

The Investigation of the Attractive Factors of Chinese Handwritten Couplets and Commercialization

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Abstract: Handwriting spring festival couplet is one of the unique forms of literature and custom in Chinese society. Currently, the development of industrial and printing technology leads to a decline in market of hand written couplet. This study used the Evaluation Grid Method (EGM) to find out the attractive factors of traditional Chinese Handwritten Couplets (CHC), than redesign these factors to popularize the Chinese culture. Then, we used the result of EGM to design a questionnaire to understand how the attractive factors of CHC attract consumers. By using the statistical method Quantification I to analyze the questionnaire, we know that all five categories attracted consumers. To obtain more specific words to describe the analysis, we summarized four attractive factors from consumers' opinions: (1) Twenty-four Solar Terms, (2) The symbol of coming-of-age ceremony, (3) The usage of Chinese writing brush and (4) Use the appropriate appellation to people. According to the previous outcome, we conducted to design two kinds of products which including attractive factors of CHC. Then we used questionnaire to evaluate our design whether attractive factors applied on product successfully. The attractive factors acquired in this research could help designers to develop the related products, and also conceive more specifically concepts in the future.

Key words: Chinese Handwritten Couplets , Kansei engineering, EGM, Quantification I

1. Introduction

Chinese New Year is not only the first day of lunar calendar but also the most magnificent one of Chinese traditional festival. People celebrate the coming of New Year. Among all the traditions, writing and pasting the New Year couplet is the most widespread traditional practices[1]. This custom has a long history; it embodies a strong national spirits and cultural connotation. New Year couplet, or the spring festival couplet, is a special form of Chinese Literature. The Chinese write composed auspicious sentences on the red papers, and then paste it on the wall or beside the front door. This tradition symbolized blowing away the cobwebs and changing the fortune. It's also an auspicious and blessing decoration, which represents the expectation of the New Year[2]. Because Chinese characters are composed of vertical and horizontal, even ramp strokes, its combination is like a gorgeous graphic picture. We call it Calligraphy. New Year couplet is a practice of Calligraphy; it is quite a creative Decorative Arts. Chinese characters are very diverse, that is, even the same character can appear in different looks.

This is one of the reasons that why Chinese Calligraphy become a distinctive art. In recent years, industrialization and the developing of printing technology lead to a change in consumer demand. Besides fundamental functions, convenience, appearance and individualized requirements become important factors when consuming products. Lots of New Year couplets appear on the market in printed form, its convenience makes it popular. Hence, the handwriting New Year couplet is gradually declined.

Although the printed couplets are low cost, the handwriting one has its symbolism. Many people consider it more emotional and old-time-flavored, and it also express Chinese people's optimistic attitude of life. It is a major characteristic of Chinese culture. Therefore, handwriting New Year couplet is a vital culture practice of Asian people[3]. However, many handicrafts are gradually replaced by mechanized production under the impact of industrial culture. Many researchers hope to study on the characteristics of different culture. By their efforts, handicrafts can last in the form of creative industries.

It has been thousands of years that New Year couplet had appeared. How to preserve it and let it last longer is a question must consider. Our research finds the fascination elements of New Year couplet, especially the traditional Chinese Handwritten Couplets (CHC), through Kansei Engineering, and we would work hard on bringing spirits of CHC. We hope to apply the cultural implications of CHC to our daily life, turning attractive factors into design, letting people aware of the beauty of Chinese characters. In this wealthy society, culture connotation is undoubtedly an important part of product particularity, it can strengthen the customers' recognition and arise value-added. This is the source of cultural industry and knowledge-based economy. At the end of our research, we design a questionnaire which requesting the relationship between products and attractive factors of CHC. We assess the effect of transformation of attractive factors, and achieve some ideas to modify the future design.

2. Methodology

This study hopes to continue the heritage of CHC culture, through transforming the commercialization to gain extensively application of CHC. Hence, it realizes the emotional needs of customers and the key factors of product development. This study took the qualitative interview and quantified questionnaire to collect data, and used EMG method and Quantification I theory to analyze information for probing the attractive factor of CHC. Next, interviewing experts with professional knowledge of research object and described the experts' opinions by Evaluation Grid diagram. Then, designed the questionnaire by the results of the Original Evaluations diagram to obtain more specific Attractive factors. It was attained and found that influence degree of attractive factors, which provided the novel innovation of CHC. The traditional industry will apply these attractive factors on their business in the future, which will also fulfill the sensual demands of customers.

2.1 Implementation Planning of EGM

EGM (Evaluation Grid Method) was proposed by Japanese scholar Sanui, which is a method learned from Kelly RGM (Repertory Grid Method) [4], and advanced to understanding thorough the psychological cognitive level in specific object of the subject[5].

EGM is one of the important research methods in Miryoku Engineering. Mainly captured through the personal cognitive knowledge, and layered the factor from the target item. It's a method that figure out the interactive relationship between factors by listing the hierarchical structure. EGM primary goes through the individual

interviews, comparing the pairwise comparisons of A & B item, which discusses the difference or similar relationship among the items, and then finally classified the specific features of the targets. EGM aims to refine the customers' language, for understanding the structure of the original evaluation and the attractive factors[6].

After Analyze the factors pointed out from the experts, we can sort out the connection of Evaluation Grid diagram, which can be seen the feeling of items and the mutual attraction of subjects. According to the Evaluation Grid diagram, we asked the degree of recognition of the attractive factor of customer by the questionnaire. Then, through the Quantification I analysis, we gained the core attractive elements. In this study, we applied the results of EGM to the concept of product development. Probing the psychological reaction of people is benchmark of design evaluation. As the result, we designed the questionnaire after commercialization, which aimed to inquire degree of associative and suitability of transformation of CHC.

Figure 1 is the experiment flow of the study, and the gray part is the application of EGM.

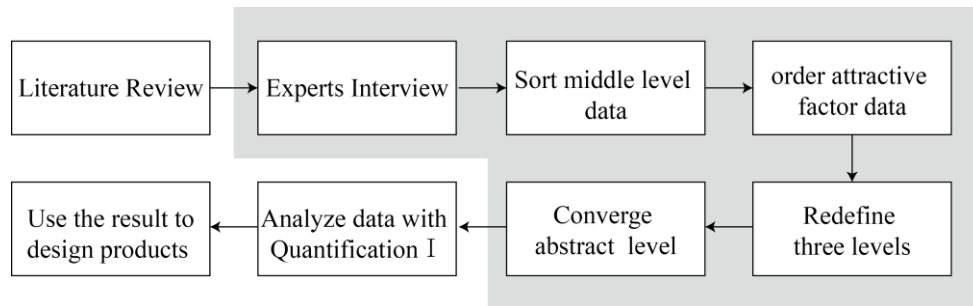


Figure 1: The Experimental procedure of EGM

2.2 Implementation of Experiment

2.2.1 Interview

In this study, through the interview of experts who have the CHC writing experience more than ten years, we recorded their feeling and the attraction of CHC. The interview subjects were three CHC business owners, which were the only two stores provide the CHC service in Tainan, Taiwan. The goal is to understand the special attraction of handwritten from aspect of expert, and know the customers' preference from sale experience.

2.2.2 Construction of Evaluation Grid Diagram

In order to refine the different types of the attractive factor, after talking with experts in depth, we used KJ method to decrease the amount of Evaluation Grid groups, and integrated all the data by attractions and opinions from experts. We classified the Original Evaluation objects explicitly, which included the specific factors and the abstract factors, and merged the similar elements to build up the evaluation grid diagram with hierarchical relationships.

2.2.3 Design and Analysis of Questionnaire

The questionnaire aims to measure the qualitative attractive factor by quantitate method, and evaluate the attractive factor of CHC preference of general. Due to the classification of Original Evaluation object, this study used the concrete factor as evaluative object, which goes through Likert seven scales to measure the score

Quantification I suites for evaluating the factor weights of general preference, which is a statistical method that often explains the qualitative data in Japan[7]. The result of questionnaire will analyze impact intensity and weight relations in further step; beside, the standardized data will give an overall comparison.

2.2.4 Application of Attractive Factor

According to the result, we will apply these features to process the product development and to seek the probability of CHC application of modern product. The second questionnaire uses the Likert scaling to estimate the subject preference, and we also asked participants what was the attraction of product with open-ended questions and the degree of acceptability of research result.

3. Results

3.1 EGM Result

To clarify the different types of Original Evaluation item in the EGM operation, we use the KJ method to clustering all items. Original Evaluations were classified to five main categories: (1) CHC maintains the hand-made feeling; (2) CHC has the value of etiquette and the expression of sincerity; (3) CHC keep the traditional feature of Chinese; (4) Meaning behind the words and (5) Customize. The results of Evaluation Grid diagram were shown in figure 2- figure 6.

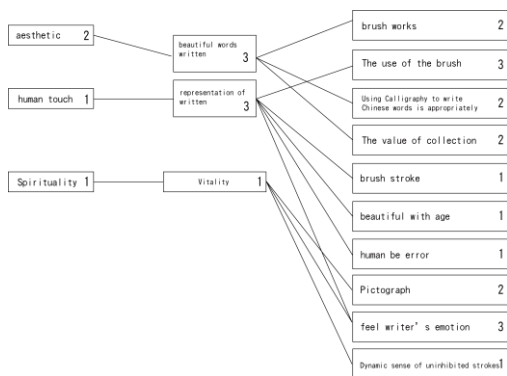


Figure. 2: To maintain the hand-made feeling

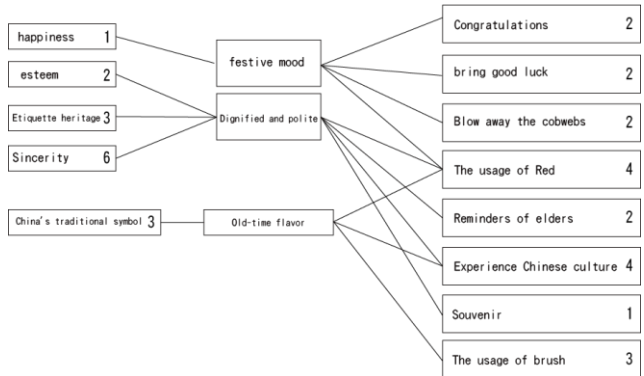


Figure.3: The value of etiquette and the expression of sincerity

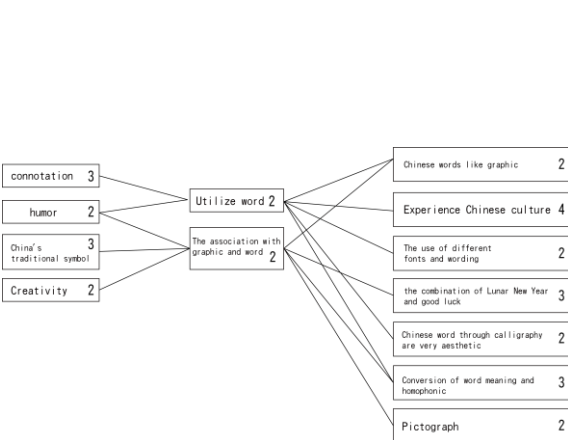


Figure. 4: Meaning behind the words

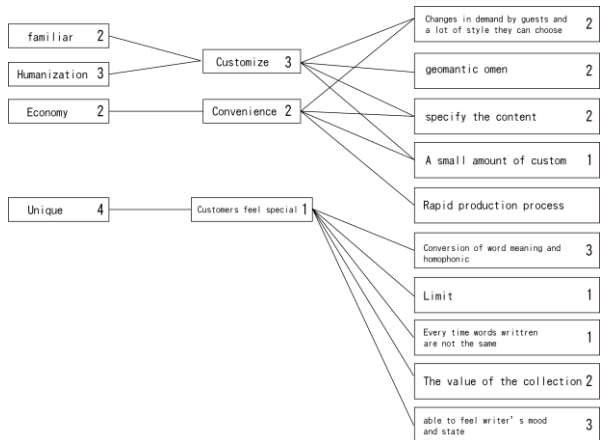


Figure.5: Customize



Figure. 6: Keep the Chinese Traditional feature

In terms of abstract factor, the “Sincerity” was mentioned most often, and then “Unique”, “Connotation”, “Traditional feature” and last place was “Humanity”. From the concrete factor perspective, “ Usage of red color” was referred most frequently, and the second place was “ Experience the Chinese culture”, and then “ Homonymic sound of characters”, “ Twelve animals symbolizing the Zodiac used to designate years ”, “ Auspicious words”, “ Knowing the emotion of writer”, “ Usage of Chinese writing brush” and the final one was “ Perseverance of practicing ”.

3.2 The Analysis of Questionnaire

In this study, we collected 72 questionnaires. Depend on the score in the second part of questionnaire, we calculated the mean score of every factor, item score (Item Partial Correction ; IPC) and category score (Category Partial Correction ; CPC) by statistical methods “Quantification I ” . The score and analytic result was shown on Table. 1. There was no significant difference among each factor category; it was found that each factor category all get high scores. Therefore, we concluded that every participant give agreement with each attractive factors of CHC.

Table 1. The score and analysis of questionnaire

The broad meaning factor	Mean Score	Category partial correction
The value of etiquette and the expression of sincerity	5.88	“Old-time flavor” was a better attractive item in this category (CPC=0.2658). While ”Use the appropriate appellation to people” was the most attractive item (CPC= 0.995)
		In the item of civility and polite (IPC =0.1694), the usage of red color gained the highest score (CPC=1.3065).
		“Festive mood “had a few influence of this factor (IPC=0.0816). Maybe that is because the festive mood was considered as a necessary category factor in CHC rather than attractive factor.
To maintain the hand-made feeling	5.19	“Beautiful words written” was the most influential item (IPC=0.3328). In this item, “brush works” was the most important category factor (CPC= 0.3514).
		In the item of Vitality (IPC=0.2018), “Bold strokes” (CPC=0.2332) and “The usage of Chinese writing brush” both (CPC= 0.2664) were the larger attractive factors.

		In the item of Representation of written (IPC=0.1435), the usage of brush (CPC= 0.1701) was the most important factor.
Customize	5.67	Customize (IPC=0.2511) was the most influential item. “Specify the content and paper material” (CPR= 0.5709) and “A small amount of custom” (CPC= 0.4868) was positively attractive factors.
		In the Customs feel special (IPC=0.2084), “Conversion the words meaning and homophonic “(CPC=0.6320) was a significant attractive factor.
Meaning behind the words	6.04	In the item of “Utilize words” (IPC=0.1112), except for “the combination between Twelve animals symbolizing the Zodiac and words” (CPC= -0.6340) which was the negative factor, the others factors score were all close to 0.
		In the item of “Association with graphics and words” (IPC=0.2336), “Chinese words look like graphic” (CPC= 0.4508) was a positively attractive factor.
Keep the traditional feature of China	5.88	The civic culture (IPC=0.4457) was a better influential item. In this item, “The symbol of coming-of-age ceremony” (CPC=5.0374) was exactly a significant attractive factor.
		In Continuity of traditional culture (IPC=0.4199), “twenty-four solar terms” was the most attractive factor (CPC=1.4967).

A comprehensive analysis of the detail of part of each factor, we could make a conclusion for concrete factors that CHC included four main attractive factors, respectively (1) Twenty-four Solar Terms, (2) The symbol of coming-of-age ceremony, (3) The usage of Chinese writing brush and (4) Use the appropriate appellation to people.

3.3 The Result of Product Design






According to the result of EGM analysis of section 3.2, the designers selected two kinds of products to re-design and apply these attractive factors. In the process of re-design, we expected to transform the factors of traditional culture into the modern products. The designers applied writing calligraphy form experts into design and transferred the concepts into two kinds of products, which were “Stationery” and “Window Curtains”.

The concept of Window Curtains came from the traditional Chinese Handwritten Couplets (CHC), which was posted at the edge of the door. It stood for spring coming and attracting blessing. With the process of redesign, we applied two attractive factors of CHC into the new curtain, which were “Usage of red” and “Conversion the words meaning and homophonic”. Furthermore, the new curtain became a more decorative product, which turned the meaning of CHC more fashionable.

The concept of “Stationery” derived from the culture of Chinese Calligraphy, which contained in the imagery of CHC. According to the result of EGM, we applied “Specify the content and paper material”, “the usage of Chinese writing brush” and “A small amount of custom” into the design of Stationery. The result of EGM also showed that user preferred to CHC which because it kept the traditional feature of China. It not only represented the Cultural heritage, but also presented as the form of Chinese literature. Consequently, we redesigned and redirected the usage of CHC as modern stationery to improve the practical utility. So that, when the customers use

this product, they would feel the new insights through reviewing the old material. Meanwhile, this product would represent our respect of traditional Chinese culture.

Table 2. Design Results and Images

Design Items	No.	Concept	image
Spring Curtain	1	Spring Curtain is refined the homonymic concept from “Couplets”, which is the same sound as “Curtain” in Chinese. There are some characters of Chinese word on the main surface.	
The Stationery Set of Handwritten Couplets			
Post Spring	2-1	“Paste” and “Post” are the important action of Chinese couplet’s tradition. Post Spring is a kind of sticky note; user could create their own couplet anytime and anywhere, which fulfills the customization of attractive factor. The red and gold color of “Post Spring” maintaining the original color of spring festival couplets.	
Paper Tape Of Spring	2-2	Nowadays, the younger people are not familiar with the 24 solar terms, as the result, designer printed the solar terms on the paper tape, which expressed the texture of ancient red very well. This novel combination called Paper Tape of Spring.	
Ink Glue	2-3	The action “grinding the ink stick evenly” is the main idea of this glue. Ink Glue is all black color-changing glue, it will turn transparent after using for few seconds, which mentions users to know the boundary of glue and avoid error.	
Lucky Thumbtack	2-4	Lucky Thumbtack Set is a concept came from the action “Post”. It was not like the ordinary thumbtack with the round outline, but the smaller size of spring festival couplets. The word on the thumbtack was written by Chinese calligraphy expert. When the users turn the thumbtack upside down, this behavior shows the spring & luck coming from the Chinese traditional culture.	

3.4 Evaluation

There were seventy-nine participants (24 males, 55 females) involved this evaluative questionnaire. Thirty-eight participants had design background the other forty-one participants with non-design background.

In terms of Spring Curtain, there are 78.42% participant thought of this product have strong association with CHC. 55.8% of them mentioned “ Usage of red color ” which was the main factor associated with CHC. Followed by 42.9% participant thought of the calligraphy font as well as 31.2% participants thought of symmetrical form and distich making them associate with CHC. The “Conversion the words meaning and homophonic” factor was proposed that is an appropriate factor to associated with CHC. Therefore, we concluded that “Spring Curtain” was a successful product, which effectively applied the attractive factors.

The entire set of “Stationery” there are 66.67% participant thought of this product have strong association with CHC. In the set of Stationery, 55.13% participants’ thought of the “Post Spring” has strong association with CHC. Although there are 43.4% participants still thought of “ Usage of red color ” was the closest factor to make them associate with CHC. Moreover, having a functionality of the tear and paste operation (18.4%), the usage of material (14.4%) also was the factor that attract consumers to purchase “Post Spring”. As the result of three factors mentioned above, this product contained the image of CHC which makes participants associate with CHC easily.

There are 47.59% participant pointed out that “Ink Glue” is hard to associate with CHC. But 80% of participants agreed that it was easy to associate with the ink of calligraphy, which because grinding ink always have a strong relationship with calligraphy writing. Some participants indicated “Ink Glue” would put together with whole set of Stationary, which is better for people to associate with CHC. To sum up, “Ink Glue” caused 56.41% of participants’ preference, while the result showed that we failed to apply the attractive factors in this case.

There are 58.97% of participants noted that Paper Tape of Spring has strong association with CHC. The usage of red (28.4%) still stood the easiest factor. This product expected to convey the attractive factor ” Twenty-four solar terms”, but there are only 16.2% of participants indicated they were being attracted. In addition, 17.7% of participants indicated that they were not able to associate with ” twenty-four solar terms”. Therefore, we should modify this problem of Tape of Spring in further design step.

In Lucky Thumbtack there were 85.9% participants think of this product have strong association with CHC, it was the highest score among products in this study. The 97.7% participants indicated they were able to associate Lucky Thumbtack with CHC because of following reasons: (1) the overall form was very close to the original spring stickers; (2) Participant specially mentioned the context of use and the reversed paste action that was very familiar with original spring stickers. These viewpoints chanced to conform to the design concept of Lucky Thumbtack.

Finally, we sum up several of different views, the participants generally thought that these two kinds of products both showed as well designed and appropriate gift of New Year. In these products, “Spring Curtain” and “Lucky Thumbtack” were popular with the participants, which we attributed the successfully application of attractive factors. Besides, participants also indicated that they were worried about if the seasonal products could appropriately be used of whole year. “Post Spring” was considered have a good association with red color, but paper in red is hard for user to write on it, which decreases the usability of paper. Though “Lucky Thumbtack” that we had a good visual effect, designers should consider more about the comfort of usage and safety which constructs an appropriate form. Some participants suggested that designers should apply the factors of CHC into wider dimensions. These suggestions will be followed as guideline, and the researcher also could think about how to make the better design of the future.

4. Discussion

In this study, we used EGM to extract the content and attraction of culture rationally. Though this method, we made design thinking more systematically, and found the product attraction efficiently. By EGM, we divided the product into a structure with three different levels, which are original evaluative factors, abstractive factors and concrete factors; it helped us to clarify the relationship among each factor definitely. Designers could utilize these specific attractive factors to design the product, which close to the user emotions. In the future, we could apply EGM to explore other cultural products.

Nevertheless, there are some limitations that need to be addressed from current study. The limitations are showed as follow:

- (1) We only interviewed three CHC experts for collecting the data of attractive factors. We should increase the interviewer of CHC experts to enhance the reliability of selecting attractive factors; it will obtain more precise depiction for narrative attractive factors.
- (2) In the questionnaire, some participants proposed common attractive factors that differed from CHC experts. Therefore, before we confirm the attractive factors from experts, we should also collect the viewpoint of consumer to get more diverse data. Then we could provide more selections for participants to choose which factors have better corresponding of their impression.

After we analyzed the data of questionnaire, the answers of quantitative demonstrated that participant like our design in general; however, the qualitative answer showed that the participants did not totally agree with attractive factors besides the usage of red. Therefore, it's possible for us to invite designer to participate to join the focus group and discuss how to merge the attractive factors into product design effectively when we converse the attractive factors.

5. Conclusion

In this study, we interviewed the experts worked at Ji-Qing Couplet and Drapery Stores to understand the property of CHC. The CHC stores not only write New Year couplets for business, but also play a role of answering the etiquette of culture. Moreover, the experts of CHC also told us some details which should notice in festival, and they also let us understand the meaning of congratulations and sincerity. It is the important characteristics of inherit the Chinese folk heritage. This study explored the attractive factors of CHC; that we tried to transform a traditional object into a modern product to extend the application of New Year couplets. In the end, we deeply recognized the importance of CHC, which conveys the content of our culture, as well as the sincerity contained within handwritten couplets.

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