Research on Creative Designing of Home Decoration by Using Waste Wood

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Keyword: Creativeness, Home Decoration, Reuse of Waste Wood, Environmental Protection.

Abstract: The main objective of the paper is to analyze the current situation of wood resources in China and the present situation of creative designing of home decoration by using waste wood. Based on the study and classification of the old timber market, combined with the development trend of sustainable development and family decoration innovation, the design method of the development trend of old wood recycling and creative home furnishing decoration is studied and discussed. In order to reduce pollution, it is necessary to recycle the natural resources and reuse the waste wood in the wood market. The purpose of this paper is that we can a new home decoration designing market by redesigning the waste wood, and we can beautify and decorate our living environment by creative designing of home decoration to reduce the waste of wood resources.

Introduction

Nowadays there are many recyclable and reusable wood resources in the field of construction and furniture. There should be a reasonable approach to tackle the old woods to recycle these resources. The old woods from the architecture and home furniture market can be reused and redesigned to decorate household, restaurant, theme bar or wooden-style tea house in the form of wooden handicrafts and wooden creative furniture. In this way we can make full use of the old wood, meanwhile we can alleviate the problem of shortage of wood resources. This is an effective way to improve our economy.

The Market Analysis of Creative Home Decoration Designed by Waste Wood

The economy is developing rapidly, but the ecological situation is going worse and worse. One hand China’s forest resources are relatively insufficient. On the other hand, the wood resources are becoming more and more scarces with the human destruction of forest. According to the eighth inventory survey of the national forest resources, the existing forest area now is of 208 million hectares, and the total forest coverage rate is 21.63%. Meanwhile China’s forest coverage rate is far below the global average and the per capita forest area is only 1/4 of the world’s per capita level \cite{1}. In addition, recycling of waste wood is not paid much attention. There are lack of state laws and regulations on this field. Short of government subsidies, many companies don’t take part in waste wood recycling when they cannot make profit. On the other hand, there are many limitations in the directory of the national comprehensive resources utilization. Enterprises are not willing to engage in waste wood recycling. Therefore, the waste of wood resources is serious even though many waste wood resources are recyclable and reusable \cite{2}.

At present the old wood home furnishing market is a primary market, developing at a starting level. It is not as popular and mature as the market in the developed countries like South Korea, Thailand, the United States and Japan. But the market is prospective. As the state population is huge and the economy is booming, people’s living standards are improving, and their taste for home decoration is also improved. Many people show great interest in innovated home decoration. Nowadays there are many creative craft products produced and sold in China’s coastal areas, while
the mainland is relatively rare. Compared to other countries, the per capita share of creative arts and crafts in our country is very low. Specific data is in table 1.

Table 1. Per capita share of the region.

<table>
<thead>
<tr>
<th>Area</th>
<th>Per capita share</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>5%</td>
</tr>
<tr>
<td>Tokyo</td>
<td>78%</td>
</tr>
<tr>
<td>Singapore</td>
<td>68%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>54%</td>
</tr>
<tr>
<td>Thailand</td>
<td>58%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>47%</td>
</tr>
<tr>
<td>South Korea</td>
<td>68%</td>
</tr>
</tbody>
</table>

The usage of timber in China has a long history. From the Ming and Qing Dynasties’ indoor furniture to the present new Chinese style, they showed different styles by using a large number of wood materials. Compared to other materials, wood resource is widely used. Because wood, as a home furnishing decoration materials, has a very special artistic effect and good performance, and easily processed and utilized, with little harm to the human body and natural environment. In recent years, people began to be bored with the life in high science and technology, slowly turning to respect for nature and seeking a carefree and content life style in natural surroundings. With the growing demand for wood products, vast number of consumers concern about wooden creative crafts [3]. By recycling back old timber merchandises, we can design creative furniture and innovative crafts for the elderly family, film studios, teahouse, theme hotels, public places of entertainment and nostalgia-themed business shop. Combined with modern design concept, professional design for the theme of individuality can be presented by using waste wood.

The Significance of Creative Designing of Home Decoration by Using Waste Wood

Wood species are of wide variety, including ash, white oak, black walnut, because the growth place and growth speed are different. The patterns and characteristics of wood are also very different. Wood material has a very special artistic effect and good performance, and easily processed and utilized, so it become the most widely used resource in the field of interior decoration. It is suitable for many indoor spaces such as wall, ceiling, doors and windows, floor, furniture, and small installation materials, furnishing crafts. It has the excellent performance which is unmatched by other materials. Compared with the design work done by the new wood, waste wood design work is with the taste of history and good old days. Therefore, the usage of waste wood production of creative home decoration is also gradually favored by customers, and become essential design elements of modern interior decoration designing [4].

Market Research of Waste Wood-designed Home Furniture

The economical development speed lets to the accelerated pace of life. People’s material living standards are gradually improved. Therefore, their pursuit of fashion and beauty is also getting higher and higher. Decoration in the home environment emphasizes more on personal style and details [5]. Through the analysis on the questionnaire survey data, we find that the redecorating interval of entertainment and leisure space is about 3 years, of the clothing stores is almost 2 years, the hotel and commercial space is 6 years, the household environment averaged 8 to10 years, so the decoration design industry in the society will never become unpopular. For the waste wood industry, creative home furnishing designing is with great opportunities. In the questionnaire, customer expectation for design service with waste wood decoration is showed in table 2.
Analysis on the Market Prospect of Creative Designing Home Furniture

In January 2009, the state promulgated the norms for recycling and management of waste wood materials, which strongly supports the recycling of waste wood and put the old wood furniture as the focus of recycling [6]. In response to the call of the state, Mr. Lin Zuoxin in Shanghai, the first founder of waste wood recycling company, found the JIAZHIJIA Company was to recycle the waste wood and sell the creative design of waste wooden home accessories. Its products are sold at home and abroad, in the field of recycling waste wood it makes a typical example. The company’s success also confirms that the waste wood recycling market is of good prospects. While on many domestic sales platform, like Jingdong and Taobao, there are a large growing number of creative wooden products and sales performance is good. It shows that wooden products’ market share is gradually increased. With cheap price and high quality, such products have good reputation among the consumers group.

The Designing Approaches of Creative Home Decoration by Using Waste Wood

Different from other designing materials, when using waste wood for home decoration, the designer take full account of the appearance, and grasp the unique nature and the inner beauty of every piece of wood [7]. Wooden decoration is of unique features, because each kind of wood material is of its own quality and texture. They give people different feeling by presenting different styles. For example, by using raw wood materials with barks, designers can made their work original, wild and natural, making people have a feeling in the open wild. Their emotion and stress is relaxed too. While wooden works designed without barks show beauty, cleanness and smoothness, making people feel in the pure and elegant nature. They can improve the standards of life. And wooden products can reduce the harm of the ultraviolet rays, infrared ray by reflection, giving people a warm, soft, delicate feeling [8].

Molding Technique of Wood Assembling

The design method processes and repaints the waste wooden sheet. Then assemble the sheet based on different animal shape. They can be designed into practical and beautiful racks and shelves, partition can be inserted into animal shapes assembled according to design, practical and beautiful storage racks, book shelves, or partition board etc. In Figure 1 Nordic style elk bookshelf, the designers cleverly use natural wood texture and color to show the natural style, then combine the shape of elk and function of bookshelf into an innovated bookshelf. Its shape is simple and elegant, with northern European style. The overall feeling is great, simple but not easy. Such products can not only decorate our living environment, but also add a lot of fun to the stressed life. These products are widely used, especially suitable for home decoration, model room, households, clubs, theme restaurants, shops, cafes and other space decoration [9].
Cutting and Recombining Technique

This designing method is to cut some waste square board, then design to different home creative objects. It shows the beauty of wood and adds a number of practical functions in the works. Each tree has growth ring and the pith line. By different cutting methods, the ring and the pith line shows different texture patterns. The main cutting methods of wood conclude radial and tangential cutting, each of which shows different wood figures. Designers choose the suitable cutting method based on different innovation. In figure 2 the designer cuts the wood into seat shape, retains the natural wood bark, cut and plane the internal space. The design shows natural and handiwork figure. In figure 3 the designer cuts the middle of the wood log into small cubes, write the date, insert small wood piece inside. The work can be used as decorative ornaments, decorating the living room, study, bedroom space, or can be used as a tool to record timetable. It is practical and beautiful.

Surface Coating and Varnishing Technique

The design method is to take advantage of some odd bits of the waste wood materials, mold its shape, and then use paint and dope to paint the surface to make a decorative design. In figure 4 there is a retro home furnishing living room floor clock [10]. It uses waste wood to do a retro painting, with metal needles of hour hand, minute hand and second hand, both practical and of strong decorative style. It adds a bright color to the home furnishing environment. Accessorie is an important element of interior decoration, making the space of house relative. Through the decorative elements and color matching, different space atmosphere can be presented and unique space style can be created. In this way we can enhance our space variety and unify the space style [10].
Wood Carving Technique

The design method is to carve the waste wood into different shape. Wood itself is relatively easy to process. So it can be carved into many different shapes in need. After surface decoration some designing works show a huge artistic sense of beauty. In figure 5 the retro Buddhist hand-painted wood ornaments was made up of weathering wood material by creative designing. The Buddha figures and weathered wood base are combined together to show an unrestrained, nature-integration realm. In Figure 6 there is a mural decoration, shielding the electric meter box. It was carved many different shaped Chinese character—FU (showing the good wish to the future). The work shows a sense of art and a symbol of good fortune and wealth, beautifying the household environment. And the household decoration level is improved by these sensitive details.

![Figure 5. Retro ornaments.](image1)

![Figure 6. Meter box cover mural.](image2)

Conclusion

Industralising the old wood recycling business is significant for saving resources, adjusting the industrial structure, truly realizing the circular economy. It says by environmental protection office that a lot of wooden garbage are processed together with household garbage and then compressed into landfilling. It not only affects the city image, but also damages the garbage compressor.

So by recycling the old wood resource and designing into a variety of creative home furnishing doceration, we can make the old wood resource revaluable. It can protect the environment, and keep the wood resources recycling, implementing the circular economy of wood industry.

And compared with other methods to use wood, the utilitzion of the old wood which is designed to be a number of creative home accessories, is a concept of innovation to make the value of wood resources raised.

References


