

The Influence of Modern Digital Design on Traditional Tie-Dye

Yanli Hu

Jiangxi garment college, School of management, Nanchang, Jiangxi

190878023@qq.com

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Abstract. Traditional dyeing technology with modern elements borrowed from computer digital design. The use of modern computer technology to develop innovation in the traditional art of tie-dye, and enriched the artistic charm. With the development of science and technology, a variety of new computer software applications will influence traditional technology. Design arts and other types of lively and new technology will combine to create new innovation. Digital tie-dye art represents a new development of this kind of computer technology. Although, it is different from the traditional production techniques. The creators can achieve design material from the traditional paper drawings to digital art. For the visual aesthetic, the painting ability, and the imagination of a powerful and unconstrained style; the use of digital techniques can create a wide range of designs, giving people an unprecedented new visual feast.

Introduction

Traditional dyeing technology has developed throughout time. The process continues to learn from excellent cultural art and the science and technology of civilization. Break-through of the original single pattern and stylized manual performance techniques have combined modern and emerging technologies. Human creativity has diversified aesthetic art, the change of the dyeing technology, design, and creation. With the implementation of the "digital dyeing art" the value of the concept of modern tie-dyeing pattern becomes more interesting. So we believe that modern dyeing is the type with the spirit of the times and popular elements. Dyeing and finishing technology has a rich artistic expression.

The Characteristics of Digital Patterns

In recent years, the textile digital printing technology has great development potential. It has been favored by the design companies and factories. Number is a bridge to connect images, clothing and people's lives. Digital printing technology is a new design concept. It provides protection for textile design and provides new technical guidance. As well it has the expression of modern design better in the pattern precision in the printing dyeing process in conceptual design. At present, the main contents of the computer digital printing technology are digital transfer printing and digital inkjet printing processes. The production includes these two kinds of methods. But often the digital printing technology refers to the digital ink-jet printing technology. Digital printing technology is through a variety of digital tools, such as scanning, digital photographs, images, or computer processing with the production of a variety of digital graphics input to the computer. The design personnel use the computer aided design technology. Then the computer software of color printing color after the use of the system, By the dedicated RIP (raster image processor) through the inkjet printing system software will be a variety of special dyes (such as active, dispersed), The design pattern is then directly printed on the desired performance of the various fabrics or other products on the process, In the end, after processing all kinds of high quality printing products need to be formed the different types of textile fabrics. (As shown in Fig. 1, Fig. 2)



Figure 1. Dye patterns



Figure 2. Digital pattern design

Digital Software Design and Dyeing

The traditional tie-dye, farm blue cloth, these traditional folk batik dyeing method, Get a new idea after today's encounter with digital software. That change is different from that of traditional dyeing process. It can be used in any textile material with modern technology and the technology of the GAOKE technology and a variety of special techniques. The aesthetic characteristics of traditional crafts reflect the aesthetic plane of modern art. The artistic creation process of the new graphics is produced by the combination of solid or monochrome and multi color. In the information age, digital art is the main method of digital processing technology. Tie-dye art provides a corresponding reference for a modern method. It becomes a new design type for the modern age. This new important graphical tool is the main design language.

Any practical arts and crafts are based on market trends. The design creates a new visual art pattern on the corresponding design objects. Simple analysis of the pattern design is based on the aesthetic standards of the carrier's shape, structure, color, texture and decorative patterns. This includes a different aesthetic decoration. From the property of the state of the art we have a special technical means to improve the performance of the design. Therefore, we can break through the traditional tie-dye art techniques. The digital art has certain theoretical values and strong practical applications for modern pattern design.

Technical Advantages of Digital Art and Creative Design

The production, development, and improvement of digital printing technology cannot be separated from the synchronous development of hardware and software. They not only directly affect the production process but also indirectly affect people's creative thinking. Digital printing technology contains a complexity of layers and a variety of colorful images. It can make pattern design more original. However, the application of digital textile printing technology in the production of home textiles and clothing, compared with the traditional printing technology, is the biggest challenge. The advantages of this technology are mainly reflected in the following: can it flexibly create color combinations? And, can the use of computer aided design systems create a high quality and a variety of colors?

Digital Printing Technology in the Field of Color Patterns. The principle of digital printing technology makes its products break the traditional production set of color. The designs can match any image. The printed image can be printed out in the fabric. It is particularly suitable for high precision design.

Digital Stamp Pattern in Technology Is not to be Restricted by Unit Patterns. Digital printing technology can be amorphous in type. The pattern does not limit the length of the sort of image. It can be disorderly without repetition. This freedom of graphic is not regular like mural works like can obtain the fabric to achieve high-grade printing effect. Has greatly expanded the

space of clothing design performance, this meet the diverse needs of the consumer demand for printed matter. (As shown in Fig. 3, Fig. 4)



Figure 3. Computer painting printing and dyeing



Figure 4. Digital design art

Modern Bandhnu --- The Significance of Integrating Digital Art

Digital Computer Aided Design of art has many advantages such as graph creation. This is an important means of modern pattern design on contemporary fabric. It plays a role that can not be replaced by other design tools. So, for the modern digital arts and crafts, the superiority of digital art and the design pattern has a friendly interface between human and computer. This also has very good market prospects.

First, from the point of view of the operation and the electronic design of man-made machines reflects the intelligence of electronic technology in the traditional application. Using computer software enhances the quality and efficiency of the graphic design. Secondly, the traditional technology combined with computer digital technology, achieves a combination of the working state. The free combination of digital technology in design with creativity, is difficult to draw the imagination of the texture pattern. The use of digital art, such as the occasional pattern, has become a new way to create a new subject. It is also the necessity of the development of the art dyeing and finishing process.

Computer software design has a huge advantage in a powerful memory. This advantage has become a treasure trove for pattern design. The rich and diverse dye patterns are a database of creative resources. Using computer digital technology helps designers find creative inspiration for the performance of the pattern effect. This makes up for the traditional process of material performance constraints. Color pattern printing processes compared with other manufacturing processes is very interesting. A wide arrangement of imagery and patterns can be stored by computer system, through network communications, and other advanced means. This greatly reduces production and sampling times. Also, this process reduces the cost of a large number of samples in a production run. The efficiency of the market competition in the environment of such a time saving operation is bound to bring more market opportunities for enterprises.

The modern tie dyeing technology has the ability and high culture to be very strong in the market: It is recognition of young people's love. Design style of modern digital technology and production. It is a fusion of various artistic styles. With the combination of abstract and figurative elements and the combination of popular color and harmony as one of the images tells us. This kind of artistic innovation is a new form of appreciation. Is the modern tie dyeing design method and the unique style of art creation. (As shown in Fig. 5, Fig. 6)



Figure 5. St Dior digital print



Figure 6. St Dior digital abstract pattern

Summary

In short, the combination of digital graphics and creative modern design is an indispensable expression of modern design technology. This technology not only changes the traditional patterns available and production processes, it also breaks through the form of graphic creativity. It opens the traditional tie-dye process into the pattern of our modern lives. Innovation is the market demand for the development of science and technology. The demand is to make it more suitable for the consumer function. The aesthetic requirements of the natural digital dyeing and finishing process will need to become the future trend of fashion. It is simply a better method in all areas of process design.

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