

A Study of Innovation Design on Taiwan Culture Creative Product – A Case Study of the Facial Mask of Ba Ja Jang

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Abstract. In the trend of advocating the cultural and creative industry in recent years, Taiwan elevates the people's spiritual satisfaction and the value of cultural products through the mutual impact of art/culture and the creative design. This is just a new-type industry that all nations worldwide pay attention to in recent years. This research studies on Taiwan's local Ja Jang culture transforming in the innovative design of cultural and creative products. Besides actually developing the product design of Ja Jang culture, we emphasize much more the discussion on the essence of cultural products and the construction of designing mode. According to the research result, there are four conclusions: 1. In terms of the development of Taiwan's cultural and creative industry, the focus should be on (1) centering on key industries, (2) cultivating the cultural industries with Taiwan's specialties, (3) introducing international capital, having international communication, making good use of China's resources, and (4) founding a platform of information integration. 2. The designing meanings of cultural products should contain three levels, which are the exterior level (visible and material), the middle level (of using behavior and ritual/customary), and the interior level (ideological and spiritual). 3. Comparing to attributes of general product design, the cultural product design generally changes from use-base to the elevation of symbol value to bring out the product's peculiarity and its differentiation. 4. The design mode of Taiwan's local culture is constructed, and products of global culture are brought from the age of technology to the age of design for “heart” of humanistic culture.

Keywords: Taiwan, cultural and creative industry, innovative design, & Ja Jang.

1 Preface

1.1 Research Background and Motivation

“Design is a kind of expression of culture.” Culture is also the base to fire up a designer’s creative thinking. Therefore, a design without culture is just one without its root. It cannot vitalize products. Klaus Krippendorff (1990) proposes that “designing means giving meanings.” In the aspect of product design, cultural image can create

special product language to bring out characteristics of products and to make products more valuable. Hence, a design has to integrate technology, science, art, culture, and other fields in the future to create more possibilities of future and to impress customers with designed works containing cultural meanings (Holt, 2000; Pilgoim, 2000). In the 21st-century digital and technological age, the design whose spirit is humanity and whose body is culture appears more important. That is called cultural and creative design.

The specialties and types of Taiwan's current cultural and creative industry include the extension of the creative content, which is emphasized by this industry, and the everlasting of art, culture, and life assets. Furthermore, it also includes cultural creative service industry which follows the steps of aesthetic and experiential economy and takes the development of diversified values as a theme to display the aesthetic style and life style in the activities of the industry. Ja Jang culture is the most animate performance group in Taiwan society. On every festivals held by temples to celebrate gods' birthday, many Ba Ja Jang groups will come to participate in the religious ceremony of welcoming gods and the local religious round tour. The facial mask-like makeup of Ja Jang contains strong implication of cultural spirits from its patterns, vivid colors, or exquisite painting skills. Those are attractions of the performance group. This research studies on the creative design of the cultural and creative products through Taiwan's traditional and religious Ja Jang culture. It analyzes the components of Ja Jang's facial mask-like makeup from viewpoints of pictorial symbols, cultural meanings, color meanings, and others to design and develop cultural and creative products and to elevate value of products.

1.2 Research Objectives

Ci-sian Syu (2004) generalizes a conclusion that a cultural product is reflection and review toward the contained cultural factors in the product itself. Designing is used to search a new modern face from the cultural factors and to seek satisfaction of the spiritual level when it is used. Moreover, Leong (2003) claims to study the cultural product design from viewpoints of the concrete, behavior of use, and the cultural space of the invisible spiritual level to formulate a design argument of the cultural integration. Therefore, according to the abovementioned background and motivation, this research made three objectives as the following:

1. Through the development of the relevant policy making and situation for the global cultural and creative industry, this research studies on the differentiation between Taiwan and other countries.
2. This research aims to construct a creative design mode of cultural and creative products for reference for designers to design relevant cultural products in the future.
3. Through the analysis of symbols and patterns on Ja Jang's facial mask-like makeup and the discussion of the cultural meanings, this research transform them into designing elements to develop and design cultural and creative products to give products new value.

2 Literature Review

2.1 Cultural and Creative Industry

In “Challenge 2008 Six-Year National Development Plan” proposed by the Executive Yuan in 2002, the “Development Plan of Cultural and Creative Industry” is especially included in it. In the light of the situation of Taiwan’s industry, it gives a definition of the cultural and creative industries, which refer to “those that origin from the accumulation of creativity or culture, that create wealth and potential of working opportunities, and that facilitate the elevation of the entire living environment, through the formulation and operation of the copyright.” Fig. 1 shows the relationship among culture, design, and industry in the cultural and creative industry. Gang Pan (2003) mentioned that if an industry only has creative performance and industrial mode, it can only be called a creative industry; if an industry only includes cultural implication with the industrial mode, it can only be called a cultural industry; if there are only cultural implication and creative performance without the implementation of the industrial mode, it will become an overhead development with only culture and creativity.

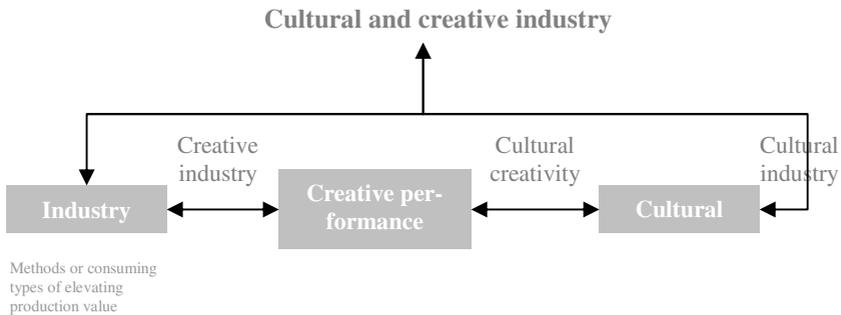


Fig. 1. The relationship among culture, design, and industry

The Current Situation about the Development of Taiwan’s Cultural and Creative Industry. According to the statistics gathered by Industrial Development Bureau, Ministry of Economic Affairs, it shows that in terms of the business volume of the entire cultural and creative industry from 2004 to 2006, the total business volume of the cultural and creative industry in 2006 is 586.23 billion dollars and grows 0.89% more than that in the last year. However, the growth range in 2006 is smaller than that in 2005, which is 4.41%. With the investigation of the factors about the deceleration of the entire business volume growth in 2006, we know one of the factors is the assistance and promotion to Taiwan’s cultural and creative industry has been supported by the government for five years, so the growth becomes stable. Besides that, according to the individual industry analysis, comparing to the recession range of the growth rate in 2005, the cultural performing facilities industry, musical and performance industry, and the visual art industry has greatest recession. Because most cultural performing facilities operators are operated as non-profit organizations, the estimated total production value should be more than 8.7 billion dollars according to the estimation method

for production value of non-profit organization. Therefore, the estimated production value here should belong to the conservatively estimated income.

The Current Situation of the Development of the Global Cultural and Creative Industry. The cultural and creative industry is a newly emerging industry globally developed from various local cultures. It is also a kind of aesthetic economy and a creative industry. It is estimated that the global cultural and creative industry can create 22 billion US dollars of daily production value. In addition to America, Britain, Japan, and other big nations of the cultural and creative industry, Thailand, India, and Singapore emerging in recent years all devote themselves one after another into the relevant promotion and construction of the cultural industry because they realize the enormous commercial profit in the cultural and creative industry. From the analysis, some points can be concluded for reference for the development of Taiwan's cultural and creative industry in the future:

1. Focusing on key industries – Focusing on key industries can centralize resources of cultural and creative development and prevent from the dispersion of the developing focus in order to effectively facilitate the development of Taiwan's cultural and creative industry and to elevate the international visibility.
2. Cultivating cultural industries with Taiwan's specialties – Focusing on and cultivating cultural and creative industries with Taiwan's specialties can not only help the local development but also make Taiwan's culture and creativity differentiated and visible in the international markets.
3. Introducing the international capital, communication with international trend and making good use of China's resources – Taiwan can communicate with China's non-governmental organizations and makes good use of China's resources. These can be seen as outposts to enter the global Chinese market and to extend the visibility of the cultural industry.
4. Establishing a platform of resource integration – In face of industries and the masses, if Taiwan's cultural and creative industry can establish a convergent and integrated communication channel, it is believed that the communication between industries and the government, between industries and consumers can be smoother.

2.2 Cultural and Creative Products

The Relation among Culture, Code, and Design. Culture is a kind of code hidden in these product designs or in the producers (Pei-ling Li, 2002). If relating culture to the design level, it refers to the factors of delivering designing styles. Then, culture contains the following meanings (Ockman, 1993): (1) Culture refers to the designing result from life styles, customs, values, and systems. (2) Culture refers to the thinking level of design, especially those ideas or concepts that can influence designing results. (3) Culture refers to interpretation of reasons about differences of designing products from different races or groups. (4) Culture refers to the designing concepts which take consumers' taste as a center and views these as mobile factors.

From Ockman's viewpoints on the cultural reference to design, we can find that from cultural perspective, many aspects of inner and external meanings presented by design can be analyzed. They can be factors to explain differences, influences, or results. In terms of "de-sign" in English, sign is a cultural code or symbol. It is also a

cultural representation. Therefore, design is de-code, re-presentation, or de-culture. In other words, it means through the transformation to interpret the current cultural styles and characteristics, and through meanings of codes, signs, and representation, the relation among design, culture, and code is combined to one.

2.3 Taiwan's Religious and Customary Culture – “Ba Ja Jang”

The Origin of Ja Jang. There are various Taiwan's traditional religions. These lead to the scenery of numerous temples established locally. Among these, “Ja Jang” is the one that can represent the performing groups of religious cultural art in Taiwan's temple fairs. Ja Jang generally refers to god's private guardians. Their job is to guard gods and assist the main god to carry out mission. Because there are different main gods, different guardians will be allocated to different gods according to positions. The religious role of Ja Jang is to assist in arresting ghosts and evils when the main god, Five-blessing Emperor, conducts a royal progress. Ja Jang attack and arrest those ghosts and evils by special footwork and array to protect people and places. From the artistic viewpoint, Ja Jang's facial mask-like makeup, the spirits of patterns, the arrangement of clothes colors, and rhythmic motions are combination of power and beauty.

Ja Jang's Responsibilities and Organization. The sacred guardians played by Ja Jang groups represent different positions according to their roles. Their different looks contain cultural meanings, such as different facial mask-like makeup, clothes, religious objects, and equipments. The detail is illustrated in Table 1.

Table 1. Ja Jang's Responsibilities and Organization

Role	Responsibility
Guardian of punishment implements	The main mission is to “lead the way” for the group and to shoulder the pole of punishment implements.
Civil and military guardians	They are responsible to receive and deliver commands from the main god. They hold edicts and group flats in hands.
Generals Gan and Liou	They and Generals Sie and Fan are organized as a group of four generals to arrest criminals.
General Sie and Fan	They are so-called the “elder and younger master” or the “seventh and eighth master.” They stand in the back of the first line. Therefore, they are also called “the second line.”
Gods of four seasons	Gods of four seasons assist the back line to arrest criminals and to interrogate the wandering ghosts arrested by the four generals.

3 Research Method and Procedure

3.1 Research Method

1. **Literature Analysis.** Literature analysis is one method used in the history graduate schools. It focuses on the description of the literature content and arranges the literature order chronologically for the convenience of understanding.

2. **Case Study.** Case study is a research to study the subject in order to decide the factors that result in states or behavior of individuals, groups, and institutions and to understand the relationship between these factors.
3. **Morphological Analysis.** Morphological analysis classifies every important part (independent factor) and analyzes them according to each independent and complete data archive system of components. This analysis is provided to the design type and style which is waiting to be completed, and then the final product design will be made.

3.2 Research Procedure

This research aims to study Ja Jang group culture of Taiwan’s traditional performance groups and to summarize these cultural implications chronologically and orderly through literature analysis to analyze historical materials and documents. At the same time, this study will adopt case study method to analyze other researches on the development and design of related cultural and creative products based on the analysis of cultural images. These researches may acquire the results from literature collection, analysis, and actual and on-site case study. Through the pattern’s styles of Ja Jang’s facial mask-like makeup, this study use morphological analysis to classify samples and describe the detail parts to analyze the characteristics and meanings of works in order to obtain the design elements needed by the product design. And then we can further develop and design creative products that represent Taiwan’s Ja Jang culture to elevate the value of the products.

4 Results and Discussion

4.1 Case Study of Cultural and Creative Products

In Table 2, cases about cultural and creative products developed from Taiwan’s cultural images are listed. Through the analysis of cultural and creative products, we can know the symbolic meanings of the cultural signs, the transformation of the product’s functions, the meanings of historical stories, and the design terms.

Table 2. Case Study of Taiwan’s Cultural and Creative Products

Title of the Product	The Original Picture before Transformation	Picture of the Cultural Product	Analysis of the Product
Figurine of the Blessing God	 Ma Zu, Groundskeeper God, and other gods in Taiwan’s religions		These figurines of gods are made by applying Taiwan’s religious culture. The products are made with strong religious and cultural stories.

4.2 The Attributes and Implication of Form of Ja Jang’s Facial Mask-Like Makeup

The subjects of this research, the innovative design of the cultural and creative products, are General Sie and General Fan of Ba Ja Jang. From their unique and abundant

cultural meanings and attributes of difference, morphological analysis will be used to simplify codes and form of the facial mask-like makeup with tracing draft and to understand each code's meaning for the use of application and abstraction of design elements in the future. The analysis is showed in Table 3.

Table 3. The Implied Meanings in Form of Ja Jang's Facial Mask-like Makeup

General Sie	
Implication of Codes	<p>◎ The transformation from the white crane. In the performing array, the action like a white crane stands in a single leg and flaps its wings.</p> <p>(1) In the middle of the forehead writes a transformed word of “loyalty” which is a symbol of combination of Chinese blessing and longevity. There is another saying that some people interpreted the word, center (the pronunciation is the same with loyalty in Chinese), on General Sie's forehead as a code of a weapon.</p> <p>(2) Eyes are painted as black bats. The codes of the painted bats represent blessing (the pronunciation of bat and blessing is the same in Chinese). It is a common metaphor in Chinese culture to express that the blessing should come early or to deliver the meanings of blessing giving or double blessings.</p>
General Fan	
Implication of Codes	<p>◎ It is said that General Fan is transformed from a black monkey whose personality trait is manful and sturdy. Therefore, black is the ground color in most of time. The short and fat body is one of the characteristics.</p> <p>(1) Because he is manful and sturdy, fire patterns will be painted on the forehead, eyebrows, and cheeks.</p> <p>(2) Coin-form patterns are added on the cheeks and represent the meaning of collecting wealth. The ancient coin also symbolizes gathering blessing and wealth. It also has a supreme power to gather blessing and avoiding bad luck.</p>

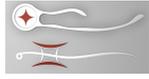
4.3 The Design of Ja Jang Cultural and Creative Product

This research applies the symbolic codes of the facial mask-like makeup, transforms them into design elements, and introduces them into the design of the cultural and creative product through the analysis of Ja Jang facial form and code meanings. Seven products are designed and developed mainly. The related application of transformation about the cultural and creative product design and code elements is showed in Table 4.

4.4 The Construction of the Cultural and Creative Product Design Mode

According to the concept of “cultural space” proposed by Leong in this article, a culture is formed by time and space. The design meanings of cultural products are extended from this concept. In this cultural space, the culture is divided into three levels. The first level is the exterior level, including those that are tangible and material. The second level is the middle level, including those that are of using behavior and ceremonial. The third level is the interior level of the cultural space, including those that

Table 4. The Analysis of Ja Jang Cultural and Creative Product Design

			
Figure-form Slippers	Hairpin	USB	Wall Clock
			
Tableware	Name Card Holder	Furniture	Analysis of Code Transformation

are ideological and invisible spiritual. The three levels are formed as an argument of cultural integration. Yu-fu Yang (2006) utilizes the cultural codes of design to explain the semantic levels of the product design, including the strategic level above the semantic level and the technological level under the semantic level. Rong-tai Lin (2005) proposes a spatial picture about the cultural creativity transforming into product design attributes. The three scholars mentioned above all investigate the changes of cultural implements from three levels of culture. In terms of the transformation of the current traditional implements in the modern cultural context, this research holds the same opinions with these scholars.

Through the analysis of Taiwan’s religious Ja Jang culture and through the transformation of the pattern meanings and cultural meanings of the facial mask-like makeup into the design element, this research conducts the design of Taiwan’s cultural and creative products. The construction of the cultural and creative product design mode is displayed in Fig. 2.

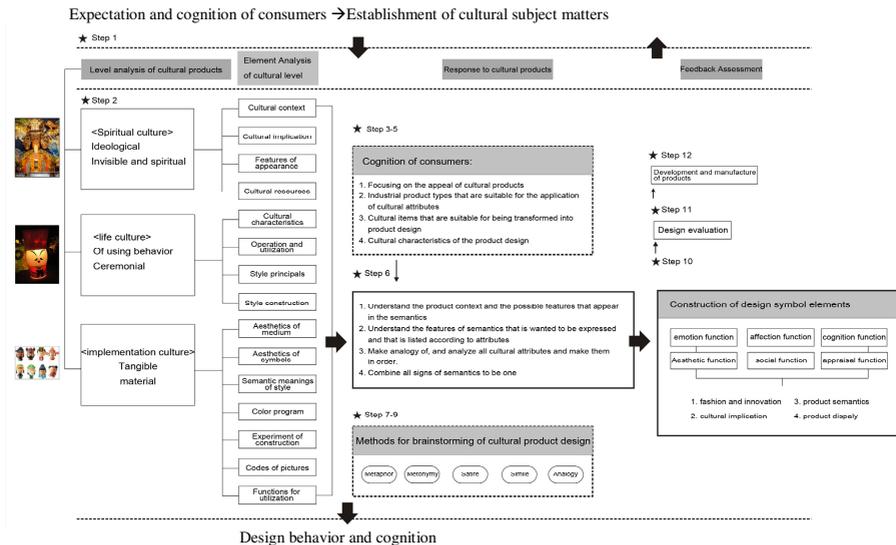


Fig. 2. The construction of the cultural and creative product design mode

5 Conclusion and Suggestion

This research hopes that through transforming Taiwan's traditional Ja Jang culture into the innovative design of cultural and creative products and through the utilization of pictorial symbols, cultural implication, color meanings from aesthetic viewpoint, components of Ja Jang facial mask-like makeup can be analyzed for the design of cultural and creative products in order to elevate the value of products. The result of the study shows the actual design of Ja Jang cultural products and focuses on the studies on the essence of cultural products and the construction of design mode. We hope that the interpretation and analysis of this research can be reference for the researchers, operators, and designers in the future. In sum, this research obtains four conclusions as the following:

1. With the development of the global cultural and creative industries and policy promotion and in terms of the sustainability and the innovative development about Taiwan's cultural and creative industry, Taiwan's cultural and creative industry should focus on in the future (A) centering on key industries, (B) cultivating the cultural industries with Taiwan's specialties, (C) introducing international capital, having international communication, making good use of China's resources, and (D) founding a platform of information integration.
2. The designing meanings of cultural products should contain three levels, which are the exterior level (visible and material), the middle level (of using behavior and ritual/customary), and the interior level (ideological and spiritual).
3. Comparing to attributes of general product design, the cultural product design generally changes from use-base to the elevation of symbol value to bring out the product's peculiarity and its differentiation.
4. Ja Jang culture is the most animate performance group in Taiwan society. This research analyzes the cultural implication and related code creation of the facial mask-like makeup and transforms them into the innovative design research of cultural and creative products. The design mode of Taiwan's local culture is constructed and brings abundant cultural quality and diversified styles. The products of global culture are brought from the age of technology to the age of design for "heart" of humanistic culture.

References

1. Syu, C.-s.: An Application and Case Studies of Taiwanese Aboriginal Material Civilization Confer to Cultural Product Design. M.A. Thesis of Department of Industrial Design, Chang Gung University, p. 20, 50(2004)
2. Dialogue. *Design Issues* 19, 48–58
3. Pan, G.: The Changed Tune of Cultural Policies and Thinking. *China Times* on June 3. A4 version (2003)
4. Holt, S.S.: Beauty and the blob: product culture now. In: Albrecht, D., Lupton, E., Holt, S.S. (eds.) *Design culture now: national design triennial*, Princeton Architecture Press, NY (2000)

5. Industrial Development Bureau, Ministry of Economic Affairs: 2007 Annual Report on the Development of Taiwan Cultural and Creative Industry. Promotion Group Office of Cultural and Creative Industry, pp. 26–37, 170–195 (2008)
6. Klaus, K.: On the Essential Contexts of Artifacts or On the Proposition that Design is Making Sense, *The Idea of Design*. Massachusetts, pp. 156–184 (1990)
7. Leong, B.D.: Culture-based knowledge towards new design thinking and practice A (2003)
8. Norris, K.W.: *The Morphological Approach to Engineering Design*. In: *Conference on Design Methods*, Pergamon Press, Oxford (1963)
9. Ockman, J.: *Architecture Culture*, Rizzoli, pp. 243–247 (1993)
10. Li, P.-l.: *The Initial Study of the Interpretation on Design Signs – A Case Study of Construction and Implication*. 2002 China Industrial Designers Association (2002)
11. Pilgrim, D.H.: Foreword. In: Albrecht, D., Lupton, E., Holt, S. (eds.) *Design culture now: national design triennial*, Princeton Architecture Press, NY (2000)
12. Wang, W.-k.: *Research Methods in Education*. Wu-nan Cultural Enterprise, pp. 387–390 (2002)
13. Yang, Y.-f.: *The Cultural Basis of Design*. Asia Pac Books, pp. 123–322 (2006)