Study on Redesign of Scrap in Leather Design

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Abstract. Based on the redesign of leather trims, this paper starts from the background, theoretical status, practical application cases, attributes and design methods of leather trims, and attempts to redesign and apply leather trims in the field of clothing design. Explore its significance and development prospects.

Keywords: Leather Design, Scraps, Redesign

At present, China is vigorously promoting sustainable development. Under such a background, all walks of life have started the research path of circular development. The leather industry must be in line with the times in such an environment. There are many wastes in the current application of leather materials. The development and utilization of "cuttings" can not only play the value of leather materials themselves, but also a new idea for sustainable development.

1. Study the Background of the Redesign of Scraps

1.1 Research Status
Regardless of whether it is a large-scale industrial production enterprise or a small workshop-like leather workshop in China, the processing and utilization of leather trims are currently at a relatively preliminary stage. Most enterprises collect and crush leather scraps into fibrous shapes, and then process them to produce recycled leather. There are even some areas where leather production is lagging behind, or choose to incinerate the leather scraps with domestic waste. Such a situation is not only a waste of leather materials, but also causes pollution to the living environment.

Abroad, in 2017, the luxury brand Burberry entrusted the leather trim produced in production to the environmental company Elvis & Kresse for processing, through a series of redesign and reprocessing into leather accessories and upholstery for re-sale, to provide for the reuse of leather trim Design direction. The same luxury brand Hermes and other companies have done the same job. The more prosperous areas in the fashion industry have more diversified research and utilization methods in this area, but their application methods are still limited, and they have not yet formed a systematic leather trim processing system. [1]

1.2 Promotion of the Concept of Ecological Cycle Development
As the world economy tends to be sustainable and cyclical, it is not only a pursuit of high economic benefits, but it is also a consensus to engrave ecological protection into the path of economic development. The concept of sustainable design emerged. Designers no longer designed products from a single aesthetic direction, but quietly integrated resource and environmental factors into it. From the perspective of guiding social sustainable development, they focused on product sustainability. In the current situation where there is already a lot of pollution, I think that redesigning and reusing the current "waste material" can not only solve the pollution problem, but also achieve the purpose of saving materials, which is a practical and feasible way to solve environmental problems.

1.3 Study the Significance of Redesign of Leather Trim
As the concept of sustainable development is deeply rooted in people's hearts, the issue of waste of scrap in leather production is gradually being valued. The purpose of the redesign of leather materials is to achieve the goal of sustainable development, tracing the history. Both China and foreign countries have their own opinions on the redesign of scraps. Therefore, the redesign of scraps is also the inheritance and promotion of the cultural development of the world's apparel industry. In summary, the research significance of this article is to explore a system suitable for the redesign and reuse of leather trims based on the related concepts of clothing design, and to design the leather trims as independent raw materials individually, to play their original value, taking into account the product's own characteristics And the characteristics of market consumption, inherit and carry forward the world's relevant clothing culture, and give this culture the connotation of modern sustainable development concepts.

2. Overview of Redesign of Leather Trim

2.1 Types of Leather Trim
Usually, leather scraps of different sizes, colors, and shapes appear in the process of leather production and processing. Before the leather scraps are designed and reproduced, these different scraps must be classified and their different characteristics must be analyzed clearly so that they can be fully Use leftovers to achieve sustainable development.

In the leather production process, the application direction of leather products is generally divided according to animal species, and then the actual product parts are divided according to the texture and size of the leather surface. Among them, if divided according to the surface texture, the leather can be roughly divided into natural fine pore leather and two kinds of leather with obvious surface texture. In the former leather material, cattle, sheep, and pig leather have mature and perfect technology and production system at home and abroad in leather processing, so this kind of leather is more common in daily life. Among the leather types with obvious surface texture, ostrich leather is more common, and its surface decoration is more uniform, but its three-dimensional pattern is directional, and the surface decoration style is very prominent. It is often stitched with other types of leather in current applications. In addition, crocodile leather, snake leather, lizard leather, etc. are all precious rare leathers, and the current processing system at home and abroad has certain imperfections. [2]

2.2 Characteristic Analysis of Leather Trim
(1) Sheep leather: The surface texture is relatively uniform, the leather is soft, the pores are delicate, and it is not firm. Usually used in the apparel manufacturing industry. (2) Cow leather: The surface texture is more uniform and the pores are rougher, but its toughness is very strong and durable. Commonly used in the fields of clothing, bags and industrial products. (3) Pig leather: rough pores on the surface, uneven texture, loose cortex and poor elasticity. Usually used in the apparel manufacturing industry. (4) Deer leather: the leather is delicate and soft, the surface texture is shiny, the toughness is strong, and it is resistant to water and high temperature. Usually used in high-end luxury manufacturing. (5) Horse leather: loose fibers and uneven thickness of leather, but its wear resistance is very good. Usually used in shoe bag manufacturing. (6) Ostrich leather: the surface is
evenly decorated with convex dots, the cortex is light and thin, it has good wear resistance and is not easy to age. Used for high-end luxury goods. (7) Crocodile leather: the leather is harder and more durable, the texture is stronger and the elasticity is poor [3]. Used in high-end luxury goods.

3. Redesign Method of Leather Trim

3.1 Redesign from the Perspective of Color
(1) Combination of scraps of the same color. Such conditions are more difficult to meet, because the way the leather is dyed and the dyes used will cause very different effects. Therefore, if strictly speaking, in addition to black and white, it is basically impossible to find leather with the same color in the colored leather trim. The effect of the combination of the same color scraps is mainly to highlight the weak contrast between the material and the handwork [4].

(2) Coordinate the combination of color scraps. The coordinated color combination includes similar color combinations and similar color combinations. There are usually different combinations of light and shade, depth and so on. This combination of effects has diversity in color expression, and also has its unique beauty in overall performance.

(3) Combination of scraps of contrasting colors. The combination of contrasting colors can be easily understood as a color combination with a clear distinction. From the existing design perspective, contrasting colors generally include color contrast, lightness contrast, saturation contrast, warm and cold contrast, and complementary color contrast. In this way, the prominent effect of color is used to highlight the designed pattern.

3.2 Redesign from the Perspective of Materials
(1) The combination of single leather trim. As the name implies, this combination refers to the combination of the same kind of leather. Although it is the same kind of leather, it has received different processes during the processing and the surface texture presented after the treatment is completely different. On this basis, the leather with more consistent surface texture and decoration is redesigned, and then the products obtained by reprocessing often have better quality in the final product.

(2) Various types of leftovers. This combination means that a variety of natural fine pore leather trims are combined. This type of leather includes five types: sheep leather, cow leather, pig leather, deer leather, and horse leather. This combination is a more ideal combination, which matches the leather surface with the same characteristics, showing a different kind of beauty.

(3) Various types of leftovers are mixed with various materials. There are many ways to combine leather trim and various materials. If divided according to clothing materials, there are mainly woven fabrics, knitted fabrics, leather fur materials and other mixed materials. Judging from the general trend, the comprehensive use of multiple materials is the prospect of fashion development, so this combination can be expected to have great potential in the future.

3.3 Redesign from the Perspective of Technology
(1) According to different analysis of the connection process of leather trim, the stitching methods are generally divided into stitched stitching and non-stitched connection. The main advantage of stitched stitching is that it has a long history, has a relatively mature processing system, and has strong style characteristics in apparel manufacturing, but it has higher requirements for designers. The main purpose of this design is to highlight the line sense and craft effect of the separation. The non-stitched connection is mainly a combination of various parts through buttons, zippers, inserts, etc. It is a relatively new process. Its advantage is that the form is newer and it has innovative significance for the application of leather trim.

(2) According to the different analysis of the decoration process of leather trims, the leather craftsmanship needs to be analyzed first in this analysis. The more widely used technologies are printing, embossed leather and flocking leather. These surfaces have some stable patterns, which are
beautiful and do not affect daily use. Secondly, some lacquer leather and suede leather also have a certain market at present. The surface color of these leathers is consistent, but they have different styles in texture. Finally, laser punching leather is a relatively new type of leather production technology, and there is no large-scale application in the production field.

3.4 Redesign from the Perspective of Splicing
In the process of reorganizing the collected leather scraps for redesign, the color, material and process of the scraps exist as predetermined values before the redesign, but the use of these scraps and the final pattern form belong to the part of redesign. According to the graphic angle division of leather trimmings, it can be divided into regular patterns and irregular patterns. In terms of the structure of the pattern, there are edge-splicing, interweaving and multi-layer stacking. The division in terms of stitching includes two-dimensional plane patterns and three-dimensional structure types.

4. Conclusion
With the social and economic development, mechanized production has brought more and more duplicate products, this behavior has caused a lot of waste. Based on this situation, this article explains the significance of leather redesign, and then the method of leather redesign was summarized. As a new design direction, the redesign method and application practice of leather trims provide a unique interpretation for the field of leather product design and production, which not only improves the utilization rate of leather materials, but also gives the best from the perspective of resource protection.

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