

# Exploration of the Cultural Product Design of the National Palace Museum from a Qualia Viewpoint

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**Abstract.** This research is focused on the cultural product design of the National Palace Museum (NPM) from a “Qualia” viewpoint. Because of the rapid rise in cultural product design in recent years, the Taiwanese government has led industrial development in emphasizing “Qualia,” the emotional value or sense of quality goods. The NPM is being used as the flagship to create national policies for the cultural product design industry. The researchers have chosen the most well-known collection at the NPM - Jadeite Cabbage - as the subject of the research and to which to apply this cultural product design concept. The subjects for this study are products from the NPM's gift shop and online store. Content analysis and literature review were the methods chosen to explore the style and quality of the cultural products of the NPM. The findings and some suggestions for improving product design and administrative measures are presented.

**Keywords:** qualia, cultural product design, museum, National Palace Museum.

## 1 Introduction

Because of the impact of economic globalization, development of product design is facing a conflict between localization and globalization. Seeking a kind of compromise has become the competitive strategy. The government in Taiwan develops the cultural and creative industries actively, having incorporated six new industries and set forth the National Development Plan, but also energetically promoting measures to assist industries in upgrading. [1] It is a significant issue to study the manner of enhancing industrial competitiveness through the improvement of value-added product design.

Moreover, with the development of Perceptual Engineering, accentuating the “Qualia Concept” of the emotional value of products has become important to product design styles and trends. SONY in Japan introduced the idea of a quality-oriented program called “Qualia-Project”. In recent years, the Corporate Synergy Development Center in Taiwan has been expecting to increase value-added products and services as well as shape corporate style to enhance overall industrial competitiveness through the

promotion of the “Plan of Qualia Advance for Small and Medium Enterprise”. At the Ministry of Economic Affairs, this guidance is anticipated “to create a new feature with quality, to construct style with competitiveness.” Consequently, cultivation of a sensual quality needs to be clarified. [2] On the other hand, the National Palace Museum is internationally known for the precious cultural Chinese Imperial Palace, the exquisite aesthetic image representative of Taiwanese culture. It is the largest and most well known museum in Taiwan with a collection of over 67 million Chinese cultural relics.[3] In accord with the fact that cultural product design shows uneven qualities, it is necessary to research the NPM products because of their leading role.

Therefore, this study is from a qualia viewpoint to explore the cultural product design of the NPM. For the specimen, the researcher adopted the most famous piece at the NPM – “Jadeite Cabbage”. For the area of study, the researcher chose the products of the NPM to research, both those at the gift shop and online, through the methods of analysis, picture and literature, hoping to advise and offer recommendations and references to the NPM to enhance the product quality.

## **2 The Derivative Product of the Greatest Treasure in the NPM - “Jadeite Cabbage”**

Of the 67 million pieces of the NPM 's cultural relics[4], Jadeite Cabbage” is the most well known, and from which the largest number of products are developed and designed. Hence, concerning the exploration of “Jadeite Cabbage” culture and its derivative products, we must first discuss the heritage itself.

### **2.1 An Analysis of the Form of “Jadeite Cabbage”**

In terms of shape and color, “Jadeite Cabbage” is a realistic creation. White and green in color, the height is 18.7 cm, smaller than real cabbages in Taiwan. Gray leaf stems and green leaves account for about half of its entirety. (Figure 1) There are two insects on the leaves. The dark green insect, which scholars call a katydid, has the larger body of the two. The Northern Chinese called this insect a Guoguo because of the sound, while it is also called a grasshopper. The posture is that of a katydid ready to spring into action. (Figure 2). According to research its sound is a mating call to the female. [4]

The insect on the other side is a locust, green in color and smaller. (Figure 3). With regard to texture and materials, Jadeite Cabbage is semi-translucent. It belongs to a Jadeite type produced in the mountains of Yunnan to Myanmar: the colors are pure white, from the sodium aluminum silicate mineral, and green, because it contains chromium. Furthermore, if the jade color is rich with red, it may contain iron and is commonly known as “Fei.” [5]

“Jadeite Cabbage” is a refined quality creation. It is labor-intensive and costly to refine jade into a piece of artwork, therefore it is necessary to consider how to save labor and materials. [6] With this in mind "Jadeite Cabbage" is an ingenious sculpture, a realistic creation, which was released from naturally colored jade. [7]



**Fig. 1.** Jadeite Cabbage  
Length 18.7 cm, Width 9.1  
cm, Thick 5.07 cm, Photo  
by National Palace Museum



**Fig. 2.** The katydid on Jadeite  
Cabbage, Photo by National  
Palace Museum



**Fig. 3.** The locusts on Jadeite  
Cabbage, Photo by National  
Palace Museum

## 2.2 The Interpretation and Meaning of Qing Jadeite Cabbage

This work originally was placed in the Forbidden City's Yung-ho Palace, which was the residence of Emperor Kuang-hsi's (1875-1908) Consort Chin. For this reason, some have surmised that this piece was a dowry gift for Consort Chin to symbolize her purity and offer blessings for bearing many children.

There are two insects that have alighted on the vegetable leaves. They are a locust and katydid, which are traditional metaphors for having numerous children. Study reveals that the female katydids lay 13-152 eggs, grasshoppers lay 200-440 eggs, and locusts lay approximately 128-1500 eggs. [8] "Zhou Nan, China generations" Book chapter V, Katydid" said that katydids represented "the blessing of giving numerous children" Consequently, Jadeite Cabbage represents the blessings of married women, "bringing numerous children".

## 2.3 The Overall Evaluation of the Qing Jadeite Cabbage

For the form of shape it displays, it consists of a popular subject matter of life, modeling realistic exquisite workmanship and precious materials. The later connotation, given the warmth of its auspicious meaning and allusions, greatly improved the value of the Jadeite Cabbage, and enhanced the public's impression as well. Overall, the "Qing Jadeite Cabbage" is an excellent creation. However, with the museum's strong promotion, Jadeite Cabbage has become famous as a top attraction of the NPM.

## 3 The Derivative Product Design of Qing Jadeite Cabbage

By Dec. 2009, there were 198 different products using the design of Qing Jadeite Cabbage. Most of the products are co-produced through the "Brand Authorized License Project" and the "Open Invitation Derivative Product Partners Project." In addition,

these products are the fruits of labor of special development and competitive production of special projects design working together.

### 3.1 Brand Authorized Licensing Project

Brand Licensing refers to an open way to seek and accept its own brand business. The company agrees with the proposal for the NPM series products of the enterprise cooperation. There are now namely 7 companies and the development and design of related products is up to 94. The category includes replicas of artifacts, food, stationeries, and life products [9]. Besides, the NPM accepts mostly private companies to apply to cooperate for designing the cultural products. But the NPM alone holds the right of authorization of the products. By Dec. 2009, there were 104 pieces of cooperative products of Qing Jadeite Cabbage, including stationery, jewelry and household items. (Figure 4-6) [10] The cooperative items of Qing Jadeite Cabbage are listed in the following table.

**Table 1.** The list of Cultural Goods derived from Qing Jadeite Cabbage

Source	Category	Item	Quantity	Total
Brand Authorized	Cultural Reproduction	Ceramics, Gold, Glass	94	198
	Foods	Chocolate, jelly, cake, pineapple cake, chocolate cake		
	Stationary	Pencil boxes, magnets, key chains, ornaments, stickers, folders, plates, mugs, mouse pads, dolls, stationery, note paper, pens, pencils, notebooks		
	Commodities	Badges, glasses case, passport holder, key ring, strap, stickers, folders, wallets, handbags and so on.		
Cooperation Development	Stationary	Paper, memo book town, name card box, gift set, notebooks, journals, letters demolition?, bookmarks, clip, pen, stamp pad, mouse pads, stationery, folders, memo clip, magnetic, magnets, postcards	104	

Note: Finished by Me-Hsien, Huang, 2009



**Fig. 4.** Derivatives of Qing Jadeite Cabbage -- Stationery and Commodities (Photo by Mei-Hsien, Huang)



**Fig. 5.** Derivatives of Qing Jadeite Cabbage -- Cultural reproduction and Foods (Photo by Mei-Hsien, Huang)



**Fig. 6.** Sample Pictures of derivative products of Jadeite Cabbage (Photo from [https://www.npmeshop.com/ct\\_search.aspx](https://www.npmeshop.com/ct_search.aspx) 2010/11/01)

#### 4 The Idea of Qualia Conceptual Cultivation

The word, qualia, derived from Latin, is close to the English word 'quality'. Qualia is based on a person's internal subjective experiences and how those experiences made that person feel. In general, the meaning of "quality" trends the function; "qualia" trends "feeling" and "emotion". A "Qualia product" means a product that can heighten customer experience through touched mind or joyful feeling, such as a beauty, creativity, humor, giving customers additional motives to buy beyond that of practical function.

Nobuyuki Idei, the former chairman In the SONY Corporation in Japan, offered this idea of "qualia" in 2004. He believed that although quality is what enterprises paid attention to in the past, talking about quality is not enough; we must also take advantage of creating emotional life experiences for different levels. He suggests "the economic charm of qualia." [11] Afterward, there were some related sayings raised. Here are three important sayings as fellows.

#### 4.1 Function to Human Feeling - The Development of Product Design

In his history of product design and development, Lin (2009) pointed out that the development of 20th century product design should be divided into five stages in the following order: design for function, design for friendliness, design for fun, design for elegance, and lastly, design for feeling. [12 ] This refers to 21st Century human design, which emphasizes the inherent humanity of the unique aesthetic and psychological needs of feelings. It is significantly different from the early 20th century, which emphasized the practical and physiological needs of a "functional" design. As a result, the sense of the quality designed product is not only getting increased popularity but also tends toward the personalized, a taste of the culture and so on. The intangible emotional value of goods is gradually surpassing the useful value of commodities. This is the "sense of qualia".

#### 4.2 Attractive Quality

Japanese scholar Noriaki Kano looked from a psychological viewpoint to analyze the internal needs of the customer. He proposed in 1984 that the two-dimensional quality mode coordinates the "useful quality" and "attractive quality". If the product is of good quality, customer satisfaction is high for sure. In contrast, customers will give a negative assessment if the product is bad. With the increase of product quality, customer satisfaction raises exponentially. (Figure 7) [13] Hence, if attractiveness is unexpected by the customer because usefulness is the necessary and basic requirement of product quality, from the Kano mode of view, regardless of how much a product is improved, customer satisfaction is limited.

Afterward, Noriaki (1996) emphasized the importance of "Attractive Quality" and pointed out that Creativity and Engineering are the vital progressions to achieve and create the needs in the customer's mind. On the other hand, Attractiveness, Beauty and Delicacy are skills to enhance added value of goods by unique style.



Fig. 7. Kano model of product development and customer satisfaction (Noriaki, 1984) [14]

### 4.3 Cs and 3 Levels' Cultural and Creative Design

In cultural and creative design, Lin (2009) brings the idea of the 4C's factors that can be characteristics of goods: 1) Cultural: Cultural and creative life is the creation of culture as a starting point. 2) Collective: From the heritage of culture and creativity come selections of representative elements of daily necessities. 3) Cheerful: Cultural and creative work is enjoyable and pleasant. 4) Creativity: This is the synthesis of the creative combined with the cultural life. These 4Cs are the elements.

After Leong (2003) proposed the research architecture of cultural product design into the outer(tangible), mid(behavior), and Inner(intangible) levels of cultural space. [15] Lin (2005) based on this cultural framework space and offered the design attributes: (1) outer or tangible level, inclusive of color, texture, shape, surface ornamentation, component composition and other attributes, (2) mid or behavior levels which includes cover features, interoperability, ease of use, security, integration relationship property, and (3) Inner or intangible levels defining indulgence products as having special meaning, the product being a narrative, the products having feelings, the product of cultural traits and so on. The inner or intangible levels is most closed to qualia. [16] Lin (2006) moreover points out that from the user-oriented scenario is more in line with cultural context. [17]

From above concepts, qualia is an important aspect of product design. It touches the deepest inner joyful feelings of consumers' hearts and attracted them to buy the product more than only good practical function. Attractiveness, beauty, creativity, delicacy and engineering are the basic elements. This value-added design is valuable for us to be concerned.

## 5 The Exploration of "Jadeite Cabbage" from the Qualia Viewpoint

Qing Jadeite Cabbage is currently one of a considerable growing number of derivative products. The researcher considered that the phenomenon reflects some comments.

### 5.1 The Good Characteristics of the Derivative Product

There are several characteristics of the Derivative Product of "Jadeite Cabbage". In the first place, regarding daily life and popular collections, the products designed from museum artifacts purchased by the public are designed in a variety of ways to serve daily necessities as well as for admiration, bringing universal heritage into people's lives. Secondly, since the collection is based on product design, development and production, it stimulates industry and commerce, not only expanding the museum's collection of applications, but also enhancing the museum's economic revenue. Thirdly, by using locally designed and created products, localization is advanced as well as internationalization since the products are sold to an international market. The local market is aided while the spreading of goods into the international market brings more attention to the museum.

## 5.2 The Defects of the Derivative Product

However, from a qualia viewpoint, an overview of the current culture of the Qing Jadeite Cabbage products reveals there is still much room for improvement. Four points could be considered: (1) The form of product design is conservative. On the layer of the form of product design, the shape of product design of the NPM is certainly used in many life-styles. But most used are relics of the original shape and its pattern of replication, or they are reposted. These designs lack of distortion, transformation, and other sublimations of a substantial design variation, and regarding color, they are rarely objective. (2) The range of product design application is narrow. On the layer of the marketing of product design, the range of product design application is too narrow. Product design is limited to reproduction of the sculpture, food gift boxes, stationeries and small household items. In the context of daily necessities, the applications are still very inadequate. Also, the designed products are geared toward the adult perspective, lacking in market segmentation; children's educational products are too limited. (3) The cultural content of product design is rare. On the layer of the internal aspects of product design, the product is within its own cultural definition. However, most of the emphasis is on the appearance of the design while short in statement understanding and cultural connotation, not considering the depth of the meaning, and neglecting to show expression and active design. (4) The overall style of product design lacks creativity. On the layer of the overall style of product design, the Jadeite Cabbage is rich in high quality elements of the cultural and creative spirit. The product design of the NPM was originally based on the Chinese Palace's degree of beauty and refinement. It had unique advantages and characteristics of life applied to different items. The NPM products in Taiwan have a high degree of culture and creativity, representative of Taiwan in the Central Plains and its unique depth of creativity. However, due to the lack of cultural form and content and conservative interpretation design, government and academic cooperation continues to develop the design. In addition, the cooperation of science and technology still needs to move forward.

## 6 Conclusion and Recommendations

NPM is the flagship of Taiwan's cultural and creative industry. As pilot for Taiwan's cultural creative image, the quality of its product design collection is of key and essential significance. The NPM is currently active in promoting cultural and creative planning for the park for transacting cultural and creative study, revealing the intentions. The researcher holds an extraordinarily optimistic attitude about the improvement of cultural and creative product design development.

Qing Jadeite Cabbage is the most popular heritage item. The sales of products designed with it in mind are higher and more significant than any other of the NPM cultural goods. Regarding overall style, it has more than just beauty and delicacy. However, the combination of creativity and technology are the weaker points, so the attraction will be relatively limited. Concerning the quality side, the goods of the NPM are representative of popular views, modern elegance and a sense of creativity.

The researcher suggests some recommendations from two aspects. On the product design side, the suggestions are: 1) To strengthen the design of the transformation and deformation, and avoid the negative heritage copy of the designs and patterns, 2) To



expand the cultural heritage by employing product design application according to the needs of different consumers' interests, especially those of children, and 3) To expand the cultural definition of goods.

On the administrative operations side the suggestions are: 1) To expand the company to design, enriching the heritage application design; 2) To combine government with academics and cultivate goods design talent; 3) To enhance design quality and competitiveness, assisting in traditional design services industry; 4) To enhance product design and development partnered with the domestic and international research community; 5) To increase the offering service of more digital pictures of artifacts to provide richer design elements; 6) To promote design education, enhancing the aesthetic quality of the consumer; 7) To expand the scope of cultural relics made to enrich the design elements; 8) To consider lowering the cost of licensing as a strategy to improve the use and design of business.

In summary, the cultural products of the National Palace Museum have multi-dimensional meanings, including Taiwan's localization, target, brand, and international significances. So, it is of great value, through the cooperation of industry, government, and academic, to research the development continually.

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