

Research on the Application of Fiber Art in Clothing Design

Xu Dongliang

Macau University of Science and Technology

Macau, China

Beijing Normal University Zhuhai

Zhuhai, Guangdong, China

Abstract—In order to study creative design of fiber art clothing, this paper expounds the basic concept and research status of fiber art at home and abroad, combines fiber art, clothing design techniques, fiber materials and clothing design method, and combines with design case study, finally analyzes that the fiber art and clothing design has potential value including art value, economic value and cultural value.

Keywords—Clothing; Baize; Fabric; Ideas; Design

I. INTRODUCTION

In recent years, with the deepening of the cross-border thinking, fiber art is no longer just limited to clothing, the combination of traditional dyeing, weaving, and other areas of the traditional fiber art and three-dimensional sculpture, fiber art and industrial design, fiber art and architectural design, art and interior design, fiber art and the digital media design, fiber art and the fusion of materials science and technology innovation as the fiber art added new connotation and creative. This article study design methods from the fiber art and clothing design combination, study combining with the design case through the fiber art and clothing design techniques, fiber materials and clothing design method two aspects, so as to achieve perfect of art and design, to improve the fabric of artistic creation, enrich the connotation of clothing design [1].

II. OVERVIEW OF FIBER ART THEORY

A. Fiber art concept

In the 20th century, especially after world war II, the concept and language forms of fiber art has undergone change in the diversified development. Since the 1940s, a group of artists, including surrealist painter and tapestry artist Jean Luce, have advocated wall hanging art again, in effort to preserve and revitalize art form that was once a treasure of the world and was nearly extinct in Europe. Since the 1960s, fiber art studio has been established in the United States, Britain, Japan and other countries, officially declaring that it has found its place in contemporary art and art design. Some artists create studios that offer innovative, unique, three-dimensional, anti-traditional creative styles. Particular in 1962, the international fiber art biennial of Lausanne in Switzerland was founded by Jean-Michel Luce, which strongly promoted the development of modern fiber art. Japanese fiber art flourished in the 1970s. By the end of the 20th century, Japanese fiber artists had formed their own national styles, combining traditional Oriental culture with naturalism. FIBER ART JAPAN and the trans-

lation book of JAPANESE HANDICRAFT introduce the innovative development of fiber art and traditional handicraft in the form of a large number of pictures [2].

B. Research status of fiber art

Although domestic academic research on fiber art has been carried out, it is still at the stage of exploration. The origin of modern fiber art in China can be traced back to 1981. American artist Ru XinGao led a dozen students majoring in fiber art came to China to explore ancient Chinese handicrafts. Since fiber art gradually formed and developed in our country, gradually professor Lin LeCheng from Tsinghua university academy opened weaving hanging design classes and set up the fiber art studio in 2000, in the same year, under professor Lin's plan, he successfully held the first "from Lausanne to Beijing" international fiber art biennale, the exhibition has become an international fiber art communication platform, promote the development of fiber art in our country and the international fiber art communication. In 2015, Beijing institute of fashion technology added fiber and fashion design major to its undergraduate teaching system [3]. At the same time, different regions of the country have held fiber art exhibitions with local characteristics.

In the academic research field, professor Chen Jian from Tongji university revealed the unique affinity and symbolic style of the fiber art and the relationship between the inner skin of the building and human life by studying the fiber art in the architectural space. Professor Li Yanzu from Tsinghua university broke with the traditional fiber art form and studied the new form of modern fiber art. Chen ling of Tsinghua university studied the necessity of fiber art inheritance and development from the perspective of cultural inheritance. Professor Lv Pintian, Liu Jude, Li Dangqi and other professors from the Chinese academy of art and Tsinghua university discussed the cross-border and integrated development of fiber art. Xu Wen of Beijing institute of fashion studies the fiber art in miao costume language. Ren Guanghui of fiber art committee of Chinese academy of arts and crafts studied fiber art in interior design. Ren Jie from the Chinese academy of fine arts studies the fibrous art in the context of traditional and contemporary art from the perspective of design order and cultural meaning. Zheng Yun from Beijing forestry university analyzed the forms, modes and derivative features of cross-border cooperation between contemporary art and fashion through cross-border cases, and analyzed the problems of media and cultural ideology in cross-border cooperation. Dawei from the Chinese

academy of fine arts studied contemporary fiber art from the perspective of non-euclidean geometry. Ma Li of Liaoning normal university enriched the connotation of embroidery and fiber art by discussing the application of traditional Chinese embroidery technology in fiber art. Wang Manman from Tongji university integrated art and interior design by studying the application of fiber art in interior design. Qiu Meiling of south China university of technology has studied fiber language in fiber art [4].

Found are summarized based on literature, experts and scholars study from different angles of fiber art application , and be able to cross and integration of subject, They can be able to further study of fiber art and interior design, architectural design, cultural inheritance, fiber art language and form, which has brought the certain reference value of multicultural fusion innovation and development of fiber art However, there are not many articles devoted to the application of fiber art in clothing design. Based on the research of these experts and scholars, this paper draws on their theoretical research results and methods, combines the latest development form and connotation of fiber art, tries to combine fiber art with clothing fabric design, and explores the cross-border integration of fiber art and clothing design.

III. THE PERFORMANCE AND DESIGN CASES OF FIBER ART IN CLOTHING DESIGN

A. Fiber art and fashion design techniques

The application of fiber art in clothing design is mainly reflected in the aspect of fabric design. The design of clothing fabrics, especially the re-design of clothing fabrics, is just like the fiber art. With the help of existing fabrics or original fiber materials, remodeling and design of fabrics visual, color, space and texture images with certain technical means, so as to enrich the internal expression and external form of clothing design. In this paper, according to the artistic characteristics of fiber materials and the expression techniques of costume design, the techniques can be divided into two methods: addition design and subtraction design.

1) Addition design

Additive design mainly refers to the creative expression of embroidery, stitching and painting on fabrics. Common design techniques include quilting, wool felt, weaving, embroidery, stitching, dyeing and weaving, etc., which are designed by means of creative expression of techniques combined with artistic creation. Figure 1 was inspired by Chagall's 1915 painting "The Birthday", the picture express sweet love stories. The design of this work first extracted the characters in the original painting and the shapes of flower bouquets, and then used appropriate pattern design to paint acrylic on cloth surface. Figure 2 is inspired by a painting by artist Nicky Samphal. The people in the middle are divided into day and night. The free dream interweaves with reality, emphasizing the fantastic imagination. The work use chromatic cotton thread to sew and become single-ply, still use bull-puncher to spell cloth craft, quilting craft, stick cloth embroider craft, integral color is unified, abstract combine with child interest .



Fig. 1 Acrylic hand-painted fabrics

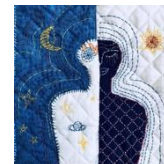


Fig. 2 Fabric sample design

2) Subtraction design

Subtraction design mainly refers to the creative expression through hollowing out, cutting and corrosion reduction on fabrics. Common design techniques include laser cutting, hollowing out, corrosion, spinning, etc., through subtraction design to directly or indirectly express the visual effect of fabrics. As shown in figure 3, the main innovation of the design work lies in the design of fabrics, which mainly adopts the combination of denim yarn, knitting and denim. The inspiration comes from the common sayings that most young people have now, namely insomnia symptoms and unhealthy lifestyle of upside down night and day. The clothing work use the concept and characteristics of deconstruction to carry out the creative clothing. The fabric design of washed denim fabric and woolen fabric are designed through the whole series. Wash denim, draw out the denim warp and weft threads for different colors and different textures[5]. The theme is expressed through the recombination of wool woven pieces of different wool patterns, the fabric design of jeans, the perspective of black mesh deformation, and the texture and form of fabric yarn.



Fig. 3 Fiber material garment finished product effect

B. Fiber material and fashion design

Clothing fabric design can be divided into wearable materials and non-wearable materials. In the category of fiber art, fibrous materials include not only traditional wearable fiber materials such as cotton, wool, wool thread and bamboo strips, but also new materials such as dupont paper, PVC and 3D printing materials. As shown in fig.4, the design work is inspired by the wall hanging art of traditional fiber art. It adopts the traditional wool material combined with the manual weaving method and different colors to design the fabric samples of spring, summer, autumn and winter seasons, combining the ancient wall hanging technology with modern aesthetics.



Fig. 4 Sample knitted fabrics

Dupont paper is also known as "paper fabric". It has the characteristics of paper being easy to wrinkle and fold. As shown in fig.5, the work is mainly to convey the "unconventional" design thinking, so the punk style with a strong sense of rebellion combined with the "impossible" surrealism made a series of imaginative design, in the design also used a variety of complex elements and craft. The pearl element incarnates the role of "rebellion" in the design, not only as a decoration, but also combined with surrealist patterns and structures. In this work, origami technology and elements are mainly combined with surrealism to form three-dimensional pattern design and structure design. From Escher's prints, he drew a lot of concepts related to surrealism, which were transformed into inspiration for costume pattern design and structural design. Asymmetric structural design can better reflect the "rebellious" design thinking, and convey an attitude that is not willing to follow the rules and regulations. This series of each design point of each cell are reflected in the "rebellion" as shown in figure, just won't meaning to design in the conventional way, hoping to bring the audience some inspiration on the ways of thinking, the world's established rules are worked out, but the rules are dead, people are living, bravely over these obstacles, break the rules, believe that the "rules" will have more freedom world waiting for you.

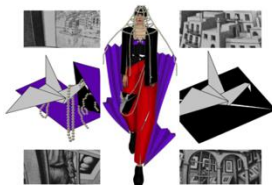


Fig. 5 Dupont paper clothing design

The combination of traditional fiber materials and modern clothing design reflects both tradition and modernity as well as art and design. As shown in fig.6, the design work is mainly inspired by the traditional rattan weaving technology. The main fabric is a thick mercerized cotton thread with sapphire-blue and white multi-strand wool. The rattan weaving material use Indonesian rattan as the main weaving material, the thicker Indonesian rattan as the supporting material, and the thickest rattan stem as the buckle material. In terms of rattan weave pattern and style design, this clothing design combines the geometry and three-dimensional sense of modern buildings to realize the combination of tradition and modernity. At the same time, it is hoped that traditional handwork can integrate into the era of rapid development and inject a new strength

into the mechanized urban life. Starting from traditional handicraft, clothing combines traditional rattan weaving skills with manual knitting, art and technology, selects natural fiber and unconventional fabric rattan weaving materials as raw materials, combines with knitting wool, and realizes the harmony and unity between human and nature.

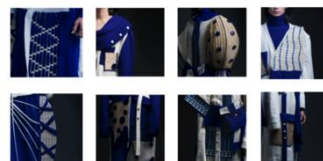


Fig. 6 Plant fiber material is combined with clothing design

IV. POTENTIAL VALUE OF CLOTHING DESIGN UNDER FIBER ART

A. Artistic value

Fiber art itself belongs to an ancient textile art category, and has been greatly developed in both material and method, plane form and three-dimensional form. It is widely used in art exhibition, interior decoration, cultural theater, window display and other aspects. These applications are more conceptual art presentation forms. The application of fiber art forms in costume design can perfectly interpret art and design, have more artistic value in the form and content of costume design.

B. Economic value

Compared with other art categories, the threshold of fiber art is lower, but it puts forward higher requirements for the expression of materials, techniques and concepts. Lin Lecheng, a professor in Tsinghua university, said that fiber art needs to break away from its boundaries and limitations to move forward, as well as need integration of different disciplines and categories. So fiber art cross - border fashion design is an inevitable trend. The creative mode ,concept of fiber art and the thinking method of design are integrated into practical products [6]. The artistic side of fiber art is reflected by design elements, which increases the visual taste and value of clothing products.

C. Cultural value

Fiber art originated from the ancient European tapestry art, in today's cultural integration, different countries' culture and design methods have penetrated into all aspects of design, the combination of Chinese and western culture makes the content of fiber art more beautiful culture. Through the application of fiber art in clothing, it has a good reference of cultural value for clothing design, it also has great significance for improving the cultural connotation, visual elements and plastic arts of clothing design [7].

V. CONCLUSION

This paper mainly studies the combination of fiber art and clothing design, with fabrics as the carrier, through the different material characteristics, technique innovation, integration is to study the potential of artistic value, economic value, cultural value, and thus will better combine fiber art and fashion design so as to innovation and development, combining traditional process with modern fashion, combining art and technology, deepen the cultural connotation of clothing design and potential value.

ACKNOWLEDGMENT

Quality project of Guangdong province "School-school collaborative international education model and mechanism innovation pilot area" (NO.2014307);

Quality project of Beijing Normal University Zhuhai "Specialty training of applied talents in Fashion and Accessories Design" (NO.201540);

Project of Beijing Normal University Zhuhai "Teacher research capacity promotion program"(NO.201850008);

Quality project of Beijing Normal University Zhuhai "College of design -- Qiandongnan sun drum miao dong clothing museum clothing and accessories design professional practice teaching base"(NO.201807).

REFERENCES

- [1] Chen Ling. Creative DIY: fiber art design. Tsinghua university press,2013,pp2.
- [2] Chen Ling. Fiber art design and production . China light industry press. January ,2015,pp5.
- [3] Li Yanzu. New visual form of weaving -- modern fiber art. Literature and art research,1993,pp3.
- [4] Lin Lecheng. The beauty of the application of fiber art. Architecture and culture,2015,pp4.
- [5] Chi Ren. From design order to cultural meaning: fiber art in the context of traditional and contemporary art. Doctoral dissertation of the Chinese academy of fine arts,2014,pp12.
- [6] Lv Pintian, Liu Jude, Li Dangqi, Ni Yuehong, Lin Lecheng, Liu Jingyan. Taking part in the fun -- a dialogue on fiber art. Chinese art,2012,pp5.
- [7] JIANG S. Q.,E. NEWTON,C. W. M. YUEN,C. W. KAN. The Textile Design Using Chemical Silver Plating on Cotton and Polyester Fabrics. Research Journal of Textile and Apparel,2004.