

The Design Meaning and Method of Grain in Chinese Aesthetic Taste

Zou Weihua

Abstract—Knowing the design meaning and method of grain in Chinese aesthetic taste could make a significant effect to the design of new Chinese style furniture products. According to the differences of sawn direction of ring and the ring of different kind of wood, could generate various grains which main include straight grain, cured grain, coarse grain and fine grain. Each wood grain has own unique original form of grain and design meaning. Grain's artificial integration form becomes a kind of way that can get perfect texture in new Chinese furniture products and can ensure quality of entire wood. In grain's artificial integration form, the method of design main include the integrated design about straight grain, cured grain, coarse grain, fine grain.

Index Terms—Chinese aesthetic, original form, artificial integration form, straight grain, curved grain, coarse grain, fine grain.

I. INTRODUCTION

Chinese traditional architecture and furniture are solid wood as the main raw materials, whose the main reason is demonstrated in two aspects: one is the facilities of solid wood material in acquisition and processing, another is the influence of Chinese “natural” aesthetic thought.

Chinese culture birthplace is the Yellow River basin, ancient the Yellow River basin has pleasant climate temperature and humidity, dense forests, abundant timber resources. In the early days of wood processing, the use of stone could complete open cut, smooth, tenon and mortise processes (although very rough processing). Along with bronze tools and later iron axe, Jin, saw, chisel, drilling, planing and other tools to use, the processing technology of wood has rapidly increased, and thus formed Chinese unique, sophisticated construction technology and art system.

Harmony between man and nature, which is attitude to life of Chinese ancestor, which is ideal state reflect Chinese living pursuit from ancient times to the present. This kind of thought influence all kinds of traditional act of creation, such as Traditional Chinese Architect, Traditional Chinese Furniture, Traditional Gardens, Traditional Arts and crafts, etc. Chinese ancestor thought that natural materials is the best material of creation and can better reflect this kind of harmonious relationship between man and nature. Therefore, they pay attention to usage of natural material, especially the wood as the main material for furniture making. In Traditional Chinese Furniture, not only use a large amount of

wood but also pay attention to maintaining the surface characteristics of material itself. They thought that the surface characteristics of material itself can better express a kind of unique natural beauty, at the same time their emotion is reflected in the unique surface texture of natural materials by their cultural imagination.

Wood as the main raw materials embodied the pursuit of Chinese “natural” aesthetic thought. Chinese traditional aesthetic thought Emphasize should respect the material own characteristics, make full use of and show material natural beauty. The natural beauty of grain rich decoration form of Chinese traditional furniture. Ming style furniture with ability to rosewood, ebony, beech, and so on, these woods not only have good properties, but also beautiful textures. As in adult rosewood, its grain is fine and with countless changes, natural formed various pattern that like landscape and scenery of in Chinese paintings.

Nowadays, new Chinese style furniture products are one of the mainstream products in the market of Chinese furniture. New Chinese style furniture is not only the spread of Chinese traditional furniture culture significance in the background of current age, but also the design in the present age which is based on the complete comprehension of the situation in the current Chinese culture. Know the design meaning and method of grain in Chinese aesthetic taste could make a significant effect to new Chinese style furniture products design.

II. THE DESIGN MEANING OF GRAIN'S ORIGINAL FORM

Wood formed own ring in its growth process. According to the differences of sawn direction of ring and the ring of different kind of wood, could generate various grains which main include straight grain, cured grain, coarse grain and fine grain. Each wood grain has own unique original form of grain and design meaning.

A. The Design Meaning of Straight Grain

Along the growth direction of wood, perpendicular to the growth ring and through the center of ring to sawn could generate straight grain. This grain is strip and parallel to each other. Compared with other grain, the straight grain could show more rational, simple beauty in Chinese aesthetic taste. The rational, simple beauty often express in Chinese traditional furniture that haven't gorgeous surface but simple shape (refer with: Fig. 1). Level straight grain is symbol of peace, vertical straight grain is noble symbol in Chinese aesthetic taste.

B. The Design Meaning of Curved Grain

Along the growth direction of wood, perpendicular to the

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growth ring and don't through the center of ring to sawn could generate cured grain. This grain likes mountain lines and "V" shape. Compared with other grain, the cured grain could show more romantic, elegant beauty in Chinese aesthetic taste. The romantic, elegant beauty often express in Chinese traditional furniture that focus on fluency of entire form (refer with: Fig. 2). This cured grain that likes mountain lines is symbol of emotion of love nature in Chinese aesthetic taste.



Fig. 1. Chinese traditional furniture of simple shape.



Fig. 2. Chinese traditional furniture that focus on fluency of entire form.

C. The Design Meaning of Coarse Grain

The vast majority of coniferous wood is coarse grain. This grain likes zebra texture. Compared with other grain, the coarse grain could show more bolded, raw beauty in Chinese aesthetic taste. The bolded, raw beauty often express in Chinese traditional furniture that focus on antique entire texture (refer with: Fig. 3). This coarse grain is the symbol that means recover one's original simplicity in Chinese aesthetic taste.



Fig. 3. Chinese traditional furniture that focus on antique entire texture.

D. The Design Meaning of Fine Grain

The vast majority of grain of hardwood is fine grain. This grain likes hairy. Compared with other grain, the fine grain could show more lightweight, comely beauty in Chinese aesthetic taste. The lightweight, comely beauty often express in Chinese traditional furniture that focus on introverted entire form (refer with: Fig. 4). This fine grain is the symbol of middlebrow in Chinese aesthetic taste.

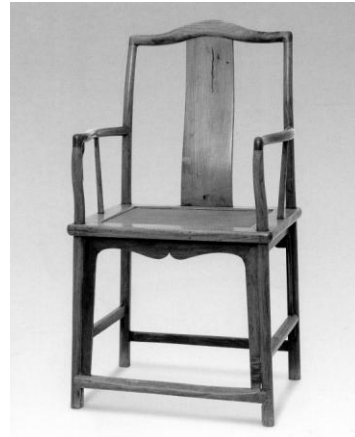


Fig. 4. Chinese traditional furniture that focus on introverted entire form.

In addition to above grain, there is some other grain that likes wings, grimace, bird's eye, etc. These grain all advocate natural beauty in Chinese aesthetic taste.

III. THE METHOD OF DESIGN IN GRAIN'S ARTIFICIAL INTEGRATION FORM

Along the development of wood industry and grain decoration, grain's artificial integration form becomes a kind of way that can get perfect texture in new Chinese furniture products and can ensure quality of entire wood. In grain's artificial integration form, the method of design main include the integrated design about straight grain, cured grain, coarse grain, fine grain.

A. The Integrated Design about Straight Grain

To make straight grain of same species of timber to integrate could expend more rational, simple beauty in Chinese aesthetic taste, and more could express unified entire texture. First, choose some boards of straight grain in same species of timber. Second, integrate these boards by modern wood technology and decoration demand in new Chinese style furniture. Not only can make the straight grain of same direction to integrate which express the sense of order, but also can make the straight grain of different direction to integrate, repeat integration of vertical direction which express a kind of rhythm (refer with: Fig. 5).

B. The Integrated Design about Curved Grain

To make cured grain of same species of timber to integrate could expend more romantic, elegant beauty in Chinese aesthetic taste, and more could express fluency of entire texture. First, choose some boards of cured grain in same species of timber. Second, integrate these boards by modern wood technology and decoration demand in new Chinese style furniture. Make the cured grain around a center to

integrate which can express sense of radiation (refer with: Fig. 6).

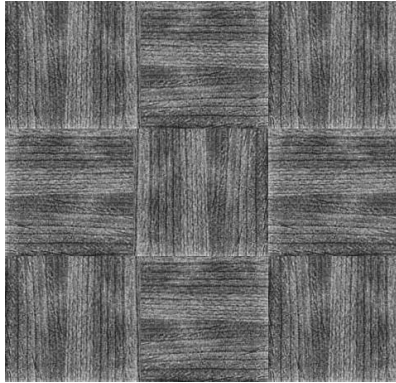


Fig. 5. Integration of straight grain.

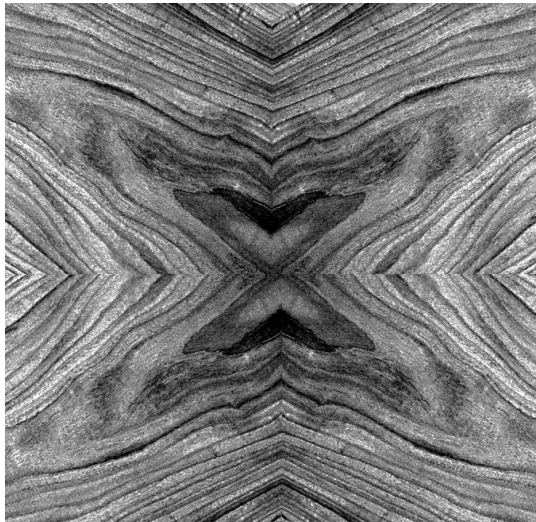


Fig. 6. Integration of cured grain.

C. The Integrated Design about Coarse Grain

To make coarse grain of same species of timber to integrate could expend more bolded, raw beauty in Chinese aesthetic taste, and more could express antique entire texture. First, choose some boards of coarse grain in same species of timber. Second, integrate these boards by modern wood technology and decoration demand in new Chinese style furniture. Make the coarse grain according to structure of furniture to integrate which can express recover one's original simplicity (refer with: Fig. 7).



Fig. 7. Integration of coarse grain.

D. The Integrated Design about Fine Grain

To make fine grain of same species of timber to integrate

could expend more lightweight, comely beauty in Chinese aesthetic taste, and more could express introverted of entire texture. First, choose some boards of fine grain in same species of timber. Second, integrate these boards by modern wood technology and decoration demand in new Chinese style furniture. Make the fine grain according to same direction to integrate which can express sense of middlebrow (refer with: Fig. 8).



Fig. 8. Integration of fine grain.

E. Extract the Classic Grain

Because the traditional Chinese furniture is the past product and entirely deviate modern life, we should take its advantages and get rid of its disadvantages when facing the inheritance of traditional Chinese furniture. The method is try to distinguish the traditional Chinese furniture, systematize and refine the form which can accord with the modern aesthetic demands and has traditional meaning, especially the classic grain and its arrangement pattern which come from traditional Chinese furniture (refer with: Fig. 9). the classic grain from the traditional Chinese furniture usually refers to the parts of furniture with above significance, while, the arrangement pattern of classic grain usually refers to the integral form of furniture with above significance.



Fig. 9. The classic grain and its arrangement pattern.

F. The Reconstruction Method

Reconstruction is an important link in design results. It's a basic principle to reconstruct the classic grain of the traditional Chinese furniture according to modern people's demands on physics and spirit. Reconstruction is not easy scatter form but construction again after very rational thinking. The premise is to comprehensively analyze the

object, purpose, environment, cost and other factors of reconstruction. The form methods determine the reconstruction effect. There are mainly three levels of the reconstruction methods of grain design in new Chinese style furniture products. The first level is based on the form method of aesthetic principles, which is an experimental assembly that is formed in a long period for the sake that people pursue aesthetic form. We can choose appropriate the classic grain from the traditional Chinese furniture and reconstruct them according to aesthetic principles (refer with: Fig. 10). The second level is based on the form method of substance demands, which is a performance that people pursue pragmatism constantly. We should put the human's physiological conditions, force support ability and other objective substance factors as the reconstruction principles, by which we choose the classic grain to carry out reconstruction. The last level is based on the form method of spiritual demands, which is a performance that people try to achieve happy mood, emotion home and self-worth. We can make the reconstruction results to be the materialization of modern aesthetic sentiment and social concept.



Fig. 10. The reconstruction of The classic grain.

IV. CONCLUSION

The above grains have abundant design meaning in Chinese aesthetic taste. We can choose the most appropriate one among different grain according to our own demands, and make this grain to integrate another that adapt to modern wood technology and decoration demand in new Chinese style furniture. By the above process, we struggle to get the best new Chinese style furniture products design.

Future research on the design meaning and method in Chinese aesthetic taste will be focused on the following two aspects. One is how to use to expend the design meaning in Chinese aesthetic taste. Another is how to use computer technology to edit new rule of integration that adapt to the modern rule of formal beauty.

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