

# An Approach of Traditional Handicraft Products Innovative Design from the Perspective of Regional Ethnic Minority Culture

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**Abstract.** Explore and analyses regional ethnic minority cultural resources and provide strong references and supports for the research and development of traditional handicraft products with distinctive regional cultural characteristics. Focusing on the elements of cultural creative product design, this paper sorts out five design elements, including product designers, regional culture classification and design elements, dual value of products, product consumers and consumption experience. Based on regional ethnic culture, this paper summarizes the design methods of traditional handicraft products, analyses the design trend and constructs the design model of them. This paper explores and analyses the design model of traditional handicraft products by mining, sorting and summarizing regional ethnic cultural resources, provides ideas for the research and development of regional ethnic cultural products, which is conducive to promoting regional culture and enhancing the dual value of products.

**Keywords:** regional ethnic minority; traditional handicraft products; design methods.

## 1. Introduction

Traditional Culture has been regarded as one part of sustainable social and economic development. Culturally products with elements derived from that are obtaining increasing attention [1]. In recent years, China's traditional handicraft industry has developing rapidly and having a good development trend.

An in-depth study of the close relationship between regional ethnic cultural elements and traditional handicraft commodity design can not only achieve the purpose of promoting and inheriting culture, but also enhance the cultural connotation and value of traditional handicraft products.

## 2. Analysis Design Elements of Regional Ethnic Culture and Traditional Handicraft Products

Traditional handicraft products comprehensively utilize spiritual elements of traditional culture, knowledge elements of advanced technology, and technical elements such as capital and manufacturing. The design emphasizes traditional cultural factors and relies on individuals or teams to develop manufacture and sell products through technology and creativity. There are five design elements: designers, regional ethnic cultural classification and design elements, dual value of products, consumers, and consumer experience.

### 2.1 Designers of Traditional Handicraft Products

Traditional handicraft product designers need to collect and excavate regional cultural materials, refine the design elements of cultural prototypes, and express design ideas through techniques. Before the design, it is necessary to identify consumer groups, conduct targets positioning and market analysis. In the design, designers should combine current design trends and aesthetic perspectives, dig deeply into the history, national traditions and local folk customs resources in the ethnic regions. After the design, we should pay attention to the consumer's experience of using the product, and carry out market summary evaluation (Fig.1).

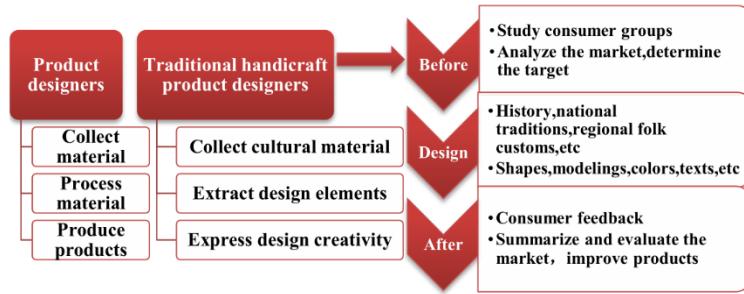


Figure 1. Traditional handicraft product designers and design flow.

## 2.2 Regional Ethnic Culture Classification and Design Elements

In the framework of the research cultural object proposed by Liang Ting and Hazel Clark, the cultural content is divided into three levels: material layer, behavior layer and spiritual layer [2]. Based on this framework, regional ethnic cultural resources can be roughly divided into three categories.

The material culture is the solid substance formed by each region in history. It is the integration of the material culture of the ethnic region that exists objectively in the physical state that records the formation and developments of ethnic regional culture. Behavior culture is the behavioral habits formed by people in different ethnic groups and regions in practice and socialization, including literatures, arts, languages, writing, folk customs and craftsmanship, etc. Inspiring designers through the formation of behavioral cultural patterns, the forms of expression and other aspects helps designers to understand the profound meaning of regional culture [3]. Mentality culture is the unique mental and psychological characteristics and concept consciousness formed by the people in social practice and consciousness activities, with cultural connotation (Fig.2).

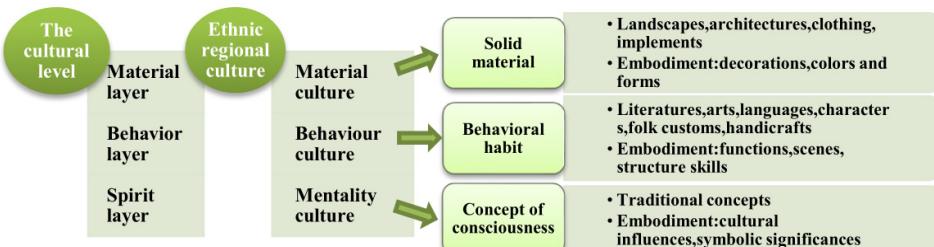


Figure 2. The classification modal of regional ethnic cultural resource.

## 2.3 The Dual Value of Traditional Handicraft Products

The dual value of traditional handicraft products is market value and non-market value. Market value is the value of products that can be reflected through commodity circulation and currency exchange. Non-market value is the unique artistic value, social value and educational value of products.

Therefore, the cost of products should be reduced as much as possible, and a reasonable price should be carried out to enable consumers to purchase. In addition, in terms of non-market value, products must reflect the cultural value of regional national culture in an innovative way and promote the dissemination and development of culture.

## 2.4 Consumers of Traditional Handicraft Products

Firstly, consumers' different ages, genders, identities, cultural accomplishments, aesthetic preferences and value may affect consumers' choice of products. Secondly, social conditions including fashion trends, social trends, and so on may affect consumer behaviors. Therefore, we must do a lot of research on the public, before formulating product programs and marketing strategies. To meet the material and spiritual needs of consumers better, we should study and their favorite cultural elements carefully [4].

The degree of satisfaction of consumer needs involves many factors, which can be integrated into three aspects: sensory impressions, experience and emotional satisfaction of the product [5]. Sensory impression is the direct feeling of consumers on cultural products. Designers need to focus on product design, such as colors, shapes, packaging, etc. Experience refers to the functional experience of the product and the story of the product and that reflects in the use of the product, the function, the method of use, etc. Emotional satisfaction is derived from the cultural connotation [6]. The product must contain the spiritual meaning of the regional culture ultimately, and we can distinguish traditional handicraft products from ordinary products by that (Fig.3).

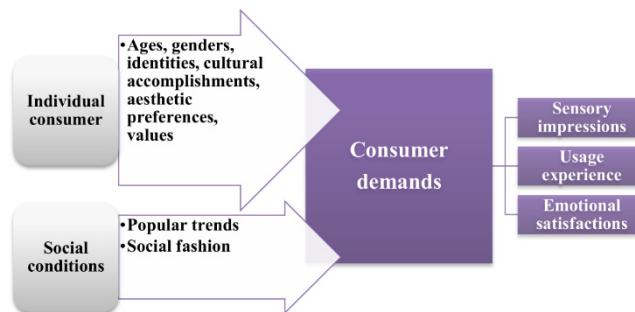


Figure 3. Influencing factors and satisfaction levels of consumer demand.

## 2.5 Consumers' Experience

In order to understand the experience of consumers after selling traditional handicraft products, we can investigate the degree of preference, awareness, advantages and disadvantages of the products through questionnaires. This facilitates the designer to re-establish new design goals, carry out product innovation, update and product serial design. Based on the consumer's concept of consumption, the product design is more targeted and purposeful.

## 3. Design Methods

The rational integration of ethnic regional culture into products mainly consists of three steps: elemental extraction, delineation and connotation refinement.

### 3.1 Extract Cultural Elements

The physical culture is the integration of material culture, including landscapes, architectures, clothing, utensils, etc., providing designers with rich and diverse cultural elements, which are embodied in ornamentations, colors and forms of products. The product modeling elements mainly include the shape and color [7]. The extraction process of the modeling elements is as follows:

#### 3.1.1 The Realistic Method.

Select a picture of cultural materials, such as architectures, landscapes, clothing, etc., and draw all details of the shape completely with the drawing software.

#### 3.1.2 The Simplification Method.

Use subtraction to remove some of the details, grab the prominent features, and leave a representative and recognizable pattern.

#### 3.1.3 The Reconstruction Method.

Regard the simplified elements as the basic unit, and innovate the simplified elements through the rotation, stretching, shearing, array, combination and other methods [8].

### 3.2 Reproduce Cultural Forms and Meanings

The shape, texture and material texture of traditional handicraft products are the external manifestations of regional culture.

Culture is the concept system in which human beings convey their knowledge and attitudes about life, inheriting and developing them, and expressing inheritance in the form of symbolic symbols [9]. Cultural symbols refer to the elements, images, concepts and other elements that can reflect the characteristics of culture. They are optimized and extracted from the natural environment, cultural heritage, customs and other factors [10]. Regional cultural symbols can be expressed as visual elements, patterns and other specific elements. These visual elements are strongly representative and recognizable, and have regional cultural connotations [11]. The extraction of regional cultural symbols should be based on the regional environment, with historical and cultural as the main line, physical objects as the carrier and semantics as the purpose.

Regional national culture is the unity of symbols and meanings. Symbols are the carrier and expression of meaning [12]. So, the symbols are external manifestation of culture, and finally it takes the symbolic expression of products as the carrier.

### 3.3 Refine Cultural Connotations

We must consider the cultural cognition of consumers, the functional design of products, etc. when designing products, and take into account the aesthetics and practicality.

#### 3.3.1 Universal Design.

The universal design method means that the designed product should be suitable for different groups of people. Therefore, in terms of product functions and common daily necessities should be selected as usual as possible. The method of use should be simple and clear, and complex structure function should be avoided. In terms of cultural and spiritual connotation, products should conform to the public aesthetic concept.

#### 3.3.2 Emotional Design.

In the design of products, we must create the purpose of emotional communication between people and things, and attract consumers' attention and induce emotional reactions through three aspects: sounds, shapes and meanings. On the one hand, using the situational story design method to combine the cultural story with the product. On the other hand, understand the consumer's heart deeply, and explore the emotional needs of consumers.

## 4. Traditional Handicraft Product Design Trends

### 4.1 Serial Design

The serial design can control the quantity of products, form scale production, reduce production cost, and improve product quality and stability. Sorting different series of products can optimize product management. The design elements of the series are similar and derived from the evolution of the base product. The series products have undergone rigorous performance testing which greatly reduces the risk of product development, shortens the product development cycle, and makes product design easier.

There are three steps of serial products design: Firstly, extract typical cultural symbols that reflect the characteristics of regional culture from the regional culture. Secondly, reduce the development risk of the remaining serial products. Thirdly, expand the product category. Extract multiple symbols of the same subject for vertical product design, and these products have the same cultural appeal and distinctive regional characteristics [13].

### 4.2 Electronic Business Design

With the development of science and technology, coupled with the wave of Industry 4.0 and the promotion of "Internet +", the product design related industries are exploring a development path that

is more suitable for them. Industries use wireless network technology to change traditional product forms, stride over new media, and experience interactive effect. Design on internet benefits both marketers and consumers, eliminates time and space barriers and facilitates efficient consumer information searches [14]. Now there are many museums have used the new platform of new media to promote cultural and creative e-commerce products.

Traditional handicraft products development can use these new digital media platforms to share unique local cultural resources with the public, spread regional culture quickly, and spread regional ethnic culture in a way that everyone likes and hears, and provide a new development platform for regional ethnic culture [15].

#### **4.3 Interactive Experience Design**

The traditional forms of handicraft product development need to innovate, and the unchanged traditional product forms and sales concepts must be upgraded to meet new cultural needs [16]. The interactive experience products design innovates the form of products, allowing consumers to make their own products, focusing on the production process and experience. Consumers personally participate in the production of their own handicraft products, and understand the product-related production process, regional ethnic history and culture through personal experience. This method can impact people of culture profoundly to expand cultural influence, promote excellent culture, and inherit traditional culture.

### **5. Regional Ethnic Culture and Traditional Handicraft Products Design Model**

Based on the analysis of the regional ethnic traditional handicraft products above, the traditional ethnic handicraft products for the regional ethnic groups are constructed to provide reference for product design and development (Fig.4).

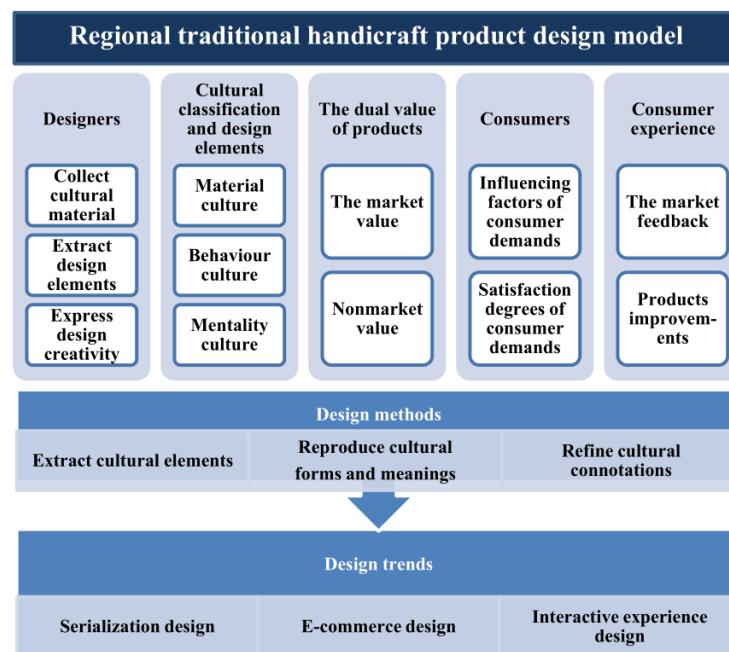


Figure 4. Regional traditional handicraft product design model.

### **6. Conclusion**

It is effective for the inheritance and development of regional ethnic cultures to design handicraft products and combine traditional cultures in different ethnic regions of China. The design of regional ethnic culture and traditional handicraft product helps to increase the added value of products. It is more conducive to disseminating the distinctive culture of different regions of the Chinese nation,

promoting local economic income and promoting local culture while satisfying the functional needs of products.

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