

# The Chinese-style modernization path of sustainable development for patchwork art

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**Abstract:** Based on the theoretical principles of sustainable fashion product design and the artistic characteristics and cultural connotations of patchwork craftsmanship, taking traditional Chinese sustainable thought and culture as the foundation, sustainable design strategies as the means, and Chinese-style modernization development as the goal, a patchwork art Chinese-style modernization sustainable development path model is summarized. Based on this model, a modern sustainable practice path is proposed from five aspects: culture, materials, craftsmanship, emotion, and economy. This provides a theoretical basis for patchwork art practices at different stages of the sustainable fashion industry chain, and the proposed practice path provides guidance for the application and development of patchwork art in modern clothing and cultural products. This further promotes the sustainable inheritance of traditional Chinese dress culture.

**Keywords:** patchwork art; chinese-style modernization; sustainable development; sustainable fashion design.

## Introduction

The history of patchwork is very long, and most scholars agree that it originated in ancient Egypt, India, and China, among other places. In ancient times, it was made from old and discarded fabrics, but now it has evolved to use various fabrics with different colors and patterns. This handicraft has been popular in countries like Europe and America for a long time, and is widely used in home furnishings, fashion, and other fields. Patchwork has become a unique and popular art form, creating many artistic and decorative designs. As a traditional handicraft in the field of clothing product design, patchwork art is also an excellent traditional Chinese art form, embodying the Chinese people's desires for good luck and their reverence for nature. Research on patchwork art is also an interpretation of the ideological connotations, customs, and traditional culture of the Chinese nation. Patchwork art has developed beyond a specific region and incorporates many different artistic styles. Through research on patchwork art, we can discover and compare different countries' art

styles, which is significant for interpreting traditional art. From a sustainable perspective, the origin, composition and development of patchwork art are closely related to its essence.

The existing research literature on patchwork art mainly focuses on three aspects: 1) Study and summarization of the craft techniques and art forms of patchwork art itself. 2) Comparative study of the characteristics, status and development of patchwork art in different countries. 3) The exploration of patchwork art as a design element in modern design practice. As patchwork art has had environmental attributes since its origin, many studies about it mention sustainability or carbon neutrality concepts from various perspectives. However, there are not many studies that focus on exploring the sustainable concepts inherent in patchwork and most of the existing ones only mention them as one of the many attributes of patchwork. With the development of research in recent years, people's exploration of patchwork art has also delved into its sustainable core. But there is still a lack of systematic research on the relationship between patchwork art as a starting point, the goal of Chinese modernization, sustainable development paths, and traditional Chinese culture.

This article begins by exploring the origins and development of patchwork art, analyzing its artistic characteristics and cultural significance, and exploring the sustainable ideas inherent in patchwork art. Then, in conjunction with the development goals of Chinese path to modernization, this article analyzes the theoretical principles of sustainable fashion product design and proposes a model for the Chinese-style modernization sustainable development path of patchwork art. Finally, the article discusses the sustainability of patchwork art and its practical methods in the context of Chinese-style modernization construction goals from five perspectives: culture, materials, craftsmanship, emotions, and economy.

## **The origin and development of patchwork art**

The origin of patchwork art in different regions of the world is quite similar, mostly due to the scarcity of materials. Old clothes, curtains, bedsheets, and other fabrics were not discarded but instead stitched together to create new clothing or home furnishings. In ancient China, patchwork styles were diverse, each with its own unique meaning, reflecting the wisdom of the working people. During the folk inheritance process of patchwork craft, it also showed a trend of integration with other handicrafts, such as paste silk and pile silk craft.

Monk's ragged robe and Baijia clothes are representative clothing with typical patchwork features that emerged during the development of patchwork art in China. Monk's ragged robe is the traditional clothing worn by Buddhist monks, which is commonly referred to as a robe. The production process of the robe is extremely difficult. According to Buddhist scriptures, the cloth for the monk's clothing must be obtained through begging. The production fabric of the robe requires the monks

to beg for some scrap fabrics from each household they visit, and then clean and cut these collected fabrics into square shapes before piecing them together and stitching them into a robe. The objects that the monks beg from are mostly common people, so the fabrics they obtain are usually faded and not bright, resulting in robes with mostly dull and dark colors.

The popular Baijia clothes among the working people carries a meaning of blessing. It is mostly worn by children and is a typical ethnic clothing. Its origin is a folk custom craftsmanship. Parents hope that their children will grow up healthy, so they gather everyone's blessings by eating from one hundred families and wearing one hundred families' clothes. Taking a small piece of fabric from each neighbor's home, the pieces are pieced together and sewn into Baijia clothes. Unlike robes, Baijia clothes are more colorful and have a meaning of blessing. During the Ming and Qing dynasties, the Shuitian clothes emerged, which imitated the patchwork effect of Baina through weaving. It is also reflected in traditional Chinese opera costumes. Some believe that Shuitian clothes are a popular element that imitates the costumes of monks in operas. As urban culture became prosperous during the Ming and Qing dynasties, Shuitian clothes gradually became a popular element of that time, reflecting the charm of traditional patchwork art from another perspective.

It can be seen that the origins of patchwork in different countries are roughly the same, but due to the integration with local cultures, politics, and economies during their development, patchwork techniques with various styles have been formed. The patchwork art of China retains the charm of traditional crafts, such as Tie juan and Dui ling techniques, which have a certain sense of volume in their appearance, prominent texture, complexity and delicacy. In contrast, foreign patchwork shows the characteristics of contemporary art with more diverse materials, such as stamps and waste newspaper. The appearance is mostly flattened and the colors are more intense.

Compared to the diverse ancient patchwork varieties, the development of modern patchwork art in mainland China appears to be somewhat lagging. The United States is a country where modern patchwork art emerged early. In 1930, the United States held its first art patchwork competition. In the 1970s, patchwork became popular in the United States. In 1970, patchwork was first mentioned in Japan at the Osaka World Expo. Japan is a country with a strong artisanal tradition and love for handmade things, and soon patchwork became popular in Japan. It then moved towards industrialization with professional training institutions. Later, this systematic system was introduced to China. After 2000, the birth of Shanghai Happy Patchwork Classroom and Shanghai Textile Patchwork Salon gradually brought modern patchwork art to the Chinese people.

Patchwork art, as one of the excellent traditional Chinese cultures, contains unique traditional cultural and artistic features as well as its sustainable concept, which are worth inheriting. With the prosperity of China's economy and the rapid development of technology, how to prevent traditional handicrafts from being ignored or even lost has become an important issue in the process of Chi-

nese-style modernization. The exploration of the sustainable development path of Chinese patchwork art should be based on the connotation of excellent traditional Chinese culture, exploring its common points with the ancient concept of frugality and modern sustainable concepts, and then taking this as the core to explore the practical path of patchwork art under the goal of Chinese-style modernization.

## **Chinese-style Modernization and Sustainable Fashion Design**

### **Chinese-style modernization and sustainable development**

Chinese-style modernization refers to the modernization created with the leadership of the Communist Party of China, by adhering to Chinese characteristics of socialism, by upholding the development philosophy and value orientation of putting people at the center, by taking the development path of ecological civilization, by acknowledging the interdependence between humans and nature, promoting the harmonious coexistence of humans and nature, and contributing to the construction of a community with a shared future for mankind, to create a new form of human civilization. The essence and significant direction of Chinese-style modernization lie in the harmonious coexistence of humans and nature, which is also consistent with the concept of sustainable development. From the perspective of the outstanding position of ecological civilization construction in the overall layout of the "Five-in-One" of Chinese socialism, the harmonious coexistence of humans and nature is the essential characteristic and important direction of Chinese-style modernization, which coincides with the scientific connotation of sustainable development. The essence of sustainable development is to meet the needs of contemporary people without posing a threat to the ability of future generations to meet their own needs. Its core is that the healthy development of the economy should be based on the sustainable capacity of the ecosystem, social justice, and active participation of the people in decision-making. Its objective is not only to satisfy human needs but also to focus on the ecological rationality of all kinds of economic activities and protect ecological resources. Therefore, based on the concept of sustainable development, the construction of ecological civilization is the core of the comprehensive construction of Chinese-style modernization.

With the development of the economy and improvement of people's material standard of living, the fashion industry has rapidly developed, bringing about problems such as resource wastage and energy depletion. According to the United Nations, the fashion industry will continue to grow in size and its influence will become increasingly apparent. By 2050, the annual carbon emissions of the fashion industry will account for 1/4 of the global total. Therefore, strengthening control over the various stages of clothing production and developing sustainable fashion has become the future direction and goal of the industry. The fashion industry integrates resources from around the world and has a high degree of globalization, so the future development direction will have a crucial

impact on the transformation of China's fashion industry and its role in the global industry. At the same time, the adjustment of China's fashion industry model, optimization of strategy, technological innovation, and green transformation can actively promote Chinese-style modernization process, and facilitate the achievement of the harmonious coexistence of humans and nature.

### Principles of sustainable fashion product design

After the concept of sustainable design was first introduced in the late 20th century in the UK, the 3R principles has played a key role in guiding design activities as a recognized principle of sustainable product design. The 3R refers to reduce, reuse, and recycle. In 2018, Canadian designer Amelie Mongrain added three more principles, namely recovery, redesign, and remanufacture, based on the 3R principle, and proposed the 6R principles to address the problems facing the Chinese fashion industry. She believes that everyone in the fashion industry chain must be familiar with these 6R principles. Building on the existing theoretical foundation and modern fashion industry background, Tao Hui and Wang Yingying (2021) added the principles of rethink and renovation to the lifecycle of clothing products, and organized the 8R basic principles suitable for fashion product design from the perspectives of designer-product-environment. As the origin of patchwork art is based on the textile and clothing industry, its development process is inseparable from the fashion industry chain. Therefore, the 8R principles of sustainable fashion product design can serve as theoretical guidance for the sustainable development of patchwork art.

### Sustainable development in patchwork art

Patchwork art, as a typical frugal craft technique, can provide new ideas for the development of sustainable fashion industry from the process of collecting raw materials to pattern design and production process. At the same time, patchwork art originated from the folk and rooted in real life. Its inherent concepts of simplicity, cherishing nature and respecting objects can be easily transmitted to the public through clothing as a medium, playing a subtle role in promoting consumers to establish good consumption concepts.

Based on the design principles of sustainable fashion products, combined with the artistic characteristics and cultural connotations of patchwork craftsmanship, based on China's traditional sustainable thinking and culture, using sustainable fashion design strategies as a means, and aiming for Chinese-style modernization development, this article summarizes the model for the Chinese-style modernization sustainable development path of patchwork art (figure 1). This section explains the sustainable characteristics of patchwork art and its sustainable development direction and practical methods under the goal of Chinese-style modernization from five perspectives: materials, craftsmanship, culture, emotions, and economy.

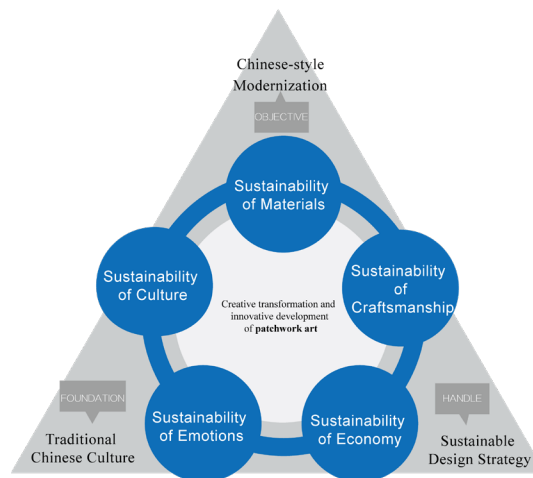


Figure 1. The model for the Chinese-style modernization sustainable development path of patchwork art

### Sustainability of Materials

Looking at the origin of patchwork, the earliest patchwork technique was born out of poverty and backward productivity. People had to join small pieces of cloth together to make clothing, bedding, and other necessities due to the limited resources they had. Most of the materials were locally sourced and reused, such as the Japanese Boro clothing. This type of clothing originated from the northeastern region of Japan, where cotton could not be grown due to the cold climate. During the Edo period, silk was also restricted to only a few high-ranking people due to its rarity and limited production. The local government compelled the people to wear rough and stiff hemp clothing, which could not withstand the cold weather. Therefore, the locals had to layer and sew pieces of hemp together, adding hemp scraps between the layers, to create clothing. This style of clothing became known as Boro in Japanese. Today, Boro has become a category of clothing that embodies the Japanese retro style. From the perspective of sustainable development, using recycled waste materials that were once useless gives them a new lease of life. Patchwork craftsmanship gives small materials great usage, turning tiny scraps of fabric into beautiful and complete works of art. It makes patchwork art a representative of practical art. Moreover, recycling materials effectively reduces resource waste and relieves environmental pressure, thus reinforcing the sustainable characteristics of materials.

### Sustainability of Craftsmanship

The origin of patchwork craft was to join two pieces of fabric together. After a certain period of development, the patchwork technique became more refined and orderly. Before patching, the fabric needs to be cut into equally sized pieces and the color matching needs to be considered in advance.

The modern patchwork technique mainly includes piecing, applique, and collage. Piecing is the combination of fabric pieces, which can be regular or irregular, and pieces of fabrics of different sizes are pieced together to form a complete large piece of fabric. This is the most common and earliest patchwork technique in patchwork art, such as Monk's ragged robe and Baijia clothes are both made using the piecing technique. Applique is mainly used to repair damaged clothes and has the effect of reinforcement and wear resistance. Originated from the life necessities of poor people, it evolved into a decorative technique, and the Japanese Boro is mainly made by this method. Collage is to attach pieces of fabric to a base fabric, which can be combined with different materials and is commonly seen in patchwork paintings.

In addition to patchwork techniques, sewing techniques are also an important technical process in modern patchwork art. In order to pursue the beauty of the picture, modern patchwork art adds sewing threads on the surface of the patchwork, increasing the richness of the picture. Patchwork sewing methods can be divided into machine stitching and hand stitching. The choice of sewing method depends on the effect desired by the creator, and most creators will combine the two methods. Machine stitching refers to the needle marks sewn by the sewing machine, which have the characteristics of fine and uniform stitches. Machine stitching is more regular and flat compared to hand stitching, but it lacks the flexibility and versatility of hand stitching, and the three-dimensional effect is not as obvious as hand stitching. Hand stitching refers to the seam lines hand-sewn by the creator on the fabric. The technique is diverse and more convenient than machine stitching as it only requires a needle and thread which can be used in any scene and is not limited by space. However, hand stitching is time-consuming, and consumes the creator's energy.

The sustainable development of patchwork art is based on its unique craftsmanship. Therefore, on the basis of inheriting traditional patchwork craftsmanship, application of sustainable design strategies and techniques, combined with modern patchwork techniques and innovative sewing techniques, is an effective way to achieve sustainable craftsmanship.

### Sustainability of Culture

Traditional patchwork as a traditional handicraft is a valuable heritage of human culture, with unique folk characteristics. At the same time, traditional patchwork can be combined with different types of traditional handicrafts, not only highlighting the characteristics of various cultural regions, but also integrating elements of different ethnic cultures. Therefore, patchwork has strong folk traditions and local cultural characteristics. In order to ensure the sustainability of culture, efforts should be made in inheritance, including teaching skills, transmitting technology, and integrating traditional crafts into modern design. Only in this way can patchwork be continued. Patchwork needs innovation and improvement to meet the needs of the times. In terms of innovation, new



designs, color combinations, and material choices can be attempted. At the same time, combining with modern technology can also improve the market competitiveness of patchwork products.

The environmental conditions and excellent traditional culture that protect traditional patchwork are the core of maintaining cultural sustainability. In the process of development for many years, traditional patchwork has been impacted by many factors, such as the natural environment, human environment, and various cultural influences. Therefore, it is necessary to strengthen the cultural protection of patchwork, ensure its sustainability, and preserve its traditional cultural values. Therefore, traditional patchwork can be used as a cultural carrier, and cultural exchange can be used as a starting point for inheritance and development. In the era of globalization, people have more opportunities for cultural exchanges. Traditional patchwork can also be spread to other countries and regions through cultural exchange activities, forming cultural resonance. It can also introduce innovative elements from different regions, promote the integration of tradition and modernity, and then conduct deeper cultural sustainable exchanges.

### Sustainability of Emotions

Patchwork art is a unique form of handicraft that not only extends the life of fabric but also integrates emotions, achieving sustainable emotional connections. The patchwork technique sews emotions left in old objects into new works, and the sense of belonging that these old items bring is something entirely new things cannot accomplish. This continuity is the essence of patchwork art. With the development of society, consumers are no longer satisfied with the functional aspects of clothing and warmth alone; the emotional interaction between products and users has become a major focus. The emotional design of patchwork art satisfies people's demand for emotional interaction. Humans are emotional animals, and emotional interaction is an essential part of human life. Through patchwork techniques, people can turn emotions in old objects into emotions in new works, extending the stories of old items. This emotional interaction can help people better understand and communicate with historical culture. Therefore, the sustainable development of patchwork techniques is not just a matter of environmental protection, resource conservation, and economic benefits, but also a social and humanistic issue. In the promotion of patchwork handicraft techniques, attention should be given to emotional design, emphasizing the preservation of emotions in old objects, expressing emotional interaction between humans and historical culture, and achieving emotional sustainability.

### Sustainability of Economy

Traditional patchwork techniques have rich cultural connotations and manual skills, and can develop patchwork clothing and home furnishings products that are fun, practical, and beautiful, thus



meeting the needs of different consumer groups. Designing and developing high-quality patchwork products can not only increase product added value, but also stimulate market demand, and contribute to the economic sustainability of patchwork craftsmanship. In addition to the traditional folk traditions and cultural characteristics of patchwork craftsmanship itself, with the development of society and people's pursuit of a better life, the demand for the practicality and aesthetics of patchwork products is also gradually increasing. In this context, traditional patchwork techniques need to adapt to the needs of the modern market, innovate, expand more application areas, and actively respond to market demand. Innovation in patchwork craftsmanship can improve production efficiency and product added value, promote the poverty alleviation and prosperity of folk craft inheritors, reduce social costs, improve the living standards and production benefits of rural residents, and promote the sustainable development of rural economies. In addition, it also reduces waste and overconsumption, promotes fundamental changes in consumption concepts, and promotes the development of sustainable consumption and lifestyle.

## Conclusion

This article analyzes the artistic characteristics and cultural connotations of traditional Chinese patchwork art, discusses the relationship between Chinese-style modernization goals and sustainable development, proposes the model for the Chinese-style modernization sustainable development path of patchwork art based on the basic principles of sustainable fashion product design, and combines Chinese-style modernization goals, traditional Chinese culture and ideas, and the sustainable fashion design strategy. Based on this model, the sustainable characteristics of patchwork art are analyzed from five perspectives: materials, craftsmanship, culture, emotions, and economy, and from these five directions, a practical path for the creative transformation and innovative development of Chinese patchwork art is proposed, which provides a systematic guidance route for the sustainable protection and development of traditional Chinese patchwork art. Furthermore, it also has an enlightening effect on the innovation and development of modern clothing and cultural creative products, as well as on the sustainable development of excellent traditional Chinese culture.

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