabric form, which makes the Zhuang brocade decoration have strong decorative significance and high practicality. It demonstrates the high skill and deep understanding of life of the Zhuang folk artists. By observing nature and daily life, they are inspired by truthfulness, loyalty, kindness and beauty to create works of art that show both natural admiration

and reflect the ideas and cultural symbols of the times. These patterns are not only the result of artistic creation, but also an important way of cultural transmission.

The patterns on Zhuang brocade are deeply influenced by the totem worship, religious ceremonies, living habits, food culture and regional aesthetic standards of the Zhuang culture. Whether it is realistic animal and plant patterns, highly decorative geometric patterns, or abstract figure patterns, the artists of Guangxi Zhuang brocade weaving try to reflect the most profoundly on that small Zhuang brocade in the depths of their hearts through their profound contents and good character. Reflecting the beautiful associations of the Zhuang people, the highly generalized image of the pattern, to think about the specific feelings, in order to become a symbol of emotions passed down from generation to generation.

Zhuang brocade has a unique national hue that distinguishes it from other brocades. The Zhuang people integrate their emotions and aesthetic interpretations of life and nature into Zhuang brocade by means of color, and brighten and purify the inherent colors, which strengthens the bright and beautiful visual effect of Zhuang brocade, and at the same time, makes the pattern have a more vivid visual effect (Jing, 2022). In the weaving process of Zhuang brocade, there are mainly red, yellow, blue and green colors as the main color scheme (Figure 5). Based on different patterns and decorations, application scenarios, symbolism and other factors to choose the right color combination and matching, some graphics can even use more than ten colors, so that the overall picture presents a colorful and brilliant scene. The selection of colors is complicated but not messy, and the style is colorful but unified. In Zhuang brocade, one of the most commonly used color combinations is to choose 180 degrees of contrasting colors in the hue ring, presenting the maximum vividness and giving people a strong visual contrast.



Figure 5 Brightly colored Zhuang brocade
(G. Zhu, China, 2023)

In Zhuang Brocade, the respective colors are arranged appropriately in order, and in the elements of hue, purity, brightness, shape and proportion, etc., the colors are arranged in an isometric progression, and finally form a consistent and aesthetic sense. Zhuang brocade in the use of color in warm tones, and with a certain amount of blue, green and other cold colors to neutralize, this cold and warm tone of the opposition and unity of the brocade to a large extent to enrich the picture effect of the brocade, the color of the Zhuang brocade artistic infectious force to show to the fullest.

7.3 Application of Guangxi Zhuang brocade patterns in contemporary serialized textiles

7.3.1 Application Design Strategy Analysis

Zhuang brocade culture, as an important part of traditional Zhuang culture, its deep cultural heritage and unique aesthetic value are still of great significance in contemporary society. In contemporary textiles, the use of Zhuang brocade patterns can collide the value of traditional patterns and modern textile products, and organically combine traditional craftsmanship and modern technology, which can reawaken the public's awareness of the importance of traditional culture and maintenance, and also vigorously disseminate and display its unique cultural connotations and characteristics.

The key to the strategy of combining Zhuang brocade culture and contemporary design is to understand and respect traditional culture, in order to enhance the sense of cultural identity and broaden the space for aesthetic presentation. It should be integrated with contemporary design elements and technologies, and think about how to make the aesthetic experience richer for the audience (Zhang, 2023). In terms of design, the modernized transformation of traditional Zhuang brocade patterns can be used to adapt to the aesthetic needs of contemporary consumers and market trends, combined with the innovative spirit of contemporary culture, to strengthen the expression of its contemporary flavor.

For example, taking advantage of the rich diversity of Zhuang brocade graphics and the prominent features of regional ethnic images, the structure and color of Zhuang brocade patterns are reconstructed or refined to create new patterns and visual languages that are more contemporary and give new vitality to traditional Zhuang brocade (Li & Duan, 2022). At the same time, Zhuang brocade patterns can be applied to other textiles, such as clothing, home furnishings, and accessories, bringing the aesthetics of Zhuang brocade to the public through these everyday products. This strategy can make brocade patterns closer to the daily life of contemporary consumers and enhance the market value and social influence of Zhuang brocade culture. It allows the traditional Zhuang brocade patterns to take on new vitality and vigor. It helps cultural inheritance and development, and promotes the development of Zhuang brocade culture and contemporary cultural and creative product design.

7.3.2 Design Application in the “Zhuangxiang Butterfly Rhythm” Series

By studying the graphic art of Guangxi Zhuang brocade, the researcher analyzes and refines the graphic elements of Zhuang brocade, combines them with contemporary design concepts and aesthetic trends to make them unique national graphic visual symbols, and uses them as an entry point to redesign with the current situation of contemporary textiles, designing a set of series of works rich in the flavor of contemporary design - Zhuangxiang Butterfly Rhyme.

In the “Zhuangxiang Butterfly Rhythm” series, researchers specifically focus on the integration of patterns and modern elements, creatively transforming and applying them based on a deep understanding of their cultural symbolism. By optimizing pattern layouts, adjusting color contrasts, and the dynamic effects of the patterns, the designs not only visually appeal to modern consumers but also meet the diverse functional demands of the market.

In terms of themes, butterfly is the most representative pattern in Zhuang brocade, which is used more frequently and has rich cultural connotations (Figure 6). “Butterfly” is similar to and homophonic with “Fu”, implying the meaning of longevity and prosperity, reflecting the Zhuang people’s longing for a better life. As a design element, it can not only reflect the connotation of national culture, but also give the vitality of natural atmosphere. The theme is eight butterflies rotating and flying around the center, using the contrasting red and green colors commonly used in Zhuang brocade to capture their vitality in nature. The natural form of the butterflies is abstracted to match contemporary aesthetics, and details such as composition, element size, and lines are examined to achieve visual balance, resulting in the design of the new pattern (Figure 7).



Figure 6 Butterfly pattern in Zhuang brocade

(G. Zhu, China, 2023)

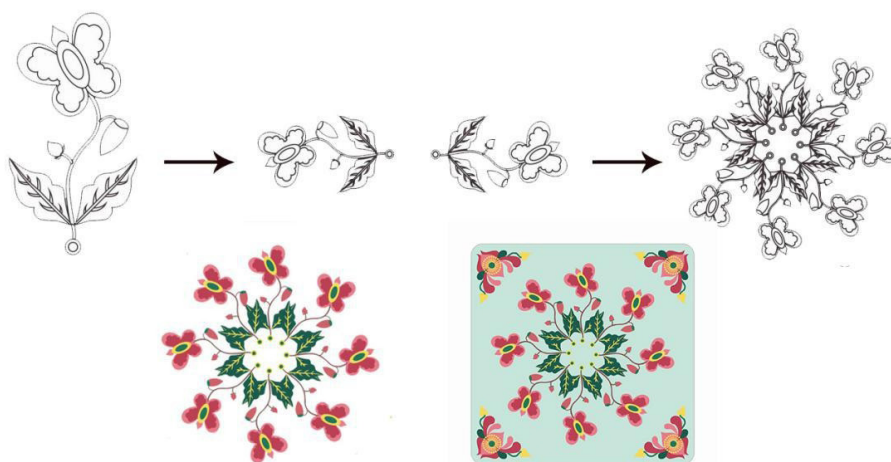


Figure 7 Butterfly pattern extracted and redesigned
(G. Zhu, China, 2023)

The designed pattern is representative, with appropriate color scheme, which reflects the cultural connotation of Guangxi Zhuang and creates cultural resonance. After the pattern is completed, the selected contemporary textiles are centered around different life scenarios and are designed with a focus on functional use. From the traditional natural aesthetics, the image of butterfly is deconstructed and modernized aesthetically reconstructed (Table 1).

Table 1 The series of contemporary textiles of “Zhuangxiang Butterfly Rhythm”
(G. Zhu, China, 2023)



the series of contemporary textiles of “Zhuangxiang Butterfly Rhythm” - Handbag: black is used as the background color, the butterfly pattern is highlighted in the center, and the visual impact is enhanced by the sharp contrast between red and green. The focus on symmetry and balance makes the overall design both beautiful and practical.



the series of contemporary textiles of “Zhuangxiang Butterfly Rhythm” - Carpet: the butterfly pattern of the four sides of the continuous repetitive arrangement, in order to create a regular and harmonious visual effect. This design technique not only makes the single pattern more vivid, but also makes the whole interior space completer and more layered.

Table 1 continued



the series of contemporary textiles of “Zhuangxiang Butterfly Rhythm” - Square Silk Scarf: The butterfly pattern is placed in a modern abstract graphic background, creating a strong artistic contrast. The bright yellow background contrasts with the surrounding colors, while geometric elements and color gradients add a modern touch, combining traditional aesthetics with contemporary design trends.

8. Conclusion and discussion

This study draws the following conclusions:

8.1 The cultural history of the Zhuang people in Guangxi has a long history, and its cultural diversity and historical development reflect the rich regional culture and national characteristics of southern China, which is an important symbol of national identity and cultural heritage.

8.2 As a traditional craft with profound historical and cultural connotations, Zhuang brocade, with its unique patterns and artistic features, occupies a pivotal position in the national culture. The complexity and meticulousness of the production process reflect the high skill of Zhuang craftsmanship and the pursuit of beauty. Each process of Zhuang brocade is the inheritance of traditional culture, and its rich colors and patterns are not only visual enjoyment, but also the carrier of culture and history.

8.3 Through the design scheme of “Zhuangxiang Butterfly Rhythm” series of textiles formulated by the researcher, it can be seen that the specific application method of Guangxi Zhuang characteristic patterns in contemporary textile design embodies the fusion of culture and innovation, and foretells a broad development prospect, which is also the direction that Guangxi Zhuang brocade should be more explored and tried in the process of future development. To expand the application of Guangxi Zhuang brocade, innovation and integration is the key, focusing on the continuation of regional characteristics and culture. By combining traditional patterns with modern aesthetic elements, works with regional characteristics and cultural connotations are created. This is a distillation of the essence of local culture and requires close connection with life and adaptation to the environment.

9. Suggestion

9.1 Consider a deeper exploration of the historical and social background of Zhuang culture, especially a comprehensive understanding of the artistic characteristics and cultural connotations of Zhuang brocade. To conduct a more comprehensive and in-depth study of Zhuang culture and Zhuang brocade in Guangxi through interdisciplinary research, combining knowledge from the fields of history, sociology and art.

9.2 Strengthen the protection and inheritance of Zhuang culture and the art of Zhuang brocade, especially in the process of modernization, and pay more attention to preserving its traditional skills and cultural essence. Encourage more of the younger generation to understand and learn the art of making Zhuang brocade, while exploring new ways of combining it with modern technology. Workshops, training courses and research projects should be set up to promote innovation and development of the techniques.

9.3 Develop more other products related to Guangxi Zhuang brocade or introduce more materials to try and expand the application space. Incorporate traditional elements into modern design to create goods with traditional characteristics and modern aesthetics, so as to expand the market of Zhuang brocade and create more economic value for traditional handicrafts.

10. Acknowledgement

I am deeply grateful to my tutor Kriangsak Khiaomang. For his patient guidance and careful teaching. His rigorous scholarly approach and profound academic expertise have been of great impact. Also, my heartfelt thanks go to the Zhuang brocade artists in the Guangxi Zhuang Autonomous Region. Their warm hospitality and generous sharing allowed me to gain an in-depth understanding of the culture and craftsmanship of Zhuang brocade, which played a crucial role in my research. Thank you to everyone who helped and supported me. It is your collective efforts that have enabled the successful completion of this research.

11. References

- Fan, M. (2013). Classification and cultural connotation analysis of Zhuang brocade pattern patterns. *Beauty and the Era, (First Ten Days)*, (10), 53-57.
- Guo, W. (2008). *Zhuang culture exploration*. Nanning: Guangxi People's Publishing House.
- Jing, J. (2022). *Transformation and innovative practice of Zhuang brocade patterns in Guangxi* (Master's thesis). South-Central Minzu University, China.
- Li, H., & Duan, Y. (2022). Study on the integration of Guangxi Zhuang brocade elements into modern visual design. *Western Leather*, 9, 136-138.
- Qin, Z. (2021). Research on the history and modern development of Guangxi Zhuang brocade. *Western Leather*, 13, 135-137.
- Su, Y., & Xu, J. (2020). Exploration of contemporary development ideas for Guangxi Zhuang brocade craftsmanship. *Collection and Investment*, 11, 104-106.
- Wei, Y. (2023). Serial product design based on Guangxi Zhuang brocade elements. *Design*, 20, 96-99.
- Zhang, C. (2023). Application of Guangxi Zhuang brocade in cultural and creative products. *Ceramics Science and Art*, 5, 94-95.
- Zhang, X. (2016). Research on visual art symbols of Guangxi Zhuang brocade embroidery patterns. *World Art*, (2), 110-112.