

Research on the Design of Nanjing Museum Cultural and Creative Product from the Perspective of Experience

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Abstract. This paper aspires to shed light on creative cultural product design by referring to document research and conducting on-the-site investigation. During the process, we also had profound discussion, conducted survey on user groups through questionnaire and explored user need. Cultural elements consist of aesthetic consciousness, code of conduct and moral value while design properties consist of physical, logical and emotional aspects. They are closely related with each other and make up a traditional design model for cultural experience so as to support creative cultural product design. By referring to Nanjing Museum and studying its cultural elements, we came up with a design strategy which can be applied to design practice.

Keywords: Cultural product design · Experience design · Cultural and creative industry · Nanjing Museum

1 Introduction

With the increasing popularity of creative experience parks and tourism industry, the experience economy has embraced a development upsurge in the cultural experience industry. As an important carrier of cultural diffusion, creative cultural product design has become a critical trend in the global market. Product functions can be divided into two categories: utilitarian and useless ones. One product can possess these two functions at the same time. In recent years, creative cultural products like adhesive tape which inscribe the copy of Emperor Kangxi's works from Taiwan have catching the trend. It has also triggered our thinking about "consumer culture" [1]. At present, designers have already focused on the integration and application of traditional culture with product design while problems like lack of innovation and poor presentation of product culture still remain [2]. They can be illustrated as follows: (1) the lack of meaning in local modern design. There is a lack of individual culture in current design. Many designers like to blindly imitate western design models by making use of western ideas to design products which are unique in oriental culture. They lack the ability to think problems from a Chinese perspective which render it difficult to showcase Chinese civilization among the world culture. (2) The transplantation of traditional cultural elements. Now

many Chinese designers have already realized the importance of inheriting traditional culture with the result that lots of designs have taken advantage of traditional Chinese culture. But many so-called local designs are still at the stage of simple transplanting of product appearance like patterns and forms. Designers ignored the spiritual strength and experience that exerting intangible impact on users. When seeking inspiration from traditional culture, designers are easy to be tempted by splendid cultural representations and ignore the role played by intangible culture so that they fail to integrate material culture with intangible culture during the design process. The so-called local design is just a piece of “gorgeous coat” in the disguise of tradition and lacks emotions. So it is impossible to making traditional culture located deep in all forms of cultural life. (3) the bottleneck problem of experience need, establishment and extension. Under the backdrop of experience economy, the idea of design diversity is on the rise. Toffler, the author of *The Third Trend*, once predicted that “all industries in the future can only depend on providing user experience to achieve success.” At the same time, the dean of institute of futurology in Copenhagen (one of the largest and most authoritative research institutions in the world) put forward a bold prediction that “future products must offer spiritual comfort for users”. As a result, with people’s increasingly higher expectations and requirements for products, designers not only have to design products that meet customers’ basic demand but also satisfy their emotional and experience need. In 2005, ICSID gave a new definition for industrial design: design is a strategic way or process for solving problems. It can be applied to products, systems, services and experience in order to realize innovation, achieve success and improve the quality of life. This definition has brought new thinking and opportunity for product design and innovation activity under the information society. So current product design has gone through the evolutionary process of “function—form—emotion—experience.” Because of poor quality, similar function and lack of cultural connotation, designers have to optimize product designs from the perspective of experience.

Based on the Above-Mentioned Problems, this Paper will Conduct the Following Research: The first one is to study and explore the cultural features and elements of collections in Nanjing Museum. The second is to study the experience design models if creative products. The last is to study and practice design strategy used by creative cultural products. Based on the application of traditional culture in creative cultural design and user experience theory, this topic shed light on the reflection relationship between experimental, cultural and design dimensions so as to form design strategy of creative cultural products in Nanjing Museum based on experience. It will contribute to a better interaction between traditional culture and modern products, creating products more of the characteristics of Nanjing Museum. The idea of linking culture with product design from the view of experience can bring users with a better cultural experience.

2 Background

The essence of a museum is not lingering on the past or the existence, but exploring, discovering and creating the unknown and future. It’s a materialized “past” which inspires and gives birth to new life. Museum should not only be a place for reserving

and researching cultural objects but also a place to fully utilize resources, creating profound spiritual wealth and bringing a unknown world. It's a non-profit organization which means that it's not profit-oriented. Although the creative culture industry doesn't encompass in museums' principles, it's an important means for museums to realize their goals. On the basis of non-profit organizations, museums can improve their educational and recreational functions by promoting creative cultural products that are beneficial to cultural diffusion, artistic innovation and knowledge popularization. While meeting people's spiritual need for culture, the invention of creative cultural products and the development of this industry can also help museums to expand their influence on society.

Located at the south of Purple Mountain and the north of Zhongshan Gate and with a territory of over 70,000 square meters, Nanjing Museum now have more than 420,000 pieces of collections which can dating back to the Paleolithic period (Fig. 1). They came from Jiangsu province as well as the whole country. These collections include excavations, loyal treasures and social donations. As a result, Nanjing Museum is acknowledged by the public as a magnificent art treasure of the Chinese nation.



Fig. 1. Nanjing Museum and its cultural relics

Nanjing Museum is a pioneer of the cultural industry among all Chinese museums by setting up a museum shop in 1979. Until now, the shop mainly sells academic books, replicas of historical relics, aesthetic presents, handicrafts, souvenirs, famous paintings, four treasures of the study, Chinese jades, Nanjing brocade as well as office supplies. All these products give a full play of the cultural characteristics of Nanjing Museum.

3 Research Method

By targeting potential users of creative cultural products in Nanjing Museum and analyzing experience design theory, the research formed design models of traditional culture in modern products so every level can reflect with each other and establish experience design models of traditional culture that can finally support creative cultural design.

The research has three steps. Firstly, we conducted survey on former users by using questionnaires so as to select all the collected information and set up powerful user information. Secondly, we formed creative cultural product design from the perspective of experience. At last, we also organized and extracted the cultural elements and information of Nanjing Museum.

3.1 User Positioning and Analyze of Creative Cultural Produces in Nanjing Museum

Visitors are important targets of museum's service. Museum's basic principle is to understand, to get familiar with, to organize, to provide service and meet visitors' needs. As a result, how to provide service for visitors is an issue that can't be denied in the development of creative cultural products. It is very significant to conduct research on users before developing these products. By conducting relevant research, we got to know the following four points: Firstly, the age, education background and occupation of museum visitors. Secondly, the time they sent in culture shops and traces. Thirdly, visitors' purchasing motive. Lastly, visitors' preference and aesthetic needs in different age groups. By conducting these research and understanding user needs for creative cultural products, we can design products in a more reasonable way.

The main processes include information collection, information analysis, distribution of preliminary research, questionnaire analysis, questionnaire correction, open publication and data analysis. By using a large number of questionnaires, we can get more precise data. The research contents are like these: museum visitors' basic information (age, race and education background), the frequency for visiting museums, purchasing purpose and usage, purchasing tendency and affordable product price [3]. We also had a clear understanding of customer expectation for creative cultural products during the process. They mainly include cultural essence, beautiful appearance, utility, convenience, reasonable price, unique feature and excellent experience.

Scientific analysis of research is the basis for development and positioning. At the same time, it's also an important process for cultural products in the museum to evolving from concept design to real market.

3.2 User Need for Creative Cultural Products in Museums

The Combination of Utility with Aesthetics. "Aesthetics" is a pretty important principle to attract consumers to appreciate and purchase creative cultural products in museums. It's also a basic rule for the development of this kind of products. However, apart from aesthetics, products should also possess utilitarian function. Under the premise of commemorative meaning and aesthetic function, many museum visitors require that creative cultural products should also be convenient for use.

The Combination of Culture with Experience. The focus of creative cultural products in museums is innovation. It is deeply rooted in culture with the feature that it has added value for cultural and creative experience. So if designers want to resonate

with users, they have to come up with excellent cultural ideas and create product experience. By “reinventing” the visual image, designers can integrate the depth of art with the breadth of experience to satisfy users [4]. This way can also create touching stories, cultural connotation and aesthetic atmosphere. As a result, all the designed products have their unique history, operation philosophy and creative value. At the same time, these products are embedded with cultural connotation which can separate them from others as well as extend their life cycles. The life cycles of creative cultural products in museums depend on innovation strategy, among which design can exert great influence on product’s life cycles.

The Combination of Theme with Series. The design of serial products abides by the aesthetic principle of “variety in unity”. Now with the increasing trend for market competition, more and more visitors are paying attention to creative cultural products which can further contribute to the promotion of these brands in museums. Meanwhile due to the family feature of serial products, if customers develop trust on one of the serial products, they will naturally trust other products of the same series as well. Serial products stress the overall presentation of appearance and have their unique cultural features. It lies in the fact that the increase in product numbers can catch people’s eye and avoid situations like disconnection between product designs and incongruity of styles. Moreover, if creative cultural products want to leave customers with happy memory, they should be confined in certain themes. A good theme is also the essence of this kind of products. It can establish a bond between products and customers. Creative cultural products with a certain theme have two advantages. One is that they can easily catch visitors’ eye so as to better promote the cultural elements. The other is that they can contribute to the exploration of product depth, the expansion of breadth and the improvement of product structure.

3.3 Establishing Experience Design Model

Based on experience, Donald Norman put forward classification of emotional design which included instinctive, behavior and reflective aspects. In order to research the application of traditional culture in modern product design, designers have to analyze the connotation and extension of traditional culture of the research object, then explore, collect and select cultural elements and symbols of value of regional characteristics. Moreover, this step can also contribute to the discovery of visual symbols which are deeply rooted in culture and are powerful enough to stimulate target groups’ perception and imagination. Here, the traditional culture can be divided into aesthetic consciousness, code of conduct and moral value.

The following is the design model based on the application of traditional culture in modern product design. Experience level consists of instinctive, behavior and reflective aspects. Cultural elements consists of aesthetic consciousness, code of conduct and moral value. Design properties consist of physical, logical and emotional aspects. Every level can reflect with each other to form experience design models based on traditional culture and support creative cultural design (Fig. 2).

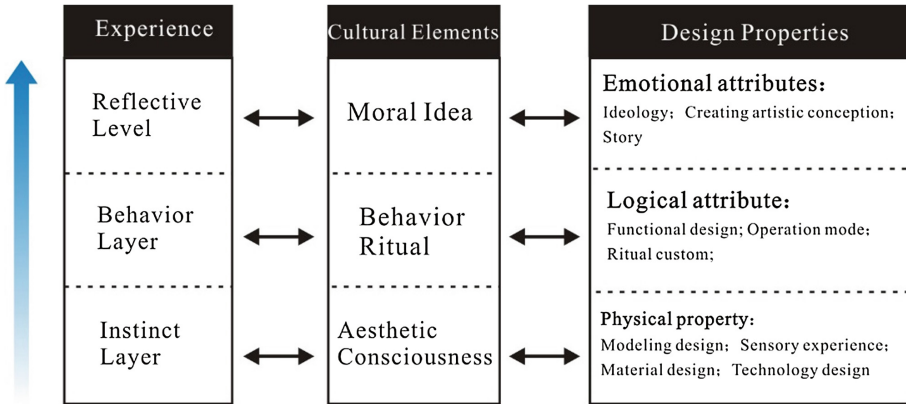


Fig. 2. Design model for creative cultural products

4 Product Design Strategy and Practice

Nanjing is an ancient city with a long history and a treasure house for national cultural resources. Nanjing Museum has over 400,000 works of art like stone objects, jade, pottery, bronze wares, china, paintings, calligraphy as well as sculptures which can dating far back to the Paleolithic Age. Among them, 1062 pieces of collection were granted as first class treasure in China. “Stringed jade ornaments” from the Paleolithic Age, “gold and silver pot” from the Warring States Period, “gold beast” from the Western Han Dynasty, “jade seal of prince Guangling” from the Eastern Han Dynasty, “bronze beast statue” from the Western Jin Dynasty, “painting of seven sages of forest” from China’s southern Dynasties and “vase with plum blossom inscription” from the Ming Dynasty are all national cultural relics. With a wide variety of collections, Nanjing Museum has the unique advantage for developing cultural industry by extracting significant elements like form, function, structure and cultural connotation from key cultural relics. At the same time, it is also famous for culture from Kingdom of Wu, culture from regions south of Yangtze River and culture from the Republic of China. Particularly, culture from the Republic of China has integrated with Nanjing’s regional characteristics which can be further explored.

Based on user need, experience design has the purpose of providing user experience. That’s to say, it’s a kind of customer-oriented design. Experience design of creative cultural products stresses user’s experience during different development stages [5]. Most importantly, this kind of design is reflected on products themselves so as to satisfy customers and reveal the hidden cultural connotation. Through design practice, we will put design model into actual use and create relevant products.

4.1 Product Design of Creative Cultural Products that Extend Visual Elements Originated from Nanjing Museum

The instinctive level of creative cultural products focuses on the display of cultural features. By representational transformation, we can display elements such as forms and patterns of traditional culture to modern products. This can in turn design products that can extend visual elements originated from Nanjing Museum. Excellent visual experience can transform into excellent products. The application of elements is a very straight and clear way as typical symbols can bring typical differentiation degrees. Typical symbol can also express concepts, further connotation and ideas. It a very effective way to implant element symbols to relevant product carriers (Fig. 3).



Fig. 3. The exhibition hall of the Republic of China in Nanjing Museum

The exhibition hall of the Republic of China in Nanjing Museum showcased the splendor of Nanjing (capital of the Republic of China). The dressing culture of that period is a very typical representative of traditional culture. Cheongsam is one of the most typical dressings in this period. It became extremely popular in 1930s and 1940s. This period also marked the height of women dressing in China. Cheongsam has the following characteristics: buttons down on the right, straight collar, single piece of cloth, plane cutting and so on. It is also a king of dressing full of Chinese cultural elements. By extracting this element and applying it to mugs can help people to remember the past and to reflect on the present. Inside of the mug are the lines of Cheongsam with unique patterns so as to extend cultural symbols (Fig. 4).

4.2 Creative Cultural Product Design Based on Code of Conduct

Experience design of the behavior level originates from people's way of life, operation process and behavior. It can be manifested in the utility, completeness and convenience of products. The process of using a product is also the process for interpretation. It actually mean the interpretation of products' forms, symbolic features and connotation which can prompt the transformation of product utility to cultural diffusion.

Green-glazed bottle with eight diagrams, a cultural relic in Nanjing Museum, was made in the period of Qianlong Dynasty. It shaped like a jade rice dumpling with eight



Fig. 4. Mug design by Nanjing Museum

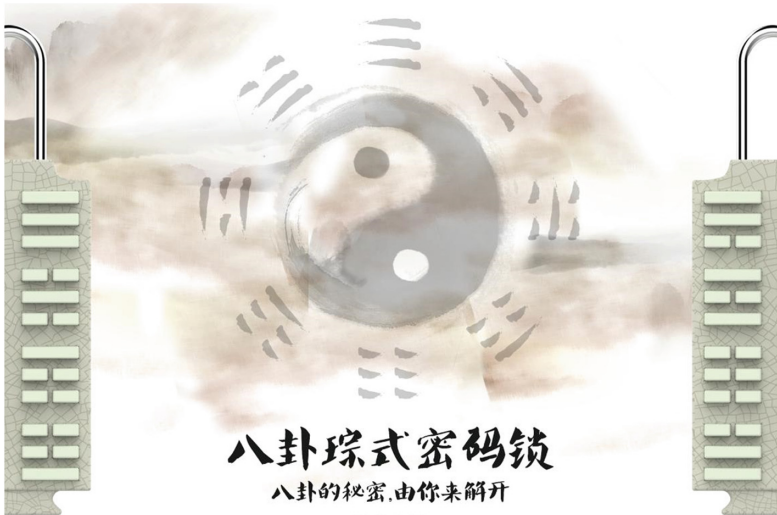
diagrams on the surface which represented the profound Chinese culture like Yin and Yang in Taoism. This object also has a coded lock the eight diagrams on the surface of the bottle were designed as the key. The flat base was the unlock button. When using this product, unlocking it is not only a simple action but also the discovery of its cultural connotation. This kind of design can help visitors to better understand culture and enable interactive experience between visitors and objects (Fig. 5).

4.3 Creative Cultural Design Embedded with Emotional Experience in Nanjing Museum

Emotional reflective level is also called mental or psychological level. It's a measurement of reflection and product value after seeing the product and making use of it which can correspond to product's ideological level. In term of creative cultural products, the reflective level includes product history, emotion, cultural features and connotation. This kind of products can express their cultural contents by telling stories and using metaphor.

The key for the theoretical innovation of souvenirs lies in the application of artistic connotation and life concept to products. We can start from the interaction between users and products to pay attention to product experience and user feeling, reserving untouchable experience with perceivable ways.

Seeking inspiration from female pottery figures from the Tang dynasty, this sauce bottle made full use of features of dressing, hairstyle and accessories used by pottery figures which gave full play of the female gentle disposition in the Tang dynasty. The



八卦琮式密码锁

八卦的秘密,由你来解开

设计来源



八卦琮式密码锁的设计来源是南京博物院的馆藏文物——青釉八卦纹琮式瓶。此文物制于清乾隆年间，形状仿制上古玉琮造型，施开片青釉，外壁模印凸起的八卦图案。该文物体现了道家阴阳八卦等博大精深的中国文化。

密码锁外形与琮式瓶相似，瓶身上的八卦图案被设计为密码按键，瓶底被设计为开锁键。在使用这款产品时，打开密码锁不仅是一个动作，更蕴含了解开文物秘密之意。通过这样的设计，希望能够促进游客对南京博物院的展品及其内涵进行深入了解。

设计说明



Fig. 5. Coded lock based on eight diagrams

free combination of the cap and bottle also adds interest to the cooking process. Due to the integration of bottle and cap, it can produce a very interesting effect when using it. These sauce bottles just like several ancient females standing in an array (Fig. 6).



女性在多数情况下是厨房的绝对主角，本产品是以唐代女性陶俑为灵感，设计的一款面向女性的厨房调味瓶。产品提取人物服饰、发型、帽饰等元素特点，体现女性“温婉”的特征，可以自由组合的瓶身与瓶盖设计为料理或饮食的过程增添了一丝情趣。除了自己使用之外，亦可作为趣味礼品赠予佳人。

“温婉”系列调味瓶设计



Fig. 6. The Design of sauce bottles

5 Conclusion and Future Works

Based on the creative cultural product design in Chinese museums, this paper gave an analysis to how to optimize product design from the perspective of experience under the backdrop of the reform drive in China. In order to have a better understanding of museum visitors, we conducted survey on target groups based on important factors like their needs, interests, motivation and faithfulness [6]. According to the theory of experience design, we established a design model by applying traditional culture to modern product design. It goes like this: Experience level consists of instinctive, behavior and reflective aspects. Cultural elements consists of aesthetic consciousness, code of conduct and moral value. Design properties consist of physical, logical and emotional aspects. Every level can reflect with each other to form experience design models based on traditional culture and support creative cultural design.

There are so many colorful and diversified advanced productivity force and cultural relics left by the ancient people. They all displayed the wisdom and strength of designers and researchers. Experience products focus more on connecting personal feeling with materials and the short-term or repeated interaction between two parties. This kind of interaction can bring users with totally different feelings, satisfy their needs and create beautiful memory.

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