

The Secondary Design of Used Clothes Based on Sustainability

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Abstract—The rapid change of fashion leads to excessive consumption, frequent replacement of clothing apparel accumulated a lot of garbage, this may cause resource waste and environmental pollution. The phenomenon of used clothes recycling and reusing causes more and more attention and supports at home and abroad, both at home and abroad appear two design examples of successful brand operation on used clothes demonstrating the feasibility and necessity of the clothing secondary design. Through the used clothes recycling and secondary design and according to the characteristics of the used clothes, we extract valuable, reflect the design elements of emotional continuity, by resolution, design, restructuring, transformation to endow them with new design life and make it more rationally, so as to create new value of clothing and realize its sustainability, for businesses and consumers to create a higher value of commercial, environmental and use.

Keywords—used clothes; secondary design; green design

I. INTRODUCTION

In fast fashion popular today, "discard" was trained to be almost a kind of fashionable qualities which consumers required. Although satisfied people pursuit of fashion, more frequently updating wardrobe, makes the garment use cycles be shorter, resulting in excessive waste and used clothes number increase rapidly. These secondary clothing is difficult to access the new round of consumption and how to deal with these clothes, becomes a clothing industry is facing a big problem. In recent years as "green design", "low carbon economy" to the promotion of the ideas, the outdated clothes become the people's embodiment of advocating natural, the green design and environmental protection.

The classification of used clothes has three main types: the first is wearing long time and has been close to a tattered clothes; this kind of clothes with the speed of social development are gradually reducing. The second is the dress for a long time, that may appear on the surface of fabric wrinkle, fade, dark yellow, even off color, losing luster phenomenon; This kind of clothes are mostly worn by people in long time and used to be wearing. The third, clothes is worn short time even not, but because of the old fashioned style, fabric, color so that be idled. The highly development of garment industry and fashion's surge is factors to push the third form.

II. THE CONCEPT OF "SECONDARY DESIGN"

"Secondary design" emphasizes the secondary design of existing things, rather than creates process from scratch. In the field of fashion design should be in line with the times to create the pulse clothing works of art, not simply recycling used clothes and to make recycling secondary innovation. It is somewhere between "transform" and "improved" design and more outstanding is the art design, applicability, sustainability and originality. It can solve some old items nowhere to put the environmental burden and make them realize effective recycling.

Embodied in the "secondary design" is a way and philosophy of life and the sublimation of product design. As new technologies, new processes, new ideas constantly emerging and wasting products will face more opportunities and challenges."Secondary design" concept into the old brand is in the field of clothing brands Junky Styling get up to the-minute of London in 1997.Designers through the redesign of used clothes, cutting assembly, so as to create high quality clothing, is a model of deconstruction used clothes. It even launched a "wardrobe surgery" practical service, dedicated to provide customers with design and renovation of used clothes, satisfied with customer demand. Founded in our country, emerging designers Na Zhang in "contact with design in the past and the future" for the purpose of "reconstructing BANK" to the success of used clothes for the secondary design and sales. She comes from used clothes buy to return to the market, the entire cycle do used clothes designer. In the process, it need stylist rich imagination and unique creative thinking and skilled operation techniques.

III. SECONDARY CLOTHING DESIGN METHOD

Clothing is composed of fabrics, style and color, the three major elements. In the design of the fabric, styling options and color between the three main factors are closely linked and influence each other. In used clothes of secondary design, it also follows the relationship between the three elements. In the three main factors for clues, it introduces the redesign of used clothes to the among them and constitutes a second clothing design method.

A. Fabric Second Design

Fabrics of creativity is an indispensable element in fashion design. Before on fabrics, designer should pay attention to visual texture rich, using the restructuring, decomposition and redesign to make unusual texture and clothing from the details to improve, clothing material of reengineering and restructure once again become a fashion design practice.

Between material and material of used clothes and the combination between a variety of materials, fabric second design is on the basis of the original material using various methods and the existing material in the form of texture is compared to the original materials have taken place in the larger and even have a qualitative change, from the surface of widened the scope of use and performance of clothing material method, material reconstruction methods varied, to reflect the designer's creative ability.

1) Addition principle

Addition principle in the three-dimensional cutting, using the common, main show is added, or through a modified showed a strong sense of volume, or a feeling of quantity, use the addition principle greatly strengthen the expressive force and render the clothing model, make clothing language and become more rich, more infectious, additive principle concrete manifestation, method of ruching, embroidered compose method, twine, embroidery, spelling a legitimate knotting, fabrics, all kinds of hand sewing, printing and dyeing, hand-painted design technique, etc.

a) Ruching method: Decoration and decorative stitch embroidery sewing dragging folds formed certain forms of embroidery techniques.

b) Embroidered compose method: In a variety of beads, bead piece, the ornamental such as by hand and machine stitched or table format or cloth surface change fabric texture state reconstruction method.

c) Twine method: Fabric folded or cut into cloth wrapped or rope, then through the means such as knitting, the formation of new fabrics or direct reconstruction method.

d) Embroidery: Including mesh embroidery and embroidery and embroidery is our most familiar with, the most representative of a kind of embroidery method. The stitch is more than 300, in a needle and thread through the formation of dot, line, surface, also can add one core and form a pattern of more stereo feeling. Mesh embroidery is according to cross weave gives the design rules of embroidery method in the mesh cloth.

e) Tied the rope: Use all kinds of different materials, the thickness of the rope, through a variety of firm to meet the design requirements.

f) Fabrics spell legal: By splicing technique, restructuring will all kinds of fabrics, because different material different shading, result in different artistic effect.

g) Printing and dyeing: Plate-making printing on thin fabric, the designer's creation intention directly printed on

the fabric surface, has a unique artistic effect, which is suitable for the manual printing, a small amount of fashion flexible easy operation.

h) Hand-painted: Using tools such as brush, brush dip dye or acrylic paint draw according to design intent, also using isolation rubber seal line first, after isolation glue dry, using the dye color areas in the picture, color can be deep to shallow, have strong weak, very distinctive. Hand-painted is usually on the garment.

In addition in the design of old garment fabrics, garments use the largest space. Style simple or outdated jeans can be free play. Whether studs, bead piece and the combination of irregular embroider line, or cloth pastes, should pay attention to the point on the surface of the line change rule. Tight old t-shirts can do it in the chest or neckline nail bead and yarn the superposition of the flower.

2) Subtraction principle

Subtraction principle is the use of means: hollow-out method and the method, the fabric shearing method, hole, tear and wear, corrosion, etc...

a) Hollow out method: Use scissors to cut out on the fabric several hole are needed to meet the needs of the design.

b) To tear: Tear is the way by hand to make material skin texture effect at will.

c) Drawnwork: Is based on design drawings, the base cloth of warp or weft discretionary smoke, take out fabric warp/weft according to certain format, form a some penetrated formats, the foil at the bottom of a different color cloth and then try to piece together, form a void, decorative pattern, can produce unexpected color effect.

d) Burn it: Is the use of cigarette butts on the garment made of different size, shape, hole, leave brown burn marks around the hole. In the fabric processing, above the various techniques can be used to regenerate both with strong personal emotion connotation and unique characteristics of the aesthetic feeling and materials. The clothes made of these fabrics clothing more personality and spirit.

e) Wear: Use water to wash, sand washing, sand paper to grind hair, let the fabric mill the old style, more in line with the design of the theme and artistic conception.

f) Corrosion: Use chemical corrosion and damage, the corrosion performance of the fabric part to design processing.

In type design for used clothes, whether drawnwork and shear folding processing, fade with positive and negative, are better reflect clothing "broken and the characteristics of incomplete". Typing an old T-shirt subtraction method use is numerous, on the back of the chest or cutting out some laws of stripe or pattern, filling again inside lining lace or color cloth, which will immediately show different personality. Loosing male T-shirt can change the style and cutting off sleeves with gauze can be converted into female vest or short skirt;

All above are some of the special craft technique through the fabric to make our fabrics from the color, texture and pattern had been extremely rich visual perception, but the fabric of the secondary design conception is by no means a simple means of using the technology, more important is to use the modern design concept and design intent to deepen the idea of the topic. If fabric design is an important part of secondary clothing design. As a result of the change of clothing fabric on the dress back to the different soul, at the same time also is unique in the clothing design language. These fabrics language not only brought on to a design inspiration, but also to the secondary design gives the newness. For recycling design and renovation of used clothes fabrics, not only reduce the fabric cost, but also save the resource waste of social environment, which is the innovation of design.

B. Modeling of the Structure of the Quadratic Design

In the three main factors of clothing, the modeling is also one of the most important elements of structure and the redesign of its clothing modeling structure has been more flexible, but difficult to make a new idea. Most of the design is to transform to stay on the size of clothing. For deeper design need more professional fashion design team to complete.

Modeling of the structure of the two design can make the old garment style more various and personalized. Fashion and aesthetic is one of the important factors promote modeling structure changes. It requires the original material performance and the overall style of used clothes. The second design of used clothing modeling structure mainly achieve through the use of the original structure and two methods.

1) The borrow the design of used clothing modeling structure

Modeling structure refers to the borrowing of used clothes to keep the original almost the same clothing shape profile type, do simple cutting sewing and make clothing more after reforming to adapt to the changes in trend. Such as changing the length of the jeans, size and fat, according to popular change or design change local sleeve type or pants. Even in the original shape structure based on local adomment changes.

2) The secondary design of used clothing modeling structure

Of used clothing modeling of the structure of the secondary to the original shape structure design is to put the used clothes break, deconstruction and reorganization, splicing, or add new structure line shape outline the obvious changes, giving new style clothing. Such as structure, it can be broken by way of the stereo modeling of used clothes to design, manufacture, to endow them with new design life.

C. Color of Secondary Design

Color of the secondary design is also one of the highlights of reforming the used clothes. The first impression is color, when people buying clothing garments generally will be eclipsed by the color of the fabric, so through the way

of secondary design and processing, can make the used clothes to a glorious. Secondary design of used clothes in the inherent grasp used clothes style, color, fabric on the basis of paying attention to the color collocation and color fusion coordination. Its colors can be designed by printing, dyeing, hand-painted, graffiti, painted lacquer, embroidery, stitching and finishing technology means such as expression comes out. In recent years to show the features of traditional culture for the embroidery and embodiment of modern science and technology level of printing not only become the latest must-haves in the burgeoning fashion show, but also be popular with consumers and to be their choice. Other such as design of hand-painted, tie-dye, splash-ink, collage, imitation technique such as rust, hollow out, widen the old garment color and decoration design space, an increase in its composition, colorful color effects at the same time has the characteristics of the new era.

IV. SECONDARY DESIGN IN USED CLOTHES RECYCLING VALUE

In the design of secondary clothing to have recycling used clothes design is the embodiment of the conservation and environmental protection, can be recycled and design way which safeguard used clothes back into reuse. After the secondary design of used clothes can be turned into a completely different clothes and other household textiles and back into the life of people, which is accord with environmental protection requirements of form. Usually a successful garment is through the iterative design improvements and contains the ideas of the designer, so we have vitality. The clothing design and updating creation again, is the value of a garment. Along with the gradual adjustment of industrial structure around the world and the deepening of people to understand the objective resources, at present, the world is set off a wave of "green". Consumption, or design is given priority to with environmental protection and energy saving. Clothes recycling and recovery after the secondary design is imperative, because secondary clothing design can indirectly reduce the survival of our ecological environment carrying capacity and gives the soul of "green" clothing.

Under the concept of green environmental protection, the remolding used clothing is becoming more and more popular. Now more and more designers like "into", they had already change used clothes into the fashion clothes and continue to give used clothes in this way the soul and vitality. Inventory has been the textile industry one of the great cycle, many enterprises inventory not moderate all the year round, so badly hinders the benign operation of the industrial chain, clothing secondary design can reduce enterprise inventory pressure, optimization of the industrial chain of the enterprise, bring an unprecedented liberation. Brand implant clothing secondary design optimization is proposed on the idea from the innovation of thinking of the feasibility of the method of enterprise culture, at the same time improve the consumer recognition of brands, to meet consumer demand for different emotions, the secondary design concept and method combining the brand terminal services, more abundant culture.

V. CONCLUSION

There is a vast number of used clothes, resulting in serious waste and environmental pollution. Used clothes take low performance, design out of date, appearance performance affected by incomplete, wearing releasing form-fitting, existing imperfections in the process and so on, the reasons of that are reminder of the fashion life and needs to more healthy green production mode. At the same time, the used clothes of secondary design has been active in advocating personality, part of the designer and consumer health, environmental protection way of life in the crowd and in a more positive way and pressing speed affects the choice of modern people and consumption. Used clothes of secondary design not only can reduce the environmental pollution caused by these scrap clothing, but also effectively play the used clothes of surplus value and fully exert its inner beauty. It fit the life concept of the low carbon, environmental protection, green, even catered to the younger generation of fashion personality and creative fashion needs.

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