

# Exploration of the Cultural Image of Chinese Form Using Culture Identity Design

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**Abstract.** The scope for the development of product design concerns several fields including cognitive meanings, symbolic functions and cultural histories of form. Through effective intervention of the culture identity design, the difference of the nationality will be decreased, the interaction between product and people will be improved, and the opportunities for cultural self-expression will be enhanced. The objective of this study mainly investigates the relationship between Chinese form and implied cultural image. The study applied the knowledge of culture identity design to enrich design semantics of a new product. In regard to develop more strategically culture identity design, a conceptual basis is needed to guide the understanding of traditional culture and support design making. In order to achieve the objective, this study partitions the knowledge into three principles including metaphor coding, traditional frame and decorative pattern. The three principles contain insights regarding how people perceive and think in such a Chinese culture environment. Designers can understand the principles of Chinese culture identity and apply the concept to design cultural creativity product.

**Keywords:** Culture identity; Cultural image; Chinese style; Metaphor coding; Decorative pattern.

## 1 Introduction

The cultural creativity industry has listed as Taiwan's national prioritize plan since 2002, and become one of the most important industries. Cultural industries have been defined as systems for controlling innovation through gatekeeping processes [1]. The cultural industry fits the fashion industry, since a new collection is produced through a sequence of gatekeeping activities, which were identified by Blumer [2]. Besides, the cultural creativity industry is the activity of local actions based on the thinking of the globalization. The globalization is the social life striding across space and time by separating out the social situation and resulting in the interactive correlation process among society, culture, system and individual [3][4]. In Taiwan, the government deliberates definitions of various countries regarding the cultural creativity industry and considering the particularity of the development of Taiwan industries. Therefore,

the cultural creativity industry in Taiwan is defined that is provided with the creation wealth, potential employment opportunity, and promotion of the whole living conditions which are derived from accumulations of the creativity and the culture and utilization of the intellectual property. In addition, applying design to cultural creativity industry is gradually important. For example, Lee [5] extracted cultural elements from the representative landscapes in Kaohsiung, Taiwan, and designed a series of cultural creativity products.

A good design should help users to understand how to use products but also how to understand their cultural image including implied cultural meanings, stories and emotions. The most noteworthy design development maybe concerns about the cognitive meanings, symbolic functions and cultural histories of form. All man-made forms are provided with socio-cultural histories, existing archetypes, and implied cultural meanings that place them in the symbolic context during the use process. An object's form reveals something about its function, usability and quality; sometime, an object's form also reveals which country it is made in. Through culture identity design, designers can demystify nationality, improve the interaction between product and people, and enhance opportunities for cultural self-expression. In this Age we live in needs an emotional revival. It needs culture identity design. It is merely a design activity that keeps the user's emotional, social, cultural needs in mind [6]. This study design activity requires the designers understand the user's lifestyle and cultural background.

China possesses a long cultural history which has generated distinctive Chinese symbols and forms including Chinese writing, Chinese painting, Chinese knot, Chinese architecture and decorative arts. This research mainly investigated the relationship between Chinese forms and cultural meaning. The research applied the knowledge of culture identity design to enrich the design semantics of a new product. This study explored product semantics to create the cultural cognitive models that explain the meaning of form and allows users to understand Chinese origin of product. The Chinese decorative arts always contain some metaphorical poetry, but most of modern Chinese don't understand those cultural meanings, because the western style replaces the Chinese tradition gradually. For example, the dragon is the metaphorical meaning of royal power. The butterfly is the metaphorical meanings of joy. Much of the new design approach embodied by Post-Modernism focuses on metaphor, as powerful a device for design, because it illuminates a new perspective by suggesting connections between the subject and memories from our experience [7]. This study not only affords users to see the aesthetics of the Chinese objects but also enable users recognize the culture meanings of the decoration.

In regard to develop more strategically culture identity design, a conceptual basis is needed to guide the understanding of traditional culture and support design making. In order to achieve the objective, this study partitions the knowledge of the culture identity design into three principles including metaphor coding, traditional frame and decorative pattern. The three principles assume the definition of culture identity design as a dialogue. Good design provides an effective information transfer among the dialogue's participants in which the user can understand the cultural meaning emotionally. The following three principles contain insights about how people perceive and think in such a Chinese culture environment. Results of this study provide valuable references for academic circles and related industrial field. Additionally, the

culture identity design model addressed by this study can be extended to develop cultural creativity design for other related fields.

## 2 Metaphor Coding

Chinese arts always contain some metaphorical poetry that is the culture meanings of the decoration art. This study classifies metaphor coding of the Chinese style into three portions including homonym, metaphor and metonymy.

### 2.1 Homonym

Most Chinese characters evolved from essential pictures. In comparison, westerners are ‘people of the ear’ rather than of the eye. Chinese words can’t be spelled, and there are not too many phonemes, so the number of homonyms remains very high. Often, the concept of the Chinese word is phonetically close to the symbol itself. For example, we can say that “fu” represents the culture meaning of good luck, and the pronunciation of the bat is phonetically close to “fu” (Fig.1).Therefore, the pronunciation of the bat symbolizes good fortune. In such homonym cases we can speak of ‘phonetic’ or ‘aural’ symbols [8]. The reason for this must be sought in a phonetic parallel: the word for ‘vast’ (ping) is identical in sound with the word for ‘peace’ (ping); the word for ‘fish’ (yu) is identical in sound with the word for ‘abundance’ (yu), as shown in the Fig. 2; the word for ‘orange’ (ju) is phonetically very close to the word for ‘lucky’ (ji).



**Fig. 1.** Bat (fu) representing the culture meaning of good luck



**Fig. 2.** Fish (yu) representing the culture meaning of abundance

### 2.2 Metaphor

The symbolism are often used in ancient China. The Chinese applied symbols to decorate everything in life including clothes, household utensils, furniture, architecture, etc. There are some metaphors of the good wishes hiding those symbols that became the part of the ancient Chinese. We may say that the pictures of those objects contain symbols, or that the symbols take graphic forms. The picture can be read in two ways—as a work of art which is intended to give aesthetic pleasure to the beholder, or as an expression of good wishes concerning the recipient’s longevity, progeny, etc. Some of the shapes are indeed pleasing, and remind one of another similar auspicious images, including: the gallant peonies (wealth and status) (Fig. 3), The inside empty of evergreen bamboo (modesty and maturity) (Fig. 4), the tortoise (long life), etc. [9]



**Fig. 3.** Peonies representing wealth and status



**Fig. 4.** Bamboo representing modesty and maturity

### 2.3 Metonymy

The metaphor works by transposing qualities from one plane of reality to another, while the metonymy works by associating meanings within the same plane. The representation of reality inevitably involves a metonymy: we choose a part of reality to stand for the whole. The selection of metonymy is clearly crucial, for from it we construct the unknown remainder of reality [10]. The symbol of yin-yang (i.e. dark and bright) is the part of Tai-Ji (Fig. 5) to stand for the ruling principle of the whole metaphysical world. The sign of eight trigrams (Fig. 6) is the basic form to stand for the all changes of Yi-Jing.



**Fig. 5.** The symbol of yin-yang (Tai-Ji)



**Fig. 6.** The symbol of Eight trigrams

## 3 Traditional Frame

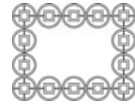
Chinese style frame is one of the characteristics of Chinese art and design. It is interesting to find these frames so widely applied on the painting, furniture, wall and windows. Framing is most often associated with ornate carving and complex shape. We can pick up such characteristics and produce collections based on minimal lines with an oriental feel. In this study, the traditional frame was classified into three portions of the Chinese style including geometric figure, utensil figure and particular figure.

### 3.1 Geometric Figure

In China, the circle represents the unity, consummation and strength. Besides, the square represents the integrity, regular, and orthodoxy. Therefore, both frames of the geometric shape are usually used on many objects in Chinese culture. There were two circular motifs containing single loop and double loop. The double loop pattern was actually a concentric circle. The internal and external square frames are emphasized as the prevailing motif by the square formed usually in vertical- horizontal relation or X-substitution (Fig. 7). When the small square is in the large circle as a coin (Fig. 8), the circle of heaven and the square of earth symbolize deities that are omnipresent.



**Fig. 7.** The internal and external square frames



**Fig. 8.** Circle & square (coin)

### 3.2 Utensil Figure

Some of the oriental utensils mean to be viewed as symbols, and their characteristics of themes token not only themselves, but also something beyond themselves. Forms of these utensil objects were applied to the frame of the painting, window and vent, or were given on the wall as typical surroundings of elaborate lattice. Shapes of the utensils were usually designed as the frames to make the borders fantastic. The often seen utensil figures include bottle-gourd, fans, vases, knots, the scrolls of Chinese painting and so forth. Figure 9-11 shows three samples of the utensil figure including bottle-gourd, fan, and the scrolls of Chinese painting.



**Fig. 9.** Appearance of the bottle-gourd



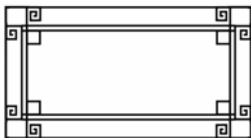
**Fig. 10.** Appearance of the fan



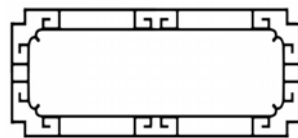
**Fig. 11.** Appearance of the scrolls of Chinese painting

### 3.3 Particular Figure

The Chinese are past masters on modifying or emphasizing corners. They are even more adept at turning corners of frames (Fig. 12). The eye does not readily skirt an acute corner, and it must even be induced to turn a right-angled one. The Chinese have studied this problem for many years and applied in many fields of art. The central frame is supported by the smaller supplementary patterns that add to the beauty of the central primary design. The small patterns with the U-scrolls and T-scrolls (Fig. 13) inlaid on the side of the main frame are typical Chinese style frames [11]. The U-scrolls and T-scrolls were designed around the corner of the frame usually, are symmetrically deployed and balanced in a most pleasing manner.



**Fig. 12.** Turning corners of frame



**Fig. 13.** The T-scrolls of the fram

## 4 Decorative Pattern

The pattern presents some of the characteristics of the Chinese arts. It is artistic value to maintain that the Chinese have been exploring the possibilities of these patterns for three thousand years. Patterns are used in bronze, stone, jade, woodblock printing, porcelain, wood lattice, and wood carving. Most of the Chinese patterns originate in the inspiration of the animal and plant. Chinese pattern is also an age-old classicism with a sense of balance, order and harmony that appeals to the most modern of minimalists. Particularly, simplification of the repeating pattern design offers a fertile field for variation in the Chinese art. In this study, the decorative pattern is classified into three portions including animal motif, plant motif and particular motif.

### 4.1 Animal Motif

The Chinese pattern is rooted in the ornamentation of the ancient bronzes, whence the inspiration of much of their design comes. Many of the designs themselves occur on the bronzes, which are often sacrificial objects. Animal's faces were also a popular motif. Sometimes it is impossible to tell if the artist was carving the face of a lion a tiger or a leopard so the carving is simply said to have an animal motif. The Tao Tie motif, which is named for the mythical creature, is currently classified as an animal motif [7]. Animal's faces motifs (Fig. 14) are famed for their greed and savage on early bronze objects. Often times the artist were very fond of carving such dragon and asp motifs onto the objects. The dragon (Fig. 15), a variety of heterogeneous beings, symbols the natural male vigor and also symbols the power of the emperor.



Fig. 14. The motif of the Animal's face



Fig. 15. The motif of the dragon

### 4.2 Plant Motif

The flower affords pleasing and beautiful patterns and gives a change from the other groups of grille, so there is usually a small unit of plant just within the external one (Fig. 16 & Fig. 17). Grainy pattern actually looked like a grain or seed, and the repeating grainy patterns are often simply symmetric construction.



Fig. 16. Flower pattern



Fig. 17. Plant pattern

### 4.3 Particular Motif

Chinese successfully manage the line of the Ju-I (Fig. 18) with some of methods of upturned ending. The Ju-I scepter-ends tend to bring the attention back and focus it at the center of the pattern; the artistic treatment of the line end is as significant as its meaning: “May things be as you desire”. Cloud-band (Fig. 19) is perhaps the oldest designs to be found. Clouds symbolize good fortune and happiness. Stylized clouds, which take the form of the spiral wave, are frequent in many ornamentation things. The clouds make use of symmetric variations and are much softer than other patterns. This meander of strip ornamentation, which is still used a great deal on similar articles with decorated borders, makes its appearance as far back as Neolithic Age, when it was used on pottery. These patterns were designed through repeating, balancing, emphasizing and contrasting, can achieve the goal of unity.

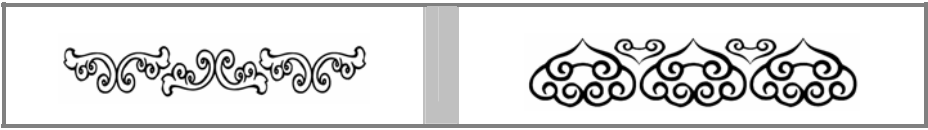


Fig.18. Appearance of the Ju-I

Fig. 19. Cloud-band

## 5 Experiment

The purpose of this experiment is to explore if the significant difference existed among the three principles to represent the Chinese style.

### 5.1 Subjects

To attain effective results, this study invites 30 design students, participated in this evaluation experiment, 9 males and 21 females, with ages ranging from 18 to 25 (mean=21.8, SD=1.6), and all possessed a normal or after correction, eyesight of 1.0., and requests the subjects to fill out the evaluation questionnaires.

### 5.2 Procedure

Subjects were introduced to the experiment procedures. Afterwards, subjects were asked to fill out the evaluation questionnaire. All the evaluating time for a subject is about 15 minutes.

The evaluation questionnaires were made up of 19 sets of Chinese style pictures and questions. The subjects evaluate those pictures representing the Chinese style images, and sign a mark on a 7-point scale of a single adjective pair. At the ending of the experiment, data collected on the reaction of subjects was further statistically analyzed.

## 6 Results and Discussion

With regard to metaphor coding, the ANOVA results in the Table 1 indicate that the statistical significance ( $F(2, 87)=7.52, p<0.01$ ) exists among homonym, metaphor, and metonymy. Consequently, on a further conduction of Scheffe's test [12], results

reveal that metonymy more strongly represents the Chinese style than homonym and metaphor (Table 2). Metonymy can use a simple sign to represent the Chinese philosophical thinking; metaphor can use an illustration to signify the meaning of the Chinese literature and culture; homonym can use the same phonetics to represent the form, sound and meaning of the word. For this reason, a part of metonymy image that stands for the whole the Chinese philosophical thinking represents the Chinese style unequivocally.

**Table 1.** ANOVA for metaphor coding

Source	df	Sum of squares	Mean squares	F	p
Metaphor Coding	2	16.8	8.4	7.52	0.00097**
Error	87	97.2	1.12		
Total	89	114			

\*\* $p < 0.01$ .

**Table 2.** Scheffe's test on the metaphor coding factor

	Homonym (mean=4.80)	Metaphor (mean=4.60)	Metonymy (mean=5.60)
Homonym		0.765	0.017*
Metaphor	0.765		0.002**
Metonymy	0.017*	0.002**	

\*  $p < 0.05$ ; \*\* $p < 0.01$

**Table 3.** ANOVA for traditional frame

Source	df	Sum of squares	Mean squares	F	p
Traditional Frame	2	24.598	12.299	20.02	0.000**
Error	87	53.441	0.614		
Total	89	78.04			

\*\* $p < 0.01$ .

**Table 4.** Scheffe's test on the traditional frame factor

	Geometric figure (mean=3.17)	Utensil figure (mean=3.78)	Particular figure (mean=4.45)
Geometric figure		0.0139*	0.0000001**
Utensil figure	0.0139*		0.0055**
Particular figure	0.0000001**	0.0055**	

\*  $p < 0.05$ ; \*\* $p < 0.01$ .

With regard to traditional frame, the ANOVA results in the Table 3 indicate that the statistical significance ( $F(2, 87) = 20.02, p < 0.01$ ) exists among geometric figure, utensil figure and particular figure. Accordingly, on a further conduction of Scheffe's test, results reveal that particular figure more strongly represents the Chinese style



(Table 4). Especially, utensil figure and particular figure of the traditional frame are strong mode exist in Chinese objects universality. Geometric figure is little distinguishing characteristic from the other country by comparison.

With regard to decorative pattern, the ANOVA results in the Table 5 indicate that the statistical significance ( $F(2, 87) = 13.498, p < 0.01$ ) exists among animal motif, plant motif and particular motif. Accordingly, on a further conduction of Scheffe's test, results reveal that animal motif and particular motif more strongly represent the Chinese style (Table 6). Animal motif and particular motif of the decorative pattern are used to the topical subject to enrich the design, but the plant motif, usually decorative background, is perceived the Chinese style weakly.

**Table 5.** ANOVA for decorative pattern

Source	df	Sum of squares	Mean squares	F	p
Decorative Pattern	2	17.528	8.764	13.498	0.000**
Error	87	56.489	0.649		
Total	89	74.017			

\*\* $p < 0.01$

**Table 6.** Scheffe's test on the decorative pattern factor

	Animal (mean=4.7)	Plant motif (mean=3.88)	Particul motif (mean=4.90)
Animal motif		0.00079**	0.632
Plant motif	0.00079**		0.00002**
Particular motif	0.632	0.00002**	

\*\* $p < 0.01$ .

**Table 7.** ANOVA for three principles

Source	df	Sum of squares	Mean squares	F	p
Principle	2	82.289	41.144	44.148	0.000**
Error	267	248.837	0.932		
Total	269	331.126			

\*\* $p < 0.01$ .

**Table 8.** Scheffe's test on the three principles

	Metaphor Coding (mean=5.00)	Traditional Frame (mean=3.40)	Decorative Pattern (mean=4.44)
Metaphor Coding		0.00000**	0.00015**
Traditional Frame	0.00000**		0.00000**
Decorative Pattern	0.00015**	0.00002**	

\*\* $p < 0.01$ .

Table 7 shows the significance exists among three principles. According to the result of the Scheffe's test, the metaphor coding is the best of three principles to represent the Chinese style (Table 8). Homonym, metaphor, and metonymy explain clearly the meaning of form and allow users to understand Chinese culture, so metaphor coding is well suited to apply on the design of the Chinese theme. Traditional frame and decorative pattern are applicable to the background design for the Chinese style.

## 7 Conclusion

The ideas developed in this short paper continue to evolve. The principles make up a growing body of knowledge that can help make decisions for the Chinese styles of today's design. All the principles can represent the Chinese style clear and reasonably, specially metaphor coding. The Particular figure of traditional frame, and the animal motif and particular motif of decorative pattern are also well to communicate the meaning of the Chinese form. The results will be become the reference resources provided the conceptual basis of culture identity design, and let Chinese style well merge the western aesthetic with centuries-old idea being reworked into the directions for modern products.

## References

1. Hirsch, P.: Processing fads and fashions: an organization-set analysis of cultural industry systems. *American Journal of Sociology* 77(4), 639–659 (1972)
2. Blumer, H.: Fashion: from class differentiation to collective selection. *Sociological Quarterly* 10, 275–291 (1969)
3. Featherstone, M.: Global and Local Cultures. In: Bird, J. (ed.) *Mapping the Futures: Local Cultures, Global Change*, Routledge, London (1993)
4. Giddens, A.: *The consequences modernity*. Standford University Press (1990)
5. Lee, Y.J.: Exploration of local culture elements and design of cultural creativity products. *Journal of Statistics and Management Systems* 13(4), 823–834 (2010)
6. Friedlaender, U.: An Historical Perspective on the New Wave in Design. *Innovation, The Journal of the Industrial Designers Society of America* 3(2), 12–14 (1984)
7. McCoy, M.: Defining a New Functionalism in Design. *Innovation, The Journal of the Industrial Designers Society of America* 3(2), 16–19 (1984)
8. Eberhard, W.: *A Dictionary of Chinese Symbols*. SMC publishing, Taipai (1994)
9. Ye, Y.S., Ye, S.Q., Ye, D.Y.: *Chinese Lucky Picture*, Chunhwabook, Taipei (2002)
10. Fiske, J.: *Introduction To Communication Studies*. Routledge, New York (1990)
11. Sheets, D.: *A Grammar of Chinese Lattice*. SMC publishing, Taipai (1990)
12. Scheffe, H.: A Method for Judging All Contrasts in the Analysis of Variance. *Biometrika* 40, 87–104 (1953)