

Research on the Application of Renewable Polyester Hanfu Based on Xinjiang Multi-ethnic Elements

Qu Dongbo, Guo Xinyi, Qiu Yiping*

Quanzhou Normal University, Quanzhou, Fujian, China, 362000

*Corresponding author

Abstract: National traditional culture is a fresh, characteristic, perceptual and shared culture. In the long process of human civilization development, excellent traditional culture has influenced mankind. The Belt and Road initiative in today's society is the continuation and development of the ancient Silk Road. As the core area of the "the Belt and Road" initiative and the heart of the Eurasian continent, Xinjiang, with its cultural representation and historical precipitation, has formed a unique multi-ethnic cultural system and the rapid development of regional economy. It actively uses cultural and technological advantages to design Han suits in combination with the multi-ethnic culture of Xinjiang's ethnic regions, while enriching Han suit design. It has strengthened the combination of green textiles and science and technology, enriched the industrial chain, and fully reflected the combination of culture and rural areas in Xinjiang to promote the prosperity and development of Xinjiang and the excellent traditional Chinese culture, and promote the construction of cultural integration.

Keywords: Xinjiang multi-ethnic culture, the Belt and Road, rural revitalization, green textile

1. Introduction

The Marxist view of culture is based on historical materialism. It regards culture as an important part of social organism and has the social function of class national culture in class society. The "the Belt and Road" initiative is the continuation and development of the ancient Silk Road. As the core area of the "the Belt and Road" initiative and the heart of the Eurasian continent, Xinjiang,^[1]with its cultural representation and historical precipitation, has formed a unique multi-ethnic cultural system and the rapid development of regional economy. The multi-ethnic culture of Xinjiang ethnic areas is an important part of Chinese culture, and the countryside is the "anchor" of Xinjiang ethnic areas' culture. It is also culturally extended. Since the 20th National Congress of the Communist Party of China (CPC), it is necessary for the people of all ethnic groups to unite, progress and integrate with each other in order to deepen the implementation of the policy of the CPC Central Committee governing Xinjiang.^[2]In the context of the rural revitalization strategy, it is necessary to implement the people-centered core concept and improve the level of education in ethnic areas. In scientific research, it is necessary to give full consideration to promoting the coordinated development of urban and rural areas through technology and improving the cultural revitalization service system,^[3] so as to promote the implementation of Now the great rejuvenation of the Chinese nation. At present, the recovery of traditional cultural industry is fully utilized to promote the "hanfu craze" to the public. Modern hanfu not only has the spiritual connotation of traditional culture, but also^[4] integrates modern aesthetic concepts. With respect to the design of Hanfu, we can deeply understand the characteristics of Chinese etiquette culture and the design concept of Hanfu, inherit and develop the excellent traditional Chinese culture, and promote the construction and development of Han culture by analyzing the inheritance of Hanfu and combining the reality of the development of Xinjiang's multi-ethnic culture. By investigating the development of traditional hanfu and combining with the analysis of market data, this paper discusses the hanfu design in line with the aesthetic trend of young people in the new era, and also promotes designers to attach importance to the redesign of hanfu. Through the investigation and demonstration of the integration of textile technology and Xinjiang's multi-ethnic art and culture resources, the cultural spirit connotation is excavated, and the culture plays a vital role in Xinjiang's management, education, motivation and stability is determined.

2. The social function of today's traditional culture

National traditional culture is a fresh, characteristic, perceptual and shared culture. In the long

process of human civilization development, the form, content, coverage and meaning of culture are constantly enriched and developed. It can be said that culture reflects and exists in all aspects of human production, life, learning and other activities. Traditional culture is a kind of culture that reflects the characteristics and features of a nation and is the overall expression of various ideological, cultural and conceptual forms in the history of various nationalities. Its content should be all kinds of material, institutional and spiritual cultural entities and cultural consciousness that have existed in previous dynasties. It is a general term corresponding to contemporary culture and foreign culture.

In a broad sense, the concept of culture refers to the sum of the material and spiritual productive capacity and the material and spiritual wealth created by human beings in the process of social practice. In short, it is the general name of various national civilizations, customs and spirits expressed through different cultural forms. In terms of content, national traditional culture includes not only the cognition of nature, but also the thinking of social humanities, economy, politics, science, etc., among which there is no lack of reasonable and profound understanding. National traditional culture is the common spiritual wealth of the nation, and its rationality cannot be denied by the influence of feudal social ideology and class nature. As far as the time limit is concerned, the national traditional culture includes both ancient and modern traditional cultures. In terms of culture, the pursuit of humanistic value includes the pursuit of morality, philosophy, life, literature and art. Although national traditional culture contains a lot of content, it is also defined in the scope of national traditional culture.^[5]The national spirit nurtured by traditional culture is the value link that unites the people of all ethnic groups in the country. The inclusive and comprehensive traditional culture is the common spiritual wealth of the Chinese nation. It can pool the strength of all fields of society, stimulate the sense of belonging, identity and enterprising of all ethnic members, and form the cohesion and creativity to promote social development.^[6]The social functions of culture include: first, the function of value identification; second, the function of entertainment and communication; and third, the function of cohesion and unity." That is to say, the better the social function of culture is played, the better the culture will develop, grasp the social function of national culture, and guide it to adapt to the socialist society. For the negative phenomena in the society and the obstacles affecting the development of the nation, we should make use of the social function of cultural change to change and provide a good condition for the development of the society.

3. Geographic advantages

Located in the hinterland of the Eurasian continent, Xinjiang is the necessary and core area of the "Silk Road Economic Belt", with unique geographical environment, rich cultural resources and unique geographical advantages. First of all, Xinjiang, as a link in the "Silk Road", has a very important geographical position and role. Therefore, the ancient Xinjiang region naturally became the main road and crossroads for the north-south and east-west traffic of ancient civilizations in the Eurasian continent, and thus became the gathering place of various civilizations and cultures. Xinjiang is the only way for ancient China to communicate with the West through the Western Regions and the West to reach China. It is also a bridge to communicate or complete the cultural, political and economic exchanges between the East and the West in Asia and Europe. As a channel link, Xinjiang naturally plays an important role in the "Silk Road", and is also the junction of the transportation line across the Asian continent. It once played a very important role in promoting the occurrence and development of ancient civilizations around the world.

Xinjiang is a multi-ethnic region, where many ethnic groups have lived for generations. Xinjiang is rich in culture because of its special and superior geographical, historical and social environment. In ancient times, Xinjiang, as an important distribution center of the Silk Road, was an important hub connecting world trade. Various cultures of the world converge here, so the culture of Xinjiang has always been characterized by diversity. Xinjiang, with its ups and downs, has complex and diverse landforms, including snowy mountains, endless Gobi, vast deserts, and fertile grasslands and fertile fields. Due to the differences in natural environment, the production modes in South Xinjiang and North Xinjiang are different. Due to drought in the south of Xinjiang, agricultural or semi-agricultural and semi-pastoral production mode has been formed; North Xinjiang is rich in water, which forms the production mode of animal husbandry. It is the difference of different production modes that forms different life cultures and presents the form of common development of multi-cultures.

4. Policy advantages

Since ancient times, Xinjiang has been a place where many cultures and civilizations converge. The languages, customs, religious beliefs and lifestyles of different nationalities blend with each other, forming the cultural characteristics of Xinjiang as a whole. In view of the integration of multiple nationalities in Xinjiang, from 2010 to 2020, the strategy of Xinjiang governance has changed from "stabilizing and rejuvenating Xinjiang, enriching the people and consolidating the border" to "governing Xinjiang according to law, uniting and stabilizing Xinjiang, and building Xinjiang for a long time". The five-in-one system of "governing Xinjiang according to law, uniting and stabilizing Xinjiang, nourishing Xinjiang through culture, enriching the people and rejuvenating Xinjiang, and building Xinjiang for a long time" fully reflects the continuous adjustment of the general goal and strategy of the CPC Central Committee with the development and change of the situation in Xinjiang, and also highlights the continuous improvement and upgrading of the CPC's strategy of governing Xinjiang in the new era.

In recent years, the central government has continuously strengthened the efforts of cultural assistance to Xinjiang in the work of aiding Xinjiang. Through the "Light of the West", "Xinjiang Special Training" and other talent training programs, it has injected new impetus and vitality into the reform and development of Xinjiang's cultural undertakings and cultural industries, and firmly established cultural confidence is to shape the soul of rural revitalization. Only by better developing the integration and promotion of cultural industries, can the policy of aiding Xinjiang be implemented and rural economic construction be revitalized.

In addition, we will further implement the project of benefiting the people through culture, continue to carry out the cultural brand activity of "Our Chinese Dream - Culture into Ten Thousand Families", optimize the project of "Rural Public Welfare Film Distribution and Screening", promote the "Dongfeng Project" and "Rural Bookstore" to improve quality and efficiency, meet the cultural needs of the grassroots people, enrich the cultural life of the people of all ethnic groups, and gather the strong spiritual strength to forge ahead in the new era and new journey.

We will fully tap the excellent traditional culture and intangible cultural heritage of all ethnic groups in Xinjiang to serve the cultural development of Xinjiang. Through "strengthening the protection of intangible cultural heritage, starting the construction of Xinjiang Intangible Cultural Heritage Museum, and holding a series of intangible cultural heritage exhibition activities, let the intangible cultural heritage truly 'live'"; We should fully tap into the Chinese culture and the excellent cultural elements of all ethnic groups, create more cultural symbols with broad influence, expand the cognitive dimension of the consciousness of the Chinese nation community, strengthen the cohesion and centripetal force of the Chinese nation, show the determination to aid Xinjiang in the ten-year Xinjiang Aid Corps, and carry out the study class through the positive field research, as well as jointly create the counterpart assistance for textile enterprises in the field, and truly adjust measures to local conditions. The integration from data to design fully conforms to the policy and advantages.

5. Technical advantages

Compared with the traditional printing and dyeing process, the project can promote the sustainable development of the environment by preparing recycled colored yarn products through water-free printing and dyeing process. Compared with the traditional Hanfu fabric, the color is more bright and durable, and it is not easy to be corroded, moth-eaten, and faded. The polyester fabric formed by regenerated water-free printing and dyeing colored yarn has better color fastness and more durable color. Embroidery is used in the pattern part of the process, and local intangible cultural heritage projects and characteristic buildings are selected to integrate into it to create a series of product designs.

Cooperate with Shanghai Hanfu Copyright Center to provide excellent works for original clothing design with Chinese characteristics, taking Hanfu design as the starting point. After that, the series of works were registered and publicized to provide intellectual protection for the originality of the works and issue the "birth certificate" granted by the Shanghai Hanfu Copyright Center.

Based in Xinjiang, through the analysis of the concept of green environmental protection, the development of suitable innovative materials benefits from renewable polyester high-quality materials, and truly realizes the green value. By establishing the internet pattern database CNN, the full name of CNN is "Convolution Neural Network". Neural network is a mathematical model or computational model that simulates the structure and function of biological neural network (animal's central nervous

system, especially brain) by establishing a database. The neural network is composed of a large number of artificial neurons, and can be realized through the systematic and complete learning process design. The pattern sorting and retrieval function enables the complex patterns to be unified in data, which is convenient for design and improves design efficiency.

Xinjiang's multi-ethnic culture and the application and development of recycled polyester hanfu

6. Research content

The research is based on the Xinjiang region. Through the policy of cultural moistening Xinjiang, combined with the special geographical location and historical and cultural background of Xinjiang, the research responds to the interpretation of the the Belt and Road policy on the basis of revitalizing the countryside, and analyzes that the spirit of Xinjiang originates from the most vital and valuable part of Xinjiang's long traditional history and culture.

In view of the problems such as the single style, the uneven design and the lack of copyright of the hanfu on the market, we will apply for the copyright of the hanfu, and commit ourselves to creating the story hanfu, restructuring the multi-ethnic elements of Xinjiang, telling the story of Xinjiang well, and developing the national culture. The patterns of its important distribution national folk customs and traditional textile technology are collated and innovated through the VNN system to establish the pattern database;

7. Design innovation

Through sorting out and analyzing the required patterns from CNN database and combining its characteristics and rich elements, the patterns are reorganized and designed at the same time, so as to develop the designs that the patterns are collected and reorganized. The combination of Han clothing style and Han clothing based on the characteristics of multi-ethnic traditional clothing is shown in the figure, which better reflects the diversity of Han clothing in design and creative significance and value appearance. It is the innovation point of modern Han clothing application. It changes the traditional version without innovation and updates the design and obtains the copyright guarantee.

In terms of technology, renewable polyester materials are used, green environmental protection technology and the application of water-free printing and dyeing technology are used to solve the problems of water pollution and energy waste in the traditional textile industry, protect the environment, comfort and health, and improve the overall quality of life.

CNN is widely used in the field of image recognition. When it is applied to images, it can be understood that taking a filter on the image to find some features in the collected patterns, and we need to find many features to distinguish an object, so we will have many filters. As shown in Figure 1, through the combination of these filters, we can get the classification pattern features, which is more convenient for design.

8. Positive impact

"The Chinese national community" [7] and "the Chinese national community consciousness". Only under the conditions of integrating the individual, sublimating the bottom, and elevating the primary level can we achieve the goal of reaching the whole, the top, and the high level, and strengthen the spirit of *Populus euphratica* with the main content of "hard work, self-improvement, rooting in the frontier, and dedication", and the Xinjiang spirit with the main content of "love the motherland, selfless dedication, hard work, pioneering and enterprising", and enhance the cultural identity. In addition, the advanced culture represented by the socialist core value system and the material carrier collection and style research and design of the Chinese clothing culture in Han Dynasty make the traditional clothing culture develop its cultural value in multiple directions.

Through the analysis of the concept of green environmental protection, it is found that the development of suitable innovative materials benefits from renewable polyester high-quality materials and truly realizes the green value. By establishing the internet pattern database CNN, the full name of CNN is "Convolution Neural Network". Neural network is a mathematical model or computational model that simulates the structure and function of biological neural network (animal's central nervous system, especially brain) by establishing a database. The neural network is composed of a large number

of artificial neurons. The construction of different networks according to different connection modes more reflects the practical significance of cross-border joint operation in the textile design industry.

9. Conclusions

To sum up, to vigorously implement the cultural power is to give full play to the advantages of Xinjiang's cultural resources, constantly improve the productivity of Xinjiang's cultural industry, create a Hanfu culture unique to Xinjiang, present the highlights of Xinjiang's humanities, and implement the strategy of strengthening the cultural region, we must actively integrate the advantageous resources, broaden the path of cultural development, highlight the regional characteristics of Xinjiang, strengthen the infrastructure construction, cultivate the soil for cultural innovation, and form a cultural brand system, Innovate and develop cultural undertakings and optimize the pattern of cultural industries. In combination with the Hanfu culture and the unique cultural talent of the people of all ethnic groups in Xinjiang, we will actively carry out the redesign of practical Hanfu, transmit the works of New Power to the whole country and even the world, and tell the story of Xinjiang well through the field study and investigation of the Xinjiang Assistance Mission; Let the Chinese culture infiltrate the Tianshan Mountains and run north and south between the high mountains and the wild plains, and guard the cultural heritage of the motherland with care, so as to build a solid foundation for the sense of the Chinese national community; In addition, the scientific research should be fully implemented through art student design and application of green materials to strengthen the improvement of the concept of green textiles and multi-dimensional and all-around cross-border model of data technology, so as to achieve the scientific research results of "grounding and implementation" for complex needs.

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