

Design Thinking of the Local Culture and the Global market

Shu-Hsuan Chang *, Chi-Hsien Hsu ** Rungtai Lin***

** Graduate School of Creative Industry Design
National Taiwan University of Arts, Taipei, Taiwan
mikejsc@yahoo.com.tw*

*** Graduate School of Creative Industry Design
National Taiwan University of Arts, Taipei, Taiwan
assah16@gmail.com*

**** Department of Crafts and Design
National Taiwan University of Arts, Taipei, Taiwan.
rtlin@mail.ntua.edu.tw*

Abstract: In an era emphasizing on esthetics experience, both the developed countries with mature economic and cultural development and the newly emerging countries which try to break through the industry positioning aggressively have all sensed that cultural creativity can bring up the entire economic growth, enhance the industry competitiveness, inherit cultural assets and create high added value in the country' s image. Many international enterprises, in this trend of industry transformation, have devoted to the guidance of local culture the global market. But at the time of converting local culture into global commercial design and application, the local culture abstraction and conversion into creative product in the global market is by itself opposite viewpoint of cultural cognition. In this article, the cooperation in the design of cultural creative product between Alessi and National Palace Museum will be used as guidance to investigate the model how a designer converts local culture into cultural product. Meanwhile, this article will also study whether the level of preference on this cultural product by the local user has its consistency, and it will also compares design view of different attribute and the global market view. The study can be mainly divided into three stages, literature review will be used as a way to understand cultural product of National Palace Museum, international design competition and the assessment mechanism on commercial product from Alessi. Next, survey will be done on two groups, one is expert and scholar with design background, another is general consumer without design background, and then through survey questionnaire design of commercial product and cognitive vocabulary, a questionnaire survey will be performed on two groups in terms of cognition, perception and preference. Finally, through statistical analysis, the similarity and difference of cognition between two groups is investigated. The results of this study can be used as future reference for the designers in the design strategy of the application of local culture into the global market.

Key words: *Alessi, local culture, design strategy, cultural product.*

1. Introduction

In the global creativity commercial product design field, in order to let the product be more competitive in the

market, designers have to collect elements other than their own domestic culture and convert them into global favorite style, and eventually, into global commercial product. The key point is how culture is applied in design creativity in added value way to make the design industry a success [3], and the most important thing is, the design concept must be convincing itself. However, design itself has intuitive and subjective characteristics, and to a cross-country design team, it is very important to convert the local culture application into design element and to produce cultural product to be sold to the global market. For the style, esthetics and quality creative process emphasized in cultural product, this research has proposed design research architecture. In the research, "The Chin Family" as cooperated and launched by National Palace Museum and Italian boutique design brand ALESSI was used as cultural attribute aspect commercial product, the award winning commercial product in the international design competition was used as design attribute commercial product, and Alessi's product was used as industry attribute commercial product. Then associate with quantitative questionnaire survey in terms of the preference, expertise of two groups of consumers and experts and scholars, the method and design strategy for the conversion of cultural attribute into global attribute commercial product was then investigated.

The main objectives of this research are: Commercial products designed in three attributes such as "Culture", "Design", "Industry" will be investigated, then the similarity and difference on the preference and view of design based on these three attributes from experts and consumers will be compared, and the model view point of design of different attributes will also be investigated, (Figure 1) research framework.

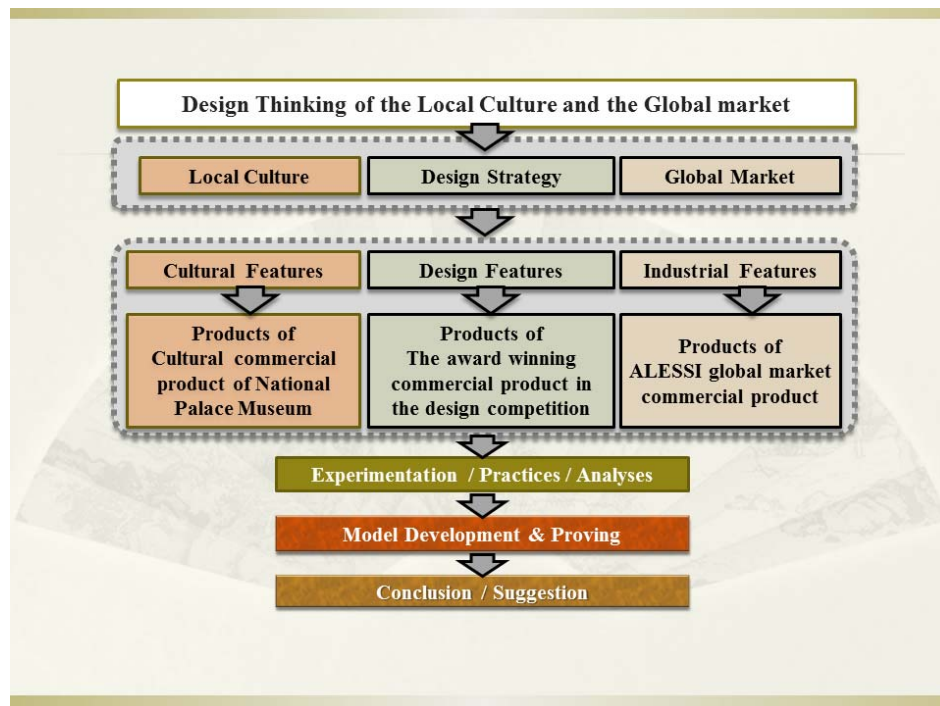


Figure 1. Research framework

2. Literature review

The modernism design style under industrial development emphasizes on extreme simplicity design, the humanities content is gradually removed, however, the later post-modernism re-find and explore the cultural content of a product and give a product its functionality and humanities value, hence, under such a trend, the cultural creative industries of many countries around the world are in a booming stage.

Moreover, such trend has created in turn a trend of “economic globalization” in the market. In order to satisfy the global consumer market need, designer has to find the inspiration source across the country and has to break the racial and cultural gap. In cultural product, what is usually displayed is cultural attribute appearance, and the culture is converted into a design commercial product that is accepted by most of the consumers, which is now a global trend. That is, the design is globalized. The designer has to highlight the cultural element into global “sensuous design”.

The conversion operation model between culture and commercial product usually brings cultural-difference-based view point controversy due to different professional view point. Take “The Chin Family” (Figure 2) cooperated between National Palace Museum and Italian ALESSI, there is usually inconsistency in the view point. Ever since a cooperation of “Association of eastern and western brand to create new cultural opportunity” between National Palace Museum and ALESSI in 2005, National Palace Museum converted deep Chinese culture, through the design experience of ALESSI, into esthetics cultural product of life and have the products sold to the global market. However, the chief of National Palace Museum, Kung-Hsin Chou, said that *the product co-developed by Italian boutique Alessi and National Palace Museum, in her eye, is “not qualified” and “skin depth design”* (Ya-Yu Liao, 2009). Kung-Hsin Chou said, *their understanding on Chinese culture is indeed not enough.* “[1]



Figure 2. The creative inspiration of “The Chin Family” is from a portrait of young Emperor Chien-Lung as seen in a visit to National Palace Museum. Stefano Giovannoni started from this archived work to create the lucky figure “Mr. Chin”, and a series of boutiques of life were originated from there.

National Palace Museum, started from 2005, authorized ALESSI to design “The Chin’s Family”(Figure 3) [10], and it used the portrait of Emperor Chien-Lung of Chin Dynasty of ancient China to design cultural products of series such as pepper and salt mill, egg cup and wine plug. However, one type of juice squeezer among ALESSI’s global commercial products was protested by one Korean in the internet as “racial discrimination”. Although this is a product before the authorization by National Palace Museum to ALESSI, yet the appearance is pretty similar (Figure 4). In cultural aspect, National Palace Museum has deeper contact and understanding on Chinese culture than ALESSI, hence, its expectation on that series of cultural products is deep historical, humanities content and cultural meaning.



Figure 2. Alessi’s designer Stefano Giovannoni signed a contract in 2006 with Man-Li Lin and announced a lucky figure.



Figure 3. Alessi’s Chin’s office juice squeezer. While the juice is squeezed, the hat is turned upside down, and the soldier is turned into officer, after juice is squeezed, the hat is put reversely back, and it is turned back to soldier again.

ALESSI explained that “Such design is to meet the flavor of the oversea consumers”. This means that today’s enterprise has to face the impact of “economic globalization”, it is thus very important to associate cultural attribute creativity into design, that is, “local design” is a way to create the feature of a product. Facing with this challenge of “market globalization” [3], a very important topic in the future is to use creative design concept to enhance the competitiveness of the design industry.

2.1 Design and culture industry

Under the influence of globalization trend, design has become the major ring of this industry. The definition of “design” is that it is to care about people’s model and behavior and life. The main objective of design is to improve human’s quality of life, to enhance the cultural level of the society. For the nature of design, first, design is with purpose, with condition, reasonable and creative general form creating activity, which emphasizes “human and object” interactive “social characteristic”, second, it is “reasonable form creating” by associating “physical function” and “psychological function”, which emphasizes “human machine system”, considers “human factor engineering”, finally, design is included into “economic activity”, creates “style of life”, forms “culture of life” and achieves “human” living environment. [12]

“Culture” is an unique way of the group life of a society, and it is expressed through language, value, organization and human created object [9]. Speak of the correlation between design and culture, “Culture” is a form of life, “design” is a taste of life, “creativity” is recognition through impression, and “industry” is media, means or method to realize cultural design creativity. Therefore, if we take a look from the cultural aspect, we know that design, through cultural creativity, can realize a design taste through industry, and form a style of life. This part of design industry for cultural creativity is achieved through design. The so-called: in the form of a product to be used in the daily life. [12]

2.2 Local culture and globalization

Globalization means the process of the crossing of time and space limit by the social life, and the generation of interactive link by local cultural features through the propagation of media. Through this process, different society, culture, system and individual in the world fuses again.

Local culture means that within a limited space, the life model of the residents is taken for granted, taken as habitual and repeated cultural activity. In the globalization process, due to the fusion of culture of the similar nature, we can get familiar to more diversified and wider local culture. If we take a look from product’s design point of view, under the influence of economic globalization and the trend of global village life, and under the customer-oriented influence, the design of cultural products of the countries around the world that can catch the attention of most of the consumers is personalized and differentiated product design, or the design with cultural recognition and the design that can express cultural features. And this is the trend of product design of “Finding difference from similarity” under globalization. [12]

2.3 Design strategy

Design strategy is, in the design process and after in-depth survey and analysis on the internal and external environment and all kinds of trends, the guideline for solving problem and achieving the goal. It is the reference guideline when the designer is doing the design, and it can help to find out the way for long term survival in the competitive environment. [6]

2.3.1 The formation of design strategy

Design strategy is, for product's design, decision making and development process, a series of clear design guidelines (Ming-Chuan Ho and Tung-Cheng Sung et al., 1997) proposed after understanding and analysis on external competitive environment (market and industry) and the inside of an organization (climate, resource, architecture and procedure, etc.). Scholar Wen-Chih Chang thought that there are four basic steps for the formation of design strategy, namely: Generation of motivation, design research, the proposing of coping project, and the decision of coping project.

For the above processes, design is a strategic plan so as to meet the fast changing need of the market and enterprise's development potential application. The final objective of design strategy is to visualize enterprise's concept and objective so as to facilitate enterprise to perform communication and information transfer. This is to face the change of the external competitive environment and to make design resource adjustment so as to develop commercial product and service that is suitable for enterprise's competitive strength. Meanwhile, it is also important to ensure the consistency and application of design strategy development (Cooper & Press, 1995).

3. Research method and procedure

In order to find out the cognitive difference on the product design between general consumer and designer, this research, through three types of samples of different attributes of products and taking persons that have taken design educational training and general consumer as the targets of questionnaire survey, has investigated the problem in terms of expert questionnaire survey and general consumer questionnaire survey. The first cultural attribute is "National Palace Museum cultural product", the second cultural attribute is "international competition award winning work" and the third industry attribute is "ALESSI global market commercial product", through the questionnaire survey statistics on expert and general consumer, the cognition and view of both of them are compared, and the elements to convert local culture into global design is investigated, the correlation between "culture" and "design" is then inspected, and the research design sample is as shown in (Figure 1).

3.1 Cultural product of National Palace Museum

In recent years, National Palace Museum took "Old is New" as its core spirit, in 2005, it cooperated with ALESSI to develop cultural product for National Palace Museum, that is, it had created new value for cultural and creative industry. It includes series such as The Chin Family, OrienTales and Banana Family.

- The Chin Family

"The Chin Family" was boutique for family use designed by Stefano Giovannoni of Alessi's designer in 2006. It brought the young portrait of Emperor Chien-Lung in Chin Dynasty archived in National Palace Museum as the design element, and it was a creativity product with cooperation from multi-culture of three nations of China, Italy and Japan. The series of products include Queen Chin, King Chin series spice mill, Mr. Chin series egg cup, timer and Mr.& Mrs. Chin series pepper and salt can set, that is, a total of 11 items of commercial products.

- OrienTales

For the 2008 Alessi's product was "OrienTales" series, the style was still taken from oriental elements, but it was changed from palace doll to oriental animal and vegetable style, bird, lotus, banana, golden fish and monkey etc.,

that is, the designer has changed them into salt can and pepper can for kitchen use, small bowl, soybean sauce can, sushi tray, sugar can, milk kettle, wine bottle plug and egg cup, etc. That is, the eastern and western elements were serially connected, new idea of design was put in, more fun was put in, and there were a total of 11 items of commercial products.

- Banana Family

This was the third cooperation between ALESSI and Taiwan's National Palace Museum. The designer used the spirit of monkey as the design element, which means energetic and friendly characteristic, good team player, intelligence and continuous pursuit of improvement. Therefore, monkey was used as the representative of this series of products. This series of products include the family products such as storage box, can opener and sugar can, etc., which come to a total of 8 items of products.

Summing up the above three series of survey questionnaire sample and code, which come to a total of 31 items, we then perform preference ranking questionnaire survey of cultural attribute commercial product, and the result is as in (Figure 5).



Figure 5. Questionnaire survey sample numbering for cultural attribute commercial product

3.2 IF, RED DOT design competition

A globally recognized product design award, the German IF product design award, which was also well known as the Oscar Award in the design industry; its main mission was to promote international class design activity, in the meantime, it also cooperated with many international exhibitions to sponsor several design competitions, that is, it was devoted to encouraging product with creative design element to enter the international market. Another similarly famous award to IF is Red Dot Design Award of Germany, which was a globally influential industrial design award with main objective to encourage creative design in product of life. In the design industry, it is always thought of as great honor to be able to receive Red Dot Design Award or IF design award. The award can be mainly divided into three parts of product design, conveying design and conceptual design. For the design attribute of sample in this study, the creative design samples in the period 2008~2011, which were award winning products, are used. A total of 15 items of samples together with the codes are as shown in (figure 6). Product preference ranking survey was then performed.



Figure 6. Questionnaire survey sample of design strategy attribute commercial product

3.3 ALESSI global product

Italian family product brand ALESSI usually shows its unique design style, and it usually catches the attention from the public in design annals, design magazine and international game. ALESSI's product, relying on its own design, let the consumer easier to understand the concept the designer wants to convey. In order to understand in depth the global design concept possessed by international brand company, hence, in this study, the industry attribute had used ALESSI as the questionnaire survey sample.

- ALESSI design and market assessment

ALESSI is a brand that is highly recognized in the global market, the successful key of this company is to develop self-product concept, assessment model flow and four core competences.

Alberto said: We do not have strategy but philosophy.

We do not rely on market survey to come out with design guideline; we are not interested in the consumer's thinking but are interested in the product and design of the creative designer; we create what the consumers want[5], and this is the concept persisted by ALESSI.

- Assessment model flow

Assessment theoretical equation can be divided into four items of communication, emotion, price and function. Only product that meets the score of the standard and the sale level in the market, Alessi will consider manufacturing the product.

The industry attribute product sample of global market in this research is mainly based on Alessi's kitchen, dining table and bar products, which come to a total of 27 items of samples, and the codes are as shown in(Figure 7). A product preference ranking survey is then performed.



Figure 7. Sample for questionnaire survey product of industry attribute

3.4 Questionnaire assessment quantitative research design

This research focuses on products of three types of attributes, and through consensus assessment technique (CAT) and quantitative research, the survey questionnaires are compared. Consensus assessment technique was creativity assessment technique as developed by US psychologist Teresa M. Amabile (1983). It is a method to inspect creativity through assessment on the product. The assessment can be divided into three main groups of creativity, technique and esthetics. After sorting process, there are 17 items left, wherein 1 to 7 are creativity factors, 8 to 14 are technical factors, 15 to 17 are esthetics factors, which are as in (Table 2). This research is then based on these 17 items as basis to perform questionnaire ranking survey and to compare the difference and similarity in cognition and view point from expert and general consumer on three types of commercial products with different attributes.

Table 1. Amabile consensus assessment technique table

Creativity factor	Technical factor	Aesthetic factor
1.Creativity	8.Technical advantage	15.Preference
2.New application of material	9.Entire organization	16.With show value
3.New concept	10.Brief and clear feature	17.Aesthetic attraction
4.Hardworking significance	11.Plan significance	
5.Shape variance	12.Level of reappearance	
6.Detail	13.Level of symmetry	
7.Complexity	14.Expression feature	

3.4.1 Questionnaire survey

The survey questionnaire in this research contains 47 effective survey questionnaires. Experts under interview are 7, general consumers under interview are 40 (with educational background above BS degree but without design background), the age distribution is in the range of 25~40 years old, and the survey questionnaire can be divided into two parts: For the preference recognition survey questionnaire of products of three types of attributes, and for consensus assessment survey questionnaire of the influence of personal living experience on "innovation", "creativity" and "creation", 1~9 items of most representative vocabularies and commercial products are selected from them.

4. Results and discussions

In this research, after questionnaire survey of two groups of expert and general consumer and after statistical analysis is made on the recognition, preference, favorite and view point of cultural attribute, design attribute and industry attribute, the top five rankings and comparison and analysis result of three types of attribute products are as in the followings.

4.1. Ranking results of three attributes product

- Preference subjective ranking of cultural attribute commercial product

Through the preference questionnaire survey of 31 cultural attribute commercial products on experts and scholars and general consumers, then after SPSS average level coefficient statistical analysis (Spearman), it shows that the correlation coefficient between expert's opinion and general consumer questionnaire survey is .487 and

the significance level of .05 is reached. It can be seen that for those two questionnaire survey groups, their recognition and preference rankings on 31 items of cultural attribute commercial products are consistent. The analysis of coefficient of concordance (Kendalls) shows that the concordance coefficient of the opinions of 7 experts, that is, W value is .226, which reaches the significance level of 0.23. It shows that 7 experts' rankings on 31 commercial products have consistency. The top 1~5 commercial product ranking is as shown in (Figure 8).

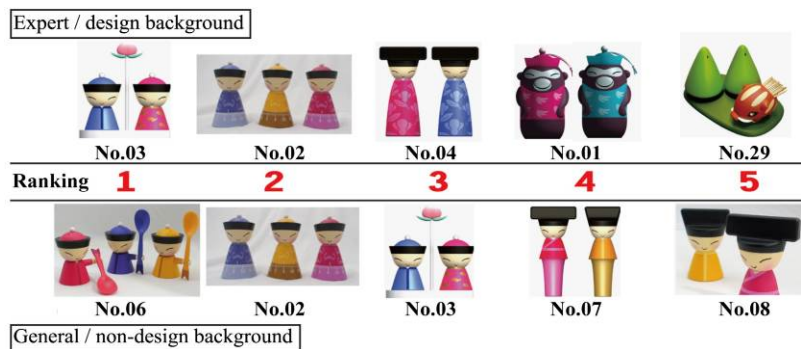


Figure 8. Top five rankings of cultural attribute expert and general questionnaire survey.

- The preference subjective ranking of design attribute product

Through questionnaire survey on 15 design attribute commercial products, it shows that the correlation coefficient between expert' s opinion and the opinion of general person under interview is .572, which reaches the significance level of .026. After comparing two groups under test for their recognition and preference rankings on 15 items of design attribute commercial products, the results shows consistency; the concordance coefficient analysis (Kendalls) shows that the concordance coefficient of the opinion of 7 experts, that is W value is .372, which reaches the significance level of 0.1. It shows that the rankings from 7 experts on 15 commercial products are consistent; after comparing the preference ranking of general consumer, the two groups show the same view point as in (Figure 9).



Figure 9. To five rankings of design attribute expert/general survey questionnaire.

- Global market (industry attribute) commercial product

Through a questionnaire survey of 15 items of design attribute commercial products, it shows that the correlation coefficient in related test between expert' s opinion and general person under interview is .572, which reaches the significant level of .026. After comparing two groups under test for their recognition and preference

rankings on 15 items of design attribute commercial products, the result shows consistency; concordance coefficient analysis (Kendalls) shows that the concordance coefficient of 7 expert' s opinion, that is, the W value is .372, which reaches the significant level of 0.1. It shows that the rankings from 7 experts on 15 commercial products possess consistency. After comparing the rankings of preference of general consumer, it shows that the view points of two groups are similar and as in (Figure 10).



Figure 10. Top five rankings of industry attribute expert/general questionnaire survey.

4.2. Comparison of preference recognition and vocabulary statistics

When the above products of three types of attributes are recognized by experts and scholars and statistically analyzed and ranked by general consumer, the commercial product attribute recognition intersection contained by the sample is then analyzed; it shows that the cross attribute analysis of three attribute products all shows similar product intersection (Figure 11). It explains that local culture design also covers design attribute and industry attribute element, and design strategy product also needs cultural attribute' s support and the help of view point of industry attribute as design reference. Industry based on global market must have its market development strategy based on fusing cultural element and common global design view.

		Cultural attribute	Design attribute	Industrial attribute
Cultural commercial product of National Palace Museum	Experts (Design background)	 03 02 04 01 29	 29	 03 29
	General (Non-design background)	 06 02 03 07 08	 06	 03
The award winning commercial product in the design competition	Experts (Design background)	 15 13	 09 02 15 06 13	 02 06
	General (Non-design background)	 13 05 04	 04 06 09 13 05	 06
ALESSI global market commercial product	Experts (Design background)	 16 24	 17 11 10	 17 11 16 24 10
	General (Non-design background)	 01	 25 17 10	 25 01 17 09 10

Figure 11. The cross attribute analysis of three attribute products all shows similar product intersection.

In the consensus assessment scale and from statistical ranking, it can be seen that experts and general consumers take most emphasis on the consistent view of commercial product's "creativity", "esthetics attraction" and "new concept". In the survey ranking of creativity factor, both questionnaire survey groups think that creativity is the most important one; in the technical ranking, the experts think that "entire organization" and "Brief and clear feature" factors are the technical keys, and general consumers think that "expression feature" is the key, which shows that, due to professional training, experts think that the design, style, organization and expression feature of a product is important, but general consumers think that the information expressed by a product is the condition to attract a purchase; esthetics factor shows that in both questionnaire survey groups, they all think that "esthetics attraction" is the major condition of styling esthetics, that is, the view is consistent.

Based on these survey results, this study (Michael R. Solomon) Consumer behavior theory of architecture design culture into the global market applications, as shown in (Figure 12).

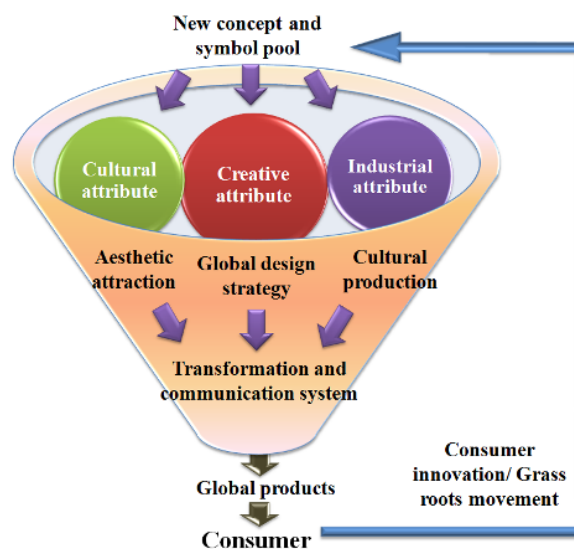


Figure 12. Global cultural design process map

5. Conclusion and suggestion

The international village era has come, and the world has taken the development of creativity industry as the first priority in economic development. Design has become one ring of cultural creativity industry in this wave of new concept, and strategic application in each aspect is very important. The added value of culture has created the value of the designed commercial product, and the development of local culture needs design strategy, in other words, the industry needs to be promoted to the market to see its meaning. Therefore, this research uses the cultural product of National Palace Museum, the design game product and Alessi's market product to reflect the application relationship between cultural creativity and global market. Cultural creativity can be realized through design, and the unique style and impression of cultural creativity can then be exploited. Through the industry's manufacturing and marketing toward the global market, the unique style, impression and recognition of life is then displayed.

In this study, products of three types of attributes are used to investigate the correlation among culture, design and industry. From the conclusion, it can be clearly seen that the mutual fusion and inclusion among three of them is the new trend of the design industry. When the life product model as favored by consumer, that is, spirit aspect,

feeling aspect and practical aspect, is included in it is the case that is most accepted by the market. Due to the arising of different flavor and trend in the general public market, the subsequent research still needs to be focused on the diversification of Taiwan's group cultural features. In the development of cultural product, the element application is still a topic that is worth of investigating.

6. REFERENCES

- [1] Aesthetics CEO | beauty and style economic community dialogue(2008, January 25). *Design management on global brand: Typical design and management in Alessi* from <http://www.aestheticeconomy.com/blog/?p=26>
- [2] Lin, R. T (2010). *From Service Innovation Design to Qualia*, College of Design, National Taiwan University of Arts, Taiwan.
- [3] Lin, R. T, (2005). *Cultural creativity A look on the design of value added arts*, Cultural creativity of July Design added value, National Taiwan University of Arts
- [4] Lin, R. T (2011). *Design assessment: From design to explore the cultural and creative design evaluation*, National Taiwan University of Arts.55-60
- [5] Li, J. C. & Ho, M. C. (2009, December). *Are thinking on the cultural product of museum: Starting from cross-border view point*, Session 4 of volume 14 of Journal of Design, 69-84.
- [6] Lin, M. H. & Wei, C. H. (2000), *Using the product style design of Alessi as an example to study the function of symbol in the emotional conveying*, Graduate School of Industrial Design of National Taiwan University of Science and Technology, Taipei City.
- [7] Lin, M. H. (2005, August). *The dream factory of delicate Italian design product: ALESSI*, Sanger Culture , Taipei
- [8] Liberty times(2007).From <http://www.libertytimes.com.tw/2007/new/may/14/today-art1.htm>
- [9] Max's design world, Some leading design strategies, Design Strategy 2 By Dr. Jun-Chieh Wu(2011). From <http://www.hfu.edu.tw/~maxwu/pdf/09-1.pdf>
- [10] Ma, H. C. & Jan, Y. Y. (2008, November) .Discussion on the Role Design and Cultural-Humorous Expression of "the Triplets of Belleville" from Semiology, The Journal Of Commercial Design 12 issues, 321-340
- [11] Ma, T. C. (2005). *A study of the application of design strategy in the brand identification planning*, Graduate School of Design Management at Ming Chuan University
- [12] Teng, C. L. (2000)Comments on design strategy, Design Journal Volume 5 Issue 2,54-61