Application and Innovation of Traditional Graphics in Modern Chinese Furniture Design

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Abstract. Based on the characteristics of traditional Chinese culture, this paper analyzes and studies the traditional graphics in modern furniture. This paper analyzes the origin, type, organization characteristics of traditional Chinese graphics and the meaning of traditional graphics, analyzes the traditional techniques of Chinese graphics, and finds out its innovative methods and ideas in a bid to find out the innovative design ideas of modern furniture with traditional characteristics. The traditional decorative graphics on Chinese furniture are combined with modern design concepts to create innovative changes in style, color and materials, which is of great significance for finding modern furniture designs with Chinese local characteristics.

Keywords: Traditional Graphics, Modern Chinese Furniture, Application and Innovation

Introduction

In recent years, with the improvement of the living standards of the Chinese people, people have paid more and more attention to the quality of indoor furniture. At present, there are many kinds of furniture styles in the Chinese market. Among them, Chinese furniture is a major feature, which is mainly characterized by the simplicity and generosity of Ming Dynasty furniture and the fine carving of Qing Dynasty furniture. Modern people tend to prefer elegant and beautiful graphics, practical and simple structures and diverse materials. Most of the Chinese furniture is directly decorated with plagiarism in the past. Therefore, it can't cater to people's aesthetic needs. If Chinese furniture plagiarizes past achievement, it will be hardly developed. How to combine the traditional graphic decoration in Chinese furniture with the modern design theory to carry out innovative design, so that the appearance and graphic decoration of the furniture have both national characteristics and characteristics of the times is a problem we need to solve. This paper classifies and summarizes the different types of traditional graphics in Chinese furniture design and combines it with the specific Chinese furniture design works for analysis, so that readers can have a more comprehensive understanding and innovation of the use of traditional graphics in Chinese furniture design and apply it to modern furniture design. [1]

I. The Historical Evolution of Chinese Traditional Graphics

Chinese traditional graphics have a long history. Its rich connotation and unique artistic style represent the unique regional culture and aesthetic taste of the Chinese nation. Chinese traditional graphics originated from the painted pottery patterns of primitive society, with a history of 6,000 to 7,000 years. With the changes in social history, traditional graphics are constantly changing and have different characteristics.

In the primitive society, human productivity was extremely low. People used utensils mainly for painted pottery. That is, people used clay to pinch and then burn them into utensils and painted colorful graphics on them. In the early Neolithic era, these graphics were characterized by simple, rough animal realistic styles. In the later period, the traditional graphics change, generally based on geometry, that is,
on the basis of realism, the animal graphics are refined to form a succinct geometric abstraction. Refer to Figure 1.

During the Xia and Shang Dynasties, productivity increased, and bronzes appeared. The graphic shape on the bronze is both realistic and abstract, which is contrary to the simplicity and liveliness of the painted period. The bronze styling began to be heavy, mysterious, majestic and fierce. The graphics are characterized by fine composition and rigorous organization. They are dominated by weird fantasy horror animal images with mysterious religious colors. By the Spring and Autumn Period and the Warring States Period, the graphic patterns were close to life, and the graphic structure was dominated by the light shape. The compositional form changed the previous serious style and changed to be lively. Refer to Figure 2.

The Han Dynasty was already in a feudal society, and people’s lives were also stable. During this period, the graphics are very exquisite and rich in shape, layout, craftsmanship, and imagination, from birds and beasts, geometric lines to real life characters and animal patterns. The content is to depict some life scenes with plot content, such as feasting, hunting, dancing, attacking and other patterns, with a strong life and mythological plot. The introduction of Buddhism in the Southern and Northern Dynasties made the traditional graphic themes mainly dominated by flying, birds and beasts, fairies, lotuses and honeysuckle. By the time of the Tang Dynasty, the economy was very prosperous. At this time, the graphics seemed to be graceful. The graphic themes not only used birds, beasts, and characters, but also patterns based on plant graphics, such as grass, pets, and pomegranates. Among them, the grass pattern is transformed by the Chinese nation to absorb foreign religions. It has simple and decorative patterns with Buddhist characteristics. See Figure 3.

The subjects used in the Ming and Qing dynasties were in various forms, mainly based on auspicious graphics. Among them, the figures of auspicious animals include dragons, tigers, unicorns, etc. The motifs of auspicious plants include lotus in Buddhism, rich peony, chrysanthemums that symbolize longevity, and plum orchids and chrysanthemums that express integrity. The theme of the legendary story and characters are eight immortals, one hundred sons, five sons, etc., and the use of “Blessing, Wealth, Longevity and Fame” and other texts as the theme. The theme of the abstract geometric figures are “rolling cloud, ideogram, cloud, and crease”. These Ming and Qing dynasties have auspicious meanings and express people's good wishes. See Figure 4.

II. Classification of Traditional Graphics

According to the theme of graphics, traditional graphics can be divided into:

Plant-like graphics. Plant-like graphics are generally made of some common plants, which are added to the refinement and change, and give auspicious meaning. These plants include lotus, peony, ivy, ganoderma lucidum, baoxiang flower, plum, orchid, bamboo, chrysanthemum, peach, Gourd and
so on. Each plant flower has a unique symbol of auspicious meaning. For example, peony means richness. Ganoderma lucidum means that the grass has the effect of licking the disease, while the lotus is not contaminated by mud. It is regarded as the object of ice and jade. Buddhist flowers also have auspicious meaning. See Figure 5.

Animal graphics. Animal graphics refer to the use of auspicious beasts and animals in life or legend. People have given good wishes to such graphics. Such as the emergence of dragons and phoenixes means auspicious wealth, cranes mean health and longevity, tigers, lions, unicorns, etc., said that they are mighty, used to eliminate disasters and ward off evil; Kirin sent a child to express his sons after the good deeds; The squid means more than a year; the bat means blessing; the yang with the “yang” homonym is organized into a figure by three sheep to express auspicious beginning of a new year, meaning that winter is coming to spring, yin and yang are long, and everything is revived. These figures are auspicious with other figures. For example, the crane is combined with the pine. The phoenix is usually combined with the peony. The sheep are usually combined with the ear of rice to form a figure. See Figure 6.

Figure graphics. Figure graphics generally organize characters in historical stories, in life, and in drama, through stories, dramatic plots, and life scenes. Figure graphics give people a true sense of simplicity and pure life, with a decent and trustworthy beauty, such as Guanyin Bodhisattva, Taibai Jinxing, He Xiangu, Nianqi, Guan Gong, Erlang God, etc., their shapes are derived from people's real life. These figures have various auspicious meanings, such as the Eight Immortals crossing the sea to express the magical powers of all the gods, the shelters around, and the likes of Fuxing and Bat, Luxing and Sika Deer, Shouxing and Ruyi Crutches, which together represent fortune, fame and longevity. See Figure 7

Text graphics. The graphic pattern is dominated by simple abstract text graphics. The text itself has the decorative nature, and its various variants or calligraphy forms have strong expression tension, so it is a good expression to directly decorate the text. For example, the figures formed by the changes of fortune, fame, longevity and happiness are an important branch of Chinese traditional auspicious patterns. It is composed of various calligraphy or variant forms, including “Baifu”, “Bailu”, “Bai Shou” and “Baixi”. It is often combined with indoor screens and furniture carvings, which is quite auspicious.

Geometry. Geometry is a geometric decorative pattern composed of various lines, curves, and circles, triangles, squares, diamonds, polygons, etc., which are a reasonable combination of points, lines, faces, black, white, and gray. The traditional geometric pattern has a pattern, a square pattern, a long pattern, a money pattern, a turtle pattern, a 4D pattern, a wishful pattern, and the like. Most of these figures indicate that people have a good yearning for things and life. They are auspicious figures. For example, the turtle's back and the four-character pattern mean longevity. The square-winning pattern is made up of diamonds, also known as longevity. See Figure 8.
III. Application of Traditional Graphic Themes in Chinese Furniture Design

The Chinese-style furniture is simple and elegant in appearance and exquisite in craftsmanship, reflecting the unique ethnic taste of the East. Although the customs and aesthetics of people in different regions are different, the graphic decoration of Chinese furniture is similar and has auspicious meaning. At present, many themes used include abduction pattern, wishful pattern, square-win pattern, back pattern, ice pattern, and the like.

3.1 Flower and grass pattern

The pattern of flower and grass is a kind of dragon's deformation pattern. The figure of the ancient dragon gradually became the exclusive use of the emperor and relatives. It is only used for the daily necessities of the aristocracy and the court building. Except for the temple, it cannot be used anywhere else. Folk craftsmen combine flowers and plants instead of faucets and dragons. They are called flower and grass pattern. Because of the “turning” and “expensive” homophony, people use the kidnapper graphic in furniture to show auspicious will. As shown in Figure 9, the chair armrest of the furniture uses the pattern of flowers and plants, and the soft curve grass dragon figure and the handrail shape complement each other, both beautiful and auspicious.

3.2 Auspicious pattern

Auspicious graphics, the shape of the handle is S-shaped, the handle end is changed from “Ganoderma lucidum” or “Auspicious cloud”. It is the earliest itch-like tool made of ivory, jade or sandalwood, bamboo hand, Buqiuren, and Buddha handle. As the prosperity of Buddhism was introduced from China to India, it became one of the “eight treasures” of Buddhism. It was developed to the point where it gradually emphasized its auspicious meaning. In traditional furniture, you can often see the wishful graphics. The useful figures are used for embossing or openwork to decorate the side of the table and chair. There are also decorative figures on the back of the chair, which embodies people's best wishes.

3.3 Square pattern

The traditional Chinese decorative pattern square pattern is a geometric pattern or geometric pattern formed by two diamond-shaped pressure angles, or combined with the long length of the disc to form a square long disc. The square pattern's concentric connection and continuous graphic expression express people’s craving for happy life and happy marriage. At the same time, it also conveys the infinite worship of human life and the long-awaited auspiciousness of human beings. The square pattern can be passed down to the present and has a long history. [5] See Figure 10 for the symmetrical, balanced and continuous composition of the square cabinet door, with a strong and simple decorative sense, making the square pattern art symbol show a distinct oriental personality and unique artistic style.
3.4 Round pattern
The pattern is called “endless rich” by the folk. It is a geometric pattern derived from the thunder of ancient pottery and bronze. Because it is a square or circular back ring pattern twisted by a horizontal and vertical short line, shaped like a “back”, it is called a round pattern. There are intermittently arranged ones, and there are pairs of positive and negative pairs, commonly known as “opposite to the back”, there are also continuous strips, etc., mostly used to decorate the mouth or neck of utensils. The pattern of embossing can be seen everywhere in the Ming and Qing dynasties of weaving, carpets, wood carvings, furniture, porcelain and architectural decoration. See Figure 11 for the side of the coffee table, which is mainly decorated with embossed edges. It has a neat, uniform and rich effect, which gives it a profound and long-lasting meaning.

3.5 Ice pattern
The ice crack is the first crack in the firing process of porcelain. It shows the infinite natural beauty. The ice crack in the furniture is affected by the porcelain. In ancient times, ice cracks were often used to open the fence, doors and windows, and back of the bed by openwork or splicing. In today's Chinese furniture, ice cracks are used more widely. For example, it is used on the tabletop of the dining table, the surface of the coffee table, etc., and the texture interlacing makes people associate. As shown in Figure 12, the fence of the bed is decorated with ice patterns. The ice crack pattern looks like transparent ice, and it looks like a piece of plum, which has a strong artistic sense. [6]

Figure 9. Flower chair armrest
Figure 10. Square Door
Figure 11. Patterned tea table
Figure 12. Ice pattern bed

IV. Innovative Design of Traditional Graphics in Modern Chinese Furniture Design
4.1 Techniques to Innovate Modern Chinese Furniture
Inheritance and innovation are the key to the vigorous development of Chinese furniture in China and to the world. Traditional graphics are a precious asset left by ancestors. For the designer, it is the source of creation. The design of traditional graphic elements cannot be simply copied, but the essence of traditional Chinese graphics should be infiltrated into modern furniture. First of all, the reference method can be applied, that is, to draw on some design principles and performance techniques of other art fields in modeling; Second, the reconstruction method is used, that is, under the premise of preserving the traditional graphic style, injecting modern points, lines, faces, etc. to form the design elements, and the patterns are simplified and reconstructed after the mutation; finally, innovations are made on materials. Traditional Chinese furniture is usually processed with wood, and the graphics are often decorated in the form of relief or openwork. Modern furniture materials are more abundant, and modern processing materials such as plastics and metals can be used to make furniture easier to process,
shape and transport.

4.1 Modern Chinese Furniture Design Practice

Under the guidance of fashion trends, modern Chinese furniture continues to evolve and diversify. It not only has strong practicality, but also highlights the unique traditional charm and modern personal taste. The following furniture is designed for the people. The design uses the traditional graphic design of “Fang Sheng Wen”. The “square patterned” furniture design reflects the traditional cultural connotation of traditional graphic elements and embodies the best wishes of consumers for marriage and family. As shown in Figure 13, the shape of the square pattern is “concentrically connected” to express the good yearning and pursuit of love life; In addition, the square pattern has the meaning of reverence for life, praying for the prosperity of future generations, and pinning the mentality of people praying for peace. The furniture is designed to be practical, and has the characteristics of detachable, combinable and strong storage: for example, the inner space of the stool can be used as a storage box, and one stool can be split into two, which is convenient for the guests to use for a long time; The shape of the foot of the coffee table in Figure 14 is also suitable for placing objects, making good use of space. As shown in Figure 15, this classic and simple and practical furniture design style reflects the young people's fashion personality. The design selects the visual elements of the body, the lines, the faces and the blocks in the art. Through the modern means, the perfect combination of modern atmosphere and traditional style is combined. (7)

![Figure 13 Square Pattern Design Elements](image1)

![Figure 14 Square Pattern Chair Design](image2)

![Figure 15 Square Pattern Tea Table](image3)

V. Conclusion

Modern furniture is designed in a variety of styles and types, and the decorative techniques of the furniture (including the use of traditional graphics) vary. Furniture with beautiful appearance can cater to the needs of consumers and improve the social value and cultural heritage of furniture. China's
traditional auspicious graphics have distinct national characteristics. They are natural yet elegant, simple and profound, but the traditional graphics used in modern Chinese furniture are too strict. As how to combine traditional graphics with modern design concepts and practical environmental protection concepts into modern Chinese furniture design, it is especially important to create modern Chinese furniture with green practicality, contemporary sense and traditional charm. It is necessary to continuously promote the innovation of modern Chinese furniture in China, and in the future, let China's furniture go abroad and the prospect of going global will be just around the corner. [8]

References