Retraction

Retraction: Research on the Application of Modern Dyeing and Weaving Art from Pattern Design to Dyeing Art based on Computer Technology in Mobile Environment (J. Phys.: Conf. Ser. 1915 042083)

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The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Research on the Application of Modern Dyeing and Weaving Art from Pattern Design to Dyeing Art based on Computer Technology in Mobile Environment

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Abstract. With the rapid development of Chinese society and economy, the position of traditional dyeing and weaving technology in textile art has been improved. Modern painting art is one of the manifestations of economic and cultural development in modern society, and it is also a new source of inspiration for modern textile pattern design. The integration of mobile Internet and mobile terminals in modern society has subverted the social structure, and a pluralistic, open and infinite society has brought opportunities and challenges to everyone and every industry. The intelligence and convenience of mobile digital media make it integrate into people's lives and change the way of life of the masses. In order to ensure that people can provide better visual effects and experience, the use of modern painting art can effectively enhance the connotation and value of dyeing and weaving pattern design. In order to get further development of traditional dyeing and weaving technology, we must maintain the national style while improving and innovating its dyeing process. With the progress of modern science and technology, the combination of art and technology is more important.

Keywords: Dyeing and Weaving Process, Mobile Internet, Dyeing

1. Introduction

The rapid development of society has greatly promoted the development and reform of painting art, especially in the current situation of information diversification and globalization, people should take effective measures to comprehensively improve the design effect and overall value of display patterns [1]. Under the background of the rapid development of China's social economy, the status of traditional dyeing and weaving technology in textile art has been improved. At present, the tie dyeing
and printing technology design needs to be reformed and innovated in terms of pattern design, dyeing and weaving technology and the appearance of fabric quality, so as to expand the scope of application, which can be applied to clothing, local cutting and other decorative parts, and can also be used in matching with decorative fabrics [2]. Dyeing and weaving pattern design plays an important role in modern clothing and home textiles. With the continuous development of modern cultural consciousness and social economy, traditional dyeing and weaving patterns have been unable to meet the aesthetic consciousness and spiritual pursuit of modern people, and many new forms and contents have emerged one after another [3]. Modern painting art has become an important source of inspiration for the design and creation of dyeing and weaving patterns. Drawing lessons from the form elements of modern painting art will become one of the important factors that will affect the innovation of dyeing and weaving pattern design in the future [4]. In order to further develop the traditional dyeing and weaving process, we must improve and innovate the dyeing process while maintaining the national style.

With the continuous improvement of people's aesthetic taste and living standards, people's requirements for the beauty and value of dyeing and weaving pattern design are also constantly improving. In modern society, the integration of mobile Internet and mobile terminals has subverted the social pattern, and a pluralistic, open and unlimited society has brought opportunities and challenges to everyone and every industry [5]. The dyeing and weaving pattern itself has a strong impact on visual effect. After ingenious arrangement and effective integration, different design styles can be formed. In the actual household textile design and clothing design, the application and design of dyeing and weaving pattern is an indispensable part [6]. The intelligence and convenience of mobile digital media make it integrate into people's life and change the life style of the public. Through it, the public can consume, socialize, read and obtain information anytime and anywhere, making the flow of ideas and information between people instant and efficient [7]. Modern painting art is one of the manifestations of modern social economic and cultural development, and a new source of inspiration for modern textile pattern design [8]. In order to further develop the traditional dyeing and weaving process, we must improve and innovate the dyeing process while maintaining the national style. With the progress of modern science and technology, the combination of art and technology is more important.

2. Types and methods of traditional dyeing process

2.1. Tie-dye

Tie-dyeing started in Qin and Han Dynasties, flourished in Wei, Jin and Southern and Northern Dynasties, and prevailed in Tang Dynasty. Tie-dyeing is an ancient anti-dyeing printing process in China. Tie-dyeing consists of two steps: tie-dyeing and dip-dyeing. Flower-tying is a manual flower-tying method combining sewing and tying, but sewing is the main method, and its flower-tying technique is characterized by delicate sewing and endless changes. Immersion dyeing is a manual repeated dyeing process, centering on the flower pattern, so as to realize the endless multi-level halo pattern of flowers. Under the halo pattern, tie-dyeing process is more simple and elegant. If the circle required by the design is white, the part that can be hooked is tied down with a string at the top, and the bottom of the cloth cannot be missed. The size of the area depends on how much it is tied [9]. The tie-dyeing process of Dali Bai nationality is made by tying, folding and stitching textile fabrics with
ropes according to the pre-designed patterns, fixing them firmly and forming them, and then dyeing them repeatedly with plant dyes. When dyeing is finished, the tying thread on the fabric is removed, because the tying thread part is not dyed with color, but is matched with the dyeing base, thus forming the unique color halo and white flower effect of tying dyeing. After it is fixed and fastened to form, it is dyed repeatedly with plant dyes. After finishing dyeing, the tying thread on the fabric is removed. Although the tying thread is not dyed, it is in contrast with the dyeing base, thus forming the unique color halo and white flower effect of tying dyeing. The tie-dyeing of Bai nationality in Dali is mainly made of pure cotton cloth and hemp yarn. Besides traditional indigo dyeing with white flowers on blue background, colorful tie-dyeing varieties have also been developed, including door curtains, hats, scarves, bed sheets and so on.

Pigments and final dyes are infiltrated and mixed by various artistic techniques, such as needle insertion and winding. Tie-dye art shows the perfect fit between dots and lines, and then transforms the color, texture, nature and shape of artwork into unique tie-dye artistic charm. For example, Figure 1 shows the characteristics of different textures dyed using traditional tie-dyeing techniques.

Figure 1. Traditional tie-dye art dyes the different texture characteristics of the canvas

For both traditional art and modern art works, their first language comes from materials. By analyzing the characteristics of materials, artists change their external expressions, give new forms and contents, and give new visual effects. Good artistic expression can build a bridge of communication between people, people and the environment, which is the primary reason why tie-dyed artworks combined with fiber art are displayed in the environment in decorative form. Fiber works of different materials, through manual free processing, reflect the changeable visual expression of beauty, that is, the texture of artistic works. It is this visual expression that casts the unique artistry of modern fiber art. When creating, art creators should feel the change of color and luster, perceive the attributes of materials, grasp the performance of plot, and integrate their own thoughts, personalities and works. In order to perfectly combine the traditional tie-dyeing art with the characteristics of modern fashion clothes, it is necessary for technical creators to combine traditional tie-dyeing techniques with modern techniques by improving tie-dyeing techniques. In the process of combining tie-dyeing technique with modern fiber design, it is necessary not only to carry out simple grafting and stiff patchwork, but also to adopt multiple combinations to continuously promote the application of various molding techniques and promote the development of existing fiber design art. Fiber is the basic raw material and component of clothing, and its type, form, performance and quality are directly reflected in the fabric, accessories, style, quality and price of clothing. Figure 2 shows the application of traditional dyeing process and textile materials in fashion design.
Figure 2. Application of traditional tie-dyeing art combined with fiber materials in fashion design

At present, in the process of dyeing and weaving pattern design, designers often analyze and study the colors of modern paintings, and then incorporate the representative and special elements into the dyeing and weaving pattern works. The tie-dyed fabric requires rich color and strong color contrast. Such as white and blue, white and red, and so on. Tie-dyed fabric can be dyed in single color, or it can be dyed on a single fabric for many times to produce the color complementary relationship of hue interaction, which makes the visual effect rich and colorful.

2.2. Batik

Batik is popular among ethnic minorities in Southwest China, especially in Guizhou. Wax dyeing begins with painting the pattern on the dyed fabric with a wax knife dipped in waxing solution, and then putting it into a dye vat for dip dyeing, where there is wax, the color can not be dyed. After dyeing, the wax is washed clean, and white flowers are displayed because the wax seal is not colored. After being dipped again, the ice grain, like a human fingerprint, shows a fresh and natural aesthetic feeling. Batik is rich in patterns, elegant in color and unique in style, so it is simple, generous and rich in national characteristics, and is mostly used to make clothing decoration and practical products for life. In the dyeing process, natural ice streaks will appear in wax cracking, which is the main reason for the popularity of wax-dyed natural ice streaks. After re-dyeing, the ice grain shows the natural beauty like human fingerprint.

Figure 3. Batik ice pattern
Batik is rich in patterns, elegant in color and unique in style, so it is simple, generous and rich in national characteristics, and is mostly used to make clothing decoration and practical products for life. Art works should not only convey a certain emotion to the appreciator, but also embody the inner emotional world of the creator or artist by means of artistic painting. Handmade printing and dyeing in most areas of China has been gradually eliminated, but among Yunnan-Guizhou ethnic minorities located in remote mountainous areas, batik technology has not only been preserved, but also the artistic level has been greatly developed and improved [10]. Only by ensuring that the external factors and internal factors remain relatively unified, can the audience's emotional resonance be better aroused, and then the appreciation value and aesthetic taste of the works can be maximized.

3. Dyeing and weaving technology inheritance based on pattern design in mobile environment

3.1. Condition support of traditional dyeing and weaving process

In traditional dyeing and weaving process, natural dyes are mainly used. From the dyeing point of view, natural dyes are usually extracted from animals and plants in application, so the production is not large. If we want to increase the production of natural dyes, it will have a certain impact on people's living ecological environment. Compared with stone dyes and animal dyes, vegetable dyes not only have many kinds of dyes, but also have the most complicated dyeing process. Because both stone dyeing and animal dyes directly dye textiles, and plant dyes have indigo reduction dyeing besides direct dyeing. The reason why the traditional dyeing and weaving process is deeply loved by people is precisely because the patterns with auspicious meanings give vitality to the traditional printing and dyeing culture [11]. The fabric pattern designed by impressionist painting style can better reflect the magic charm of color. Visually, it gives people a contrast with reality, leaving a strong artistic effect in the audience's mind. The mode of communication has changed from passive strength of traditional media to active sensibility of mobile digital media, and from limited amount of information to unlimited information space. Such changes will inevitably make new content demands for information dissemination in mobile digital media.

In the aspect of traditional dyeing and weaving technology, all parts of China have initiated the protection and inheritance of local characteristic textile dyeing and weaving technology, and textile and garment design schools in all parts of China have also set up courses on traditional dyeing and weaving technology, which has been vigorously publicized. In the process of mobile digital media communication, the decision makers of information priority level have changed. Visual information is no longer divided according to the judgment of information publishers, but the audience participates in the process of independent selection, attention and dissemination of massive information, and gradually becomes the information selector and information sharer, forming a two-way interactive dissemination mode. In the traditional process of information dissemination, the audience is in a state of passive acceptance. Both paper media and TV media are one-way communication forms centered on information publishers.

3.2. Rational development of new technology and products of traditional dyeing and weaving

People can effectively add the optimized application of symbolism after fully considering the dyed patterns, design themes and design requirements. The biggest feature of traditional dyeing and weaving technology is that it has strong practicability and can keep up with the development of the
times. We should not only understand the application of auspicious meaning patterns in traditional culture, but also keep the unique skills in traditional dyeing and weaving technology and give full play to its leading role in weaving and dyeing culture. Mobile Internet is not a simple superposition of mobile communication and Internet, but the combination of the two is more similar to multiplication. The mobile Internet makes full use of the wireless communication function and the powerful advantages of the Internet, so that the "screen" surface can realize unlimited mobile communication anytime, anywhere, forming an interactive, timely, open and shared communication ring [12]. With the continuous improvement of living standards, more and more people love luxury textiles and decorative clothing. Therefore, in the design of dyeing and weaving patterns, designers can add a large number of beads and silk threads with gold and silver as the main colors. With the wide application of computer technology and automation technology in textile field, textile patterns generated by fractal art can be directly reproduced on textile fabrics. Because fractal pattern belongs to digital figure, it can also be processed by texture software.

4. Conclusion

The diversity and extensiveness of textile art not only enriches the treasure house of Chinese textile art, but also inherits and develops the traditional dyeing process to a certain extent, making traditional dyed fabrics gradually enter the palace of art. With the rapid development of information technology, people can get more information quickly and effectively, but at the same time, people will be influenced by more and more different ideological trends and cultures. From the perspective of the development of modern art, the ideological trend of modernist painting started from the Impressionist period. Artists constantly explore and pursue new art forms, hoping to jump out of the established mode, break through the traditional art concept of time and space, and give full play to artists' imagination. Modern dyed patterns have permeated people's lives as a cultural phenomenon, which is a comprehensive reflection of art and technology. It shows modern cultural consciousness and artistic trend through clothing, household textiles and other carriers, and reflects people's aesthetic taste and fashion style. Designers need to fully grasp the traditional Chinese painting techniques and modern painting art, and effectively add modern elements with diversity and innovation to the design of dyeing and weaving patterns.

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