

Research on the Application of Traditional Culture in Product Innovation Design

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Abstract. Purpose: By analyzing the development status of traditional culture in my country, to explore the problems and difficulties encountered in product design of traditional culture in our country, to propose that traditional culture needs to be innovated and reformed, and to discuss the principles to be followed in the innovative application of traditional culture today gist. Methods: Through literature analysis, case comparison and other research methods to understand the social environment at home and abroad, to analyze the literature of traditional cultural product design innovation, and to summarize excellent design cases. Conclusion: The traditional innovative design of traditional culture needs balanced development, focusing on the regional and contemporary nature of products.

Keywords. traditional culture, product design, innovation

1. Overview of traditional culture

1.1. Concept

The word "culture" existed in ancient China. The original meaning of "wen" refers to the interlaced textures of various colors. The original meaning of "hua" is change, generation, good fortune. But today's "culture" broadly refers to the way of life of human society and the value system based on it. It is the sum of material wealth and spiritual wealth created by human beings in the process of social and historical development. Now refers directly to knowledge. Traditional culture refers to the national culture that reflects the characteristics and features of a nation through the evolution of a certain civilization and is the overall representation of various ideological cultures and ideological forms in the history of a nation. It includes a nation's values, epistemology, method system, way of life, thinking habits, etc. passed down from generation to generation. It is a relatively complete spiritual system. Chinese traditional culture is based on the three traditional cultural thoughts of Confucianism, Buddhism and Taoism. The three are interdependent, interpenetrating and influencing each other to build the whole of Chinese traditional culture. Traditional culture is diverse and broad, including ancient prose, poetry, music, folk music, drama, and national costumes, living customs [1-3].

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1.2. Necessity

Traditional culture has its inevitability and importance, it has a profound impact on the individual, the society, and the country:

From the perspective of culture and identity, traditional culture is the spiritual pillar of the society, which embodies the history, value, and identity of the society. In a diversified society, people can understand their own cultural environment and improve their cultural identity through traditional culture. In addition to these, there is a sense of values, a code of ethics, and a code of conduct that is passed down from generation to generation. This value concept plays an important role in guiding people's behavior, cultivating people's moral quality, maintaining social harmony, and maintaining social stability. Because traditional culture is the witness of human history, only by inheriting and developing it, can human understanding and experience of history be passed on from generation to generation, and can human culture be enduring. This will prevent cultural heritage from being forgotten. The creation of many arts and cultures is also inspired by traditional culture. Traditional culture can stimulate people's creativity and promote new artistic creation and innovation.

Traditional culture not only occupies a place in the country, but also plays the role of a bridge in the world. In this process, the mutual understanding and mutual promotion between countries and nations, thus promoting cultural exchanges and cooperation among countries. People experience and inherit traditional culture together, which can strengthen social cohesion and unity, and thus promote the stable development of society. Therefore, as an important cultural resource, traditional culture attracts people to experience and understand. It plays a positive role in promoting regional economy, increasing employment, and improving regional image.

In general, traditional culture plays a huge role in maintaining individual identity, promoting cultural inheritance, promoting innovation, and enhancing social cohesion, and has irreplaceable value for the sustainable development of a society and a country [4].

2. Status of traditional culture

However, today, traditional culture is facing many practical problems and challenges. The following are some concrete examples to illustrate these problems:

The first is the loss and lack of culture, and the development of traditional agriculture and handicrafts in many villages in China has tended to stall. For example, many young people do not want to continue working in village but seek other opportunities in the city. This resulted in the loss of traditional agricultural production techniques and knowledge, which had a certain impact on the inheritance of rural culture. Second, commercialization and superficializing make traditional festivals and celebrations lose their deep cultural connotation in the process of commercialization; Taking the Chinese Spring Festival as an example, due to the influence of market competition, some places only pay attention to the publicity of firecrackers, shopping, and other aspects, while ignoring the cultural traditions behind the festival and the values related to family reunion. Third, the reform of education system, which is being carried out in many countries, is likely to weaken traditional culture. In some places, due to the emphasis on scientific and technological education, the inculcation of traditional culture may not be enough. For example, in our country, some schools attach much more

importance to modern curriculum than to traditional cultural activities. Fourth, cultural collision: In the context of economic globalization, some traditional cultures are likely to suffer from the impact of different cultures. For example, in some parts of the developing nation, thanks to the popularity of Western popular culture, young people are more likely to accept foreign values than to pay attention to their own traditional culture. Fifth, the impact of the digital society. The rise of the digital society makes teenagers more addicted to the Internet, while ignoring the learning and experience of traditional culture. For example, many young people spend more time on network socializing and online games, but seldom participate in traditional cultural activities. Young people's participation is not enough: some young people do not have enough interest in traditional culture, and the enthusiasm to participate is not high. Some traditional festivals or rituals have fewer opportunities for young people to participate, which affects the inheritance of traditional culture among young people. Taking these examples together, traditional culture is facing a series of problems such as loss, commercialization, educational reform, cultural collision, digital impact, etc. These problems may have an impact on the inheritance and development of traditional culture and need to be solved by the joint efforts of all sectors of society [5-7].

Based on the plight of traditional culture in the context of The Times, traditional culture also faces similar and more complex problems in product design, mainly involving commercial distortion and innovation.

Commercial orientation distortion: In the business environment, some companies will use traditional cultural elements to design products, but due to excessive commercial considerations, cultural elements will be distorted. Commodities only attach some traditional cultural patterns on the appearance, but there is no real understanding of the cultural implications, which causes the emptiness of commodities. For example, the cultural and creative products of many museums on the market are printed directly on daily products with the patterns of artworks. For example, some products only pay attention to their appearances, but ignore the complex implications. This will cause people to have a wrong understanding and prejudice of traditional culture. For example, simply using a cultural symbol without understanding the deeper meaning raises questions about cultural sensitivity. In addition, there is the risk of cultural consumerization, that is, traditional cultural elements are consumerized and become a commodity rather than a true cultural inheritance. For example, some cultural souvenirs sold in scenic spots will become a kind of rampant commodities, thus losing their original cultural connotation [8].

Lack of creativity the design of some products relies too much on traditional cultural elements and lacks creativity; This will result in a stereotypical product design, which is difficult to appeal to young people. For example, the traditional pattern is directly applied to the product design, but it cannot integrate new elements and new ideas, resulting in the product is not novel enough. At the same time, because commodities are global, they inevitably face consumers from different cultures. When trying to apply traditional cultural factors to the design, special attention should be paid to avoid cultural collision and misunderstanding. For example, a symbol in one culture may have a different meaning in another.

Based on the above development status, to better understand the real problems faced by the innovation and inheritance of traditional culture in real life, as well as people's attitudes and expectations for traditional cultural inheritance, the author conducts research in the form of a questionnaire. From Table 1, both men and women have a simple understanding of traditional culture; However, both believe that the innovative

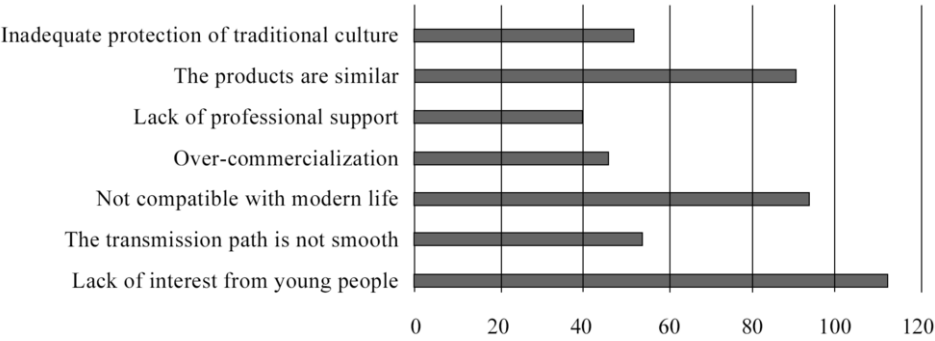
inheritance of traditional culture is very important. However, there is still debate about how traditional culture needs to innovate. Moreover, most participants believe that the lack of young people's interest, the incompatibility of products with modern life, and the excessive similarity of products are the main problems faced by the current traditional cultural innovation and reform (as shown in Table 2), as can be seen from Table 3, the main factors for this are due to insufficient recognition and participation of the public.

Table 1. Results of the intersection (chi-square) analysis of women's and men's understanding of traditional culture and the importance of innovation

Topic	Options	Gender(%)		Total	χ^2	p
		Female	Male			
How much do you know about traditional culture?	Learn a little	55(79.71)	15(48.39)	70(70.00)	11.560	0.009**
	Very little is understood	5(7.25)	5(16.13)	10(10.00)		
	Almost do not understand	1(1.45)	0(0.00)	1(1.00)		
	Well understood	8(11.59)	11(35.48)	19(19.00)		
	Total	69	31	100		
How important do you think is the innovation and inheritance of traditional culture?	In general, innovation can be carried out appropriately	3(4.35)	3(9.68)	6(6.00)	5.861	0.053
	It is important and requires a continuous legacy of innovation	40(57.97)	10(32.26)	50(50.00)		
	Important, but need to maintain the traditional core	26(37.68)	18(58.06)	44(44.00)		
	Total	69	31	100		

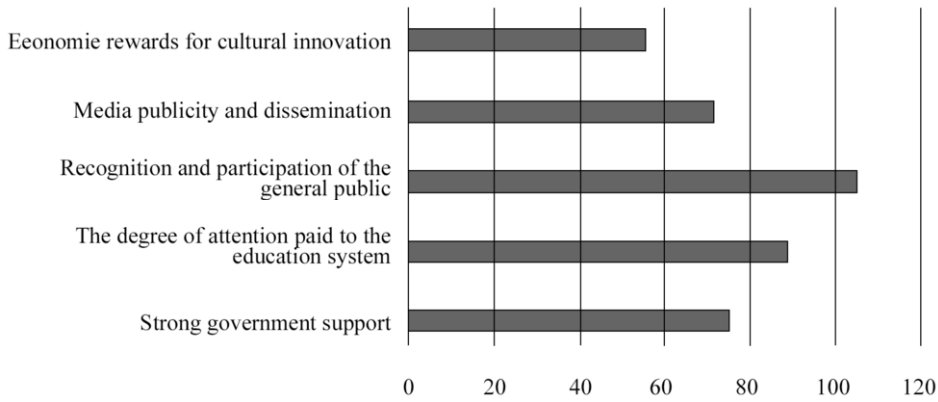
*p<0.05** p<0.01

Table 2. Traditional cultural innovation faces major problems



In short, in product design, traditional culture has problems such as commoditization distortion, stereotypes of cultural symbols, collisions and challenges between different cultures, and insufficient creativity. In the process of integrating traditional culture, it is necessary to have a deep understanding of its connotation, pay attention to creativity, not be too commercial, and retain its own value and significance.

Table 3. The main contributing factors to the problem



3. Key Issues and Measures of Traditional Culture Innovation and Inheritance

Although the protection of traditional culture and the innovation and inheritance of traditional culture have become the main theme of today's society, we are also working hard to explore, innovate and solve, through the above data analysis and investigation research, extract the following three problems facing the most prominent innovation and inheritance of China's traditional culture in product design, and propose corresponding improvement measures through in-depth secondary research and interviews [9-10].

3.1. Unbalanced development—all-round development

Since traditional culture can be divided into material culture and non-material culture, compared to the two, material culture is more likely to receive people's attention and protection because it is real and visible. It is also divided into orthodox classic culture and folk culture. The former is the soul of the nation and the spiritual nourishment of society. After the protection and inheritance of the rulers, the precipitation of history, the assignment of material and status, it has been collected, learned, and inherited by the world; and the latter lacks a systematic protection awareness and mechanism, and its material and status are relatively low, so its value is seriously underestimated. Underestimated, except for direct inheritors, it is rarely widely known by the world. For example, in the same traditional culture, the Forbidden City and the Great Wall in Beijing can be preserved as completely as possible, but non-material cultures such as paper-cutting, shadow puppetry, and Peking opera may gradually become extinct as the number of inheritors decreases. It is also a traditional building, the Forbidden City can be completely preserved, and can be repaired periodically; however, residential buildings are rarely preserved, and are rebuilt or demolished with the times.

The power of public opinion is powerful, just like the current popular "national trend", which will strongly drive economic consumption, stimulate design innovation, and thus attract attention to traditional culture. From a positive point of view, once a traditional culture is developed, other traditional cultures will also be affected by "ripples", whether it is from the economic point of view of the businessmen or the psychology of consumers to catch up with the trend. It can be said that "let some cultures get rich first". At present, we have achieved partial development, and now we need to

develop in an all-round way. Comprehensive development can be carried out in two ways. One is top-down, where the state and relevant departments issue laws and regulations to advocate the protection of traditional folk culture; the other is bottom-up, where designers pay attention to traditional folk culture and design a more diversified traditional culture product.

3.2. The products are similar and lack regional characteristics—regional characteristics

Our current products are too homogeneous, and differentiation has become a kind of scarcity. The number of products to choose from continues to increase, and the proportion of truly meaningful products is declining. The first way to defeat homogenization is to increase the regional characteristics of products. For example, refrigerators, in our impression, seem to have the same function of keeping fresh and freezing ingredients. In some parts of Africa, in addition to the most basic fresh-keeping and freezing functions, refrigerators also need to have anti-theft functions. This is due to the relatively backward economic conditions in some parts of Africa, and after families with better conditions have refrigerators, they have added functions to prevent domestic servants from moving food without permission. Then our south is humid, and the temperature is high; the north is dry and the temperature is low, which will also form obvious regional differences. Using this regional difference, we can create unique regional products. Although the sales of regional products will be narrowed in general products, they will have an overwhelming advantage in products with strong regional characteristics, making their products more competitive in a market with serious homogeneity.

To enhance the regional characteristics of products, it is necessary to focus on the local regional culture itself. Take the tomb of Marquis Haihun in Nanchang, Jiangxi as an example. This is the tomb of Liu He, Marquis of Haihun in the Western Han Dynasty. This "Mountain of Money" is made up of five-baht coins, about 2 million pieces, weighing more than 10 tons. Its value is equivalent to 50 kilograms of gold today. In addition, it is famous for its goldware, including 285 gold cakes, each weighing about 250 grams. There are 20 gold plates, each of which weighs 1 kg. This is its unique feature. Then when promoting and designing, we can highlight the "golden" feature. In product design, whether using golden tones in terms of color or metal decoration in terms of materials, we can well promote the characteristics of Haihunhou, rather than stereotyped Museum design for bookmarks, silk scarves, badges. Only when the design has unique innovation points will people have memory points, so that it will no longer become a "homogeneous" product.

3.3. Products do not fit modern life—modern products

Traditional culture is the product of people's historical life in the past. Every era has a different living environment and way of life, so it has its own different needs, and the market will provide and produce corresponding material and cultural products. Whether it is material or spiritual products, they are all adapted to people's needs. The core of my country's traditional thinking of using things is practicality. The reason why many traditional cultures have not been passed down is largely because it does not meet the needs of the later times. This requires contemporary traditional culture inheritors and

designers to pay attention to the changes and development of traditional culture in the current social environment when they perceive social changes and think about inheriting traditions and innovative development and carry out "redesign" on this basis. It cannot and should not be forced to accept things that people do not need and cannot be produced for the purpose of inheriting traditional culture.

The inheritance and development of seal cutting seals is a positive case that can be used for reference. In ancient times, the seal was a token to show someone's identity and issue a certain order, and it was also a carrier for literati to express their hearts. In modern times, due to the popularization of fountain pens and simplified Chinese characters, signatures have become more convenient. Hand-carved signature seals have become a hobby of people who have leisure, elegance, and high life pursuits, but the seals have not disappeared from our lives because of this. A special chemical synthetic material invented by Japan in the early 1990s. The photosensitive stamp is made of a special equipment that instantly emits strong light radiation to cause photooxidation and thermal crosslinking on the surface of the material. It can be printed once oiled. More than 1000 times and can be refilled repeatedly. In addition, the personalized seal design makes the seal more widely used, such as company official seal, personal handwritten signature, children's fun seal... The integration of new materials and new needs in the modern era has made the seal continue to develop.

4. Case analysis of traditional culture integration

Although the innovative design of our country's traditional culture still has a lot of shortcomings, there are always some products that can stand out in the vortex of serious product homogeneity.

As the representative of Chinese traditional culture and the leader of Chinese museums, the Forbidden City has launched many cultural and creative products that we can learn from. Figure 1 shows the "everything goes well" office cup sold by the Palace Museum. This product is derived from Zhu Jianshen's "Auspicious Omens of Years" in the collection of the Forbidden City. Ripe persimmons are put into the vessel, and the lid is patterned with persimmon stems, implying that everything goes well, and you are always satisfied. There is an ear-shaped handle on one side. When using it, the index finger and middle finger are hooked and fit snugly with the small ear. It is easy and effortless to hold the cup with one hand; the cup body is coated with red lacquer glaze, and the handle is painted with gold by hand, which can easily distinguish and identify functions; At the same time, the outside of the cup has a matte texture, which increases friction and reduces the probability of hand slipping and breaking. The inside of the cup is made of smooth ceramic material, which is easy to clean.

From the product in Figure 2, we can see that in terms of name, it uses the homonym of "persimmon" in traditional Chinese characters to carry a beautiful meaning and endow the product with rich emotional value; in terms of shape: two persimmons The superposition of the shape becomes the mug that we often use in our daily life; in terms of color, it adopts the brick red of the red wall of the Forbidden City. When a product gives people the first impression that it is a product of traditional Chinese culture, then it is a successful cultural and creative product. Secondly, we look at its emotional value and its own meaning, whether it really combines traditional culture and modern products. Fusion, not blunt splicing.



Figure 1. "Everything goes well" cup



Figure 2. Y Chair.

Any form and symbol of beauty can be used as a design element in the design. The purpose of adding design elements in product design is to eliminate the strangeness of the product and convey accurate product information to users. Just like this chair, users can easily see that it is a Ming Dynasty armchair with Chinese tradition, but the difference can be seen if you look closely. First, the back of the chair adopts a "Y" character instead of the traditional curved backboard; secondly, the traditional Ming-style armchair is connected by tube feet, which are raised successively from front to back, which is a step-by- step style. Although this Y Chair also adopts a step-by-step shape, But the height has been increased a lot, and it mainly plays the role of supporting the chair, ignoring the function of the foot. This is a very Chinese-style Y Chair designed by Danish designer Hans Wegner based on Ming-style furniture. The application of Chinese elements in design is doomed to design with Chinese taste, which has nothing to do with the nationality of the designer. But one thing we need to think about is, why is it not the Chinese who have been familiar with it since childhood, but friends of other nationalities who have made our country's traditional culture so wonderful? Perhaps it is because we have been in this environment for a long time that we are too accustomed to traditional culture, and regard it as a normal life, so it is difficult to discover its wonderfulness. Sometimes we need to jump out of the usual thinking paradigm when designing, "Stand far away "To observe life, to observe things.

5. Epilogue

We should face up to the impact and impact of Western design concepts on Chinese contemporary products and designs, take the essence and discard the dross, creatively apply Chinese traditional culture to product design, endow Chinese traditional culture with infinite ductility, and create a new path. It belongs to the Chinese people's own road to the development of contemporary product design. After thousands of years of tempering, traditional culture has formed immeasurable aesthetic value, artistic value, and cultural value, making it feasible to infiltrate product design and even design. As long as it is applied properly, it will definitely enhance the appreciation of the product at the same time, it gives the product more cultural connotation, arouses the emotional resonance of users, and then better inherits and develops the traditional culture of the nation.

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