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THE INTERACTION BETWEEN TEXT AND IMAGE NARRATIVE ON ONLINE HANDMADE PRODUCT PRESENTATION

Chan-Li Lin[1*] and Yi-Ping Huang[2]

[1]Assistant Prof. National Taipei University of Education, Taiwan, chanli@tea.ntue.edu.tw

[2] Ms. National Taipei University of Education, Taiwan, erin.huang09@gmail.com

*Corresponding author

Abstract

Handmade product market is in a stage of development. If there is no proper interaction of text and image narrative for product promotion, brand concepts cannot be effectively be conveyed. This study was designed to figure out the application of text and image narrative to online handmade product presentation, summarize whose attributes, and explore the relationship between handmade text and image narrative. A multi-factor experiment was designed, with image and text narrative as independent variables and text and image interaction as dependent variables. The results showed that: (1) Image narrative contains product, atmosphere and character attributes and text narrative contains product feature, creation inspiration, usage situation, and social issue attributes. (2) Usage situation belonging to text narrative matches character or atmosphere under image narrative. To a further research, text and image narrative application and advertising effects on product web pages can be extensively discussed.

Keywords: Handmade product, Text and image narrative, Text-image interaction

1   INTRODUCTION

People spend more frequently on handmade products as new design brands have sprung up in Taiwan in recent years and online shopping has been convenient and become mature. The term "handmade product" has not been widely discussed in the academic area in Taiwan. There are similar discussions such as cultural products (Lin, 2005) and designed products Wang, 2010), and yet there is no clear definition. The internet has become a highly convenient and low threshold selling platform to handmade product operators due to limited resources and immature market. E-commerce platform gathering independent designers' creative products has already had a small scale. For example, in Taiwan there are Pinkoi, a handmade product online shopping website (www.pinkoi.com) and designers' social network; Zakka, a grocery shopping website (www.zakka.com.tw) and FunZakka, a grocery shopping website (www.funzakka.com). In China, there is a wowsai website (www.wowsai.com) launched by original designer union. In the U.S., there is an Etsy website (www.etsy.com) featuring handcraft product trading. Also, internet pictures and images have become a trend. No matter whether it is Facebook, the popular social network; Instagram, the mobile phone picture sharing program or Pinterest, the picture sharing social network, people have become accustomed to telling their own life stories through pictures as carriers. Moreover, pictures have also affected shopping economy. The conversion rate from Pinterest's pictures to shopping websites was up to 41% (Wei-Quan, Zheng, 2013). Pictures with daily life elements uploaded by users are more attractive to customers than product pictures on shopping websites.

Since the internet is the main marketing platform for handmade products and text-image messages on products are the first line of contact to consumers, operators shall think how to better use of limited text-image contents to tell a "good-looking" story for their own products. From the perspective of brand management design, if handmade products have an impressive brand story, they can have resonance for consumers, which is the key point whether handmade product brands can last for a long time. In the market

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full with numerous products, how handmade products' function can be conveyed effectively through proper text-image interaction to consumers? And whether or not different text-image contents will affect consumers' perception of products? These are worthy of a further study.

From the above description, it can be learned that literature discussions in the past focused more on internet multimedia tools or text-image forms and had fewer studies on text-image interaction effects through text and image narrative over the internet. Today, in the market filled with massive industrial products, Pinkoi has still risen rapidly, which means its products have good market potential. Also, for a designer who is also an operator, he/she needs to not only design excellent products but also reflect cognition that making good use of text-image performance on web pages can let product features be even more prominent and attract consumers. In short, this study aimed to:

1. Explore application of text and image narrative on handmade product web pages.
2. Consolidate text and image narrative attributes on handmade product web pages.
3. Examine the relationship between text and image narrative and text-image interaction effects.

2   LITERATURE REVIEW

A narrative was a story about things that had happened or were happening to people, animals and so on. Such things included a series of things happened in chronological order; to be more specifically, they referred to things happened over a period of time (Berger, 1997/2006). "narrative" and "story" generally known had often been used alternatively (Stern, 1998). And for advertisements, a narrative was about writing, oral and visual expression of a story (Padgett & Allen, 1997). In short, a narrative is an event that takes place within a period of time and can be expressed by means of writing, utterance or visual performance. Although most of narrative contents are fictional, they are indispensable in people's life. Hopkinson and Hogarth-Scott (2001) thought that narrative was a tool people use to understand events and construct reality and Escalas (1998) extended the work in narrative psychology, showing that narrative had two functions that helped people, namely sense making and emotional appraisal. Moreover, story (narrative) was the cultural element prevalent in human society; it helped people realize life experience (Huang, 2006).

Berger (1997/2006) explicated that a narrative was the thing that had happened within a period of time and even though a single image (painting or photography) included narrative elements, it was still "an instant" event but not a linear logic the same as words. Hence, it was generally believed that a single image was not enough to be a narrative (Steiner, 2003). In the field of semiotics, recent systemic functional linguistics school thought that image creators already had ideas or meanings in their minds and used various kinds of strategies to communicate with viewers through images and this was a dynamic process (Kress & van Leeuwen, 2006). Steiner (2003) summarized from narrative picture analysis that elements in pictures contained metaphors and symbols. Creators' composition guided viewers' visual movements, making them be able to put image element pieces into a complete plot.

There are individual differences between images and texts when people process messages. Paivio (1969) pointed out in relevant studies that pictures were more easily remembered, recalled and recognized than texts. Nevertheless, images matching texts can also acquire synergistic effects. Paivio (1971) put forward Dual-Coding Theory (DCT) that human message processing system could be divided into verbal and nonverbal systems. It can be learned that to properly match images and texts can produce complementary interaction. Lutz called relevant images and texts picture headline interaction from the perspective of advertising. The so-called "relevant" meant that image contents repeated the messages texts conveyed and so making images and texts had mutually reinforcing effects (Wu, 1998).

The images and texts in this study mean product images and product description texts on product web pages and hence text-image interaction refers to the relevancy between product images and product description texts. For use in advertising, the higher the relevancy among brand names, product proposals and product pictures was, the more opportunities the message would be remembered by consumers (Schmitt, Tavassoli, & Millard, 1993). That is to say, proper product text messages together with product pictures that can be cross-reference can increase the opportunities for the product to be understood and recalled by consumers. In other words, relevancy of a product, its pictures and texts may affect the impression that a consumer has on that product.

3   METHODOLOGY

As relevant studies of handmade products still belong to the emerging field, no scholars have categorized image narrative attributes for handmade products on web pages. Therefore, this study firstly conducted the

initial exploration of the current status as the first phase, used Pinkoi, the handmade product website, as the source of study samples and engaged an expert group for discussion about text and image narrative application and attributes on handmade product web pages. Next, this study conducted experimental design as the second phase. It used image and text narratives acquired from the first phase to created 45 web pages by taking advantage of Google Site and recruited 44 study participants openly for the experiment. Study framework is as follows:
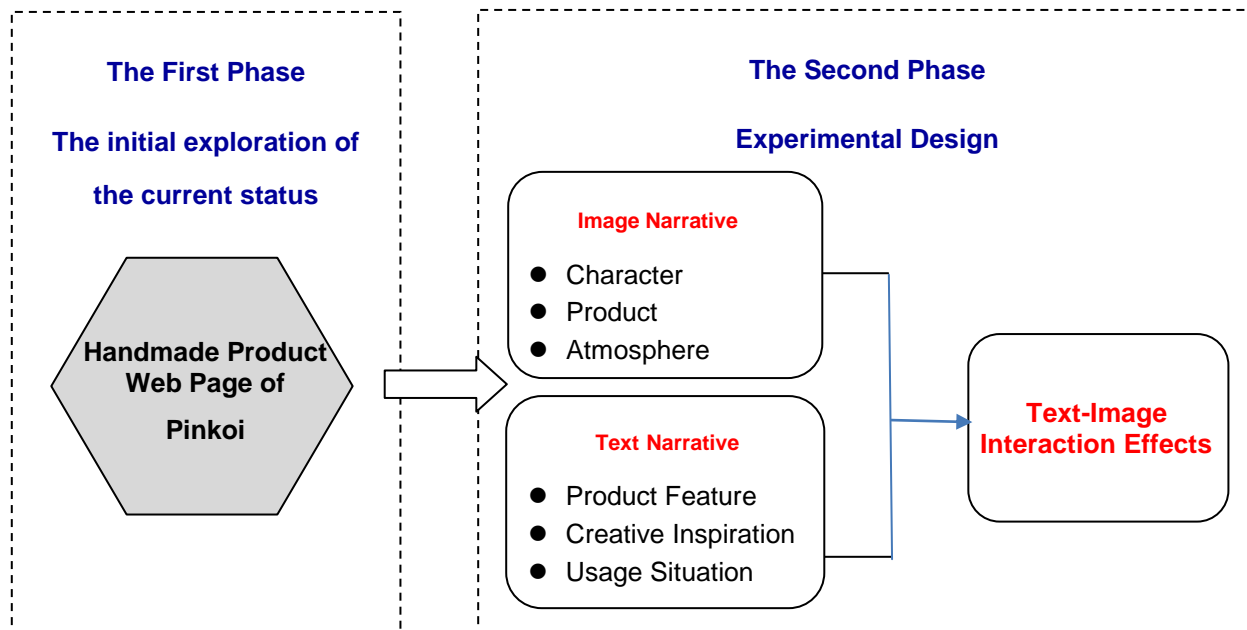

Fig. 1 Study Framework

4 RESULTS

4.1 Image and Text Narrative Attribute Analysis

Study samples came from handmade products on Pinkoi website and the sample period was from Mar. 16 to Mar. 22, 2014. This study selected top-10 product web pages from each of the five major product types, namely "Shoes and Bags", "Accessories", "Good Quality Products for House", "Stationery and Cards" and "Good Quality Clothes". Purposive sampling was used to make the following restrictions for study samples: (1) The web page for the handmade product need to have both image and text description; (2) The handmade product is the original product; (3) For the top 10 products under the same product type, if there are more than two products under the same design brand, which results in text-image repetition or high similarity, then skip such products and select the top 11 product. After selection, resolution correction and individual numbering were made for images on product web pages. Such pages were printed colorfully on one side of A4. A web page was cut if it exceeded a single A4 page. There were a total of 50 pages for samples.

There were 3 industry professionals who were in the fields of photography, product proposals and handmade product marketing retained as members of the expert group. As subjects of text and image narrative for cultural and creative handmade products were new, qualifications for such experts were set to have 3 to 5 years' experience. Clarification was made for definition of text and image narrative during discussion process and there was open discussion about the current application status of the study samples. After narrative attributes were corrected repeatedly, two study personnel whose background was related to graphic communication were asked to conduct narrative analysis for the study samples based on narrative attributes. Analysis items included product images and product description texts and analysis results for text and image narrative were written down on paper respectively.

After the experts' discussion and study personnel' repeated correction, image and text narrative attributes have been categorized as Table 1. For image narrative attributes, there are (1) character: persons who have

a product at hand or wear the product; (2) product: product is the main subject and background is simple; (3) atmosphere: product is part of background and focuses less on subject. For text narrative attributes, there are (1) product feature: emphasis is on product appearance, materials used or design features; (2) creation inspiration: source of creation inspiration for product is described; (3) usage situation: product usage situations are created.

During the analysis process, it was found that there were differences in messages conveyed by image narrative and text narrative functions. It is hard put to it to explain in just a sentence. In order to fully understand application of text and image narratives on product web pages, image narrative and text narrative will be explicated separately. In terms of text narrative attributes used for a single product type, product feature attribute is often used for Accessories and Good Quality Clothes while usage situation attribute is used for Good Quality Product for House. On the whole, product feature attribute is frequently used, followed by creation inspiration and then usage situation attribute. Simply put, this study tried to make initial clarification for application of text and image narratives to cultural and creative handmade products on web pages. The above assumptions for study results need to be verified continually. Next, image narrative attributes and text narrative attributes in this phase were used as independent variables to design study tools for the experiment at the second phase of the study.

Table 1 Image Narrative Manipulation Example Table

Image Narrative Attributes		Text Narrative Attributes
Character		Product Feature	Enamel's unique features are as strong as metal; as smooth as glass; as light as plastic and as colorful as rainbow. Texts are arranged in the same formation.
Product		Creation Inspiration	Everyone has a different role in life, and so do cups. They have their own occasions to show up so do remember to wear make-up with different colors for them to be ever changing.
Atmosphere		Usage Situation	Drink water to feel cool; drink tea to feel peaceful; drink coffee to feel bitter. You and I all need to have different cups for different moods.

4.2 Two-way factorial design analysis between text/ image narratives and text-image interaction

There was no grouping during the experiment process and the computer test method was adopted. Each participant would watch 45 kinds of experimental combinations, a total of 15 product web pages, on a computer screen and then filled out a scale after watching a page. The test took 30 minutes including the time for study personnel's instruction and testing process. Those who fully participated in the experiment and sent back effective data would be given a 100-NTD supermarket coupon in return. The experiment was undertaken from May 13 to 20, 2014 and the venue was at the multimedia classroom in audio-visual museum of National Taipei University of Education. 4 to 7 subjects received the test simultaneously per time.

See Figure 2 for the interaction between image /text narrative attributes and text-image interaction. It can be learned from the Figure that when character (B1) or atmosphere (B3) under image narrative mixes with usage situation (C3) under text, the mean of text-image interaction is the highest number as a whole, whereas when character (B1) or atmosphere (B3) under image mixes with product feature (C1) under text, the mean of text-images interaction is the lowest number as a whole.

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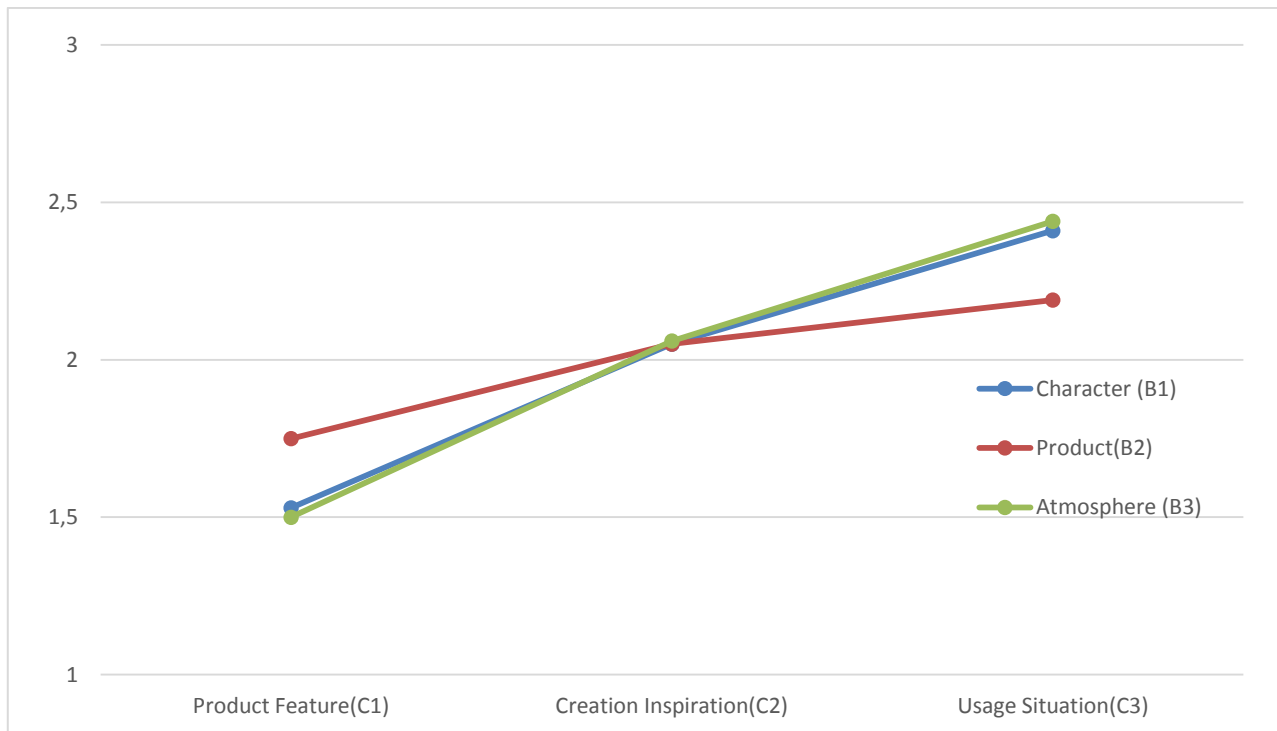*Proceedings of INTCESS15- 2ⁿᵈ International Conference on Education and Social Sciences*

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Fig. 2 The interaction between image/text narrative attributes and text-image interaction

Descriptive statistics between image/text narrative attributes (B×C) and text-image interaction have been shown as Table 2. Simple main effect test has been summarized as the Table. Two attributes under text narrative (C) matching with attributes under image narrative (B) reached significant differences: (1) Product feature (C1) under text reached significant differences (F=9.28, p=.000). According to the simple main effect test, text-image interaction created by product (B2)(M=1.75) under image narrative was significantly higher than character (B1)(M=1.53) and atmosphere (B3)(M=1.50) under image. This indicated that text-image interaction created by product under image matching with product feature under text was better than that created by character or atmosphere under image. (2) Usage situation (C3) under text reached significant differences (F=8.67, p=.000). Text-image interaction created by character (B1)(M= 2.41) and atmosphere (B3)(M= 2.44) under image narrative attributes was significantly better than product (B2)(M= 2.19), which meant text-image interaction created by character or atmosphere under image mixing with usage situation under text was better than that created by product under image.

Moreover, three attributes under text narrative (C) mixing with attributes under image narrative (B) all reached significant differences: (1) Character (B1) under image reached significant differences (F=46.61, p=.000); usage situation (C3)(M= 2.41) was significantly higher than creative inspiration (C2)(M=2.05) and creative inspiration was significantly higher than product feature (C1)(M= 1.53). This demonstrated that text-image interaction generated by usage situation under text was the best, followed by creation inspiration and then the worst product feature. (2) Product (B2) under image reached significant differences (F=8.88, p=.000); text-image interaction was greatly higher when it matched with usage situation (C3)(M= 2.19) and creation inspiration (C2)(M= 2.05) rather than product feature (C1)(M= 1.75) under text, which meant that text-image interaction generated by usage situation or creation inspiration under text was better than that generated by product feature. Atmosphere (B3) under image reached significances (F=56.47, p=.000); usage situation (C3)(M= 2.44) was significantly higher than creative inspiration (C2)(M= 2.06) and creative inspiration was significantly higher than product feature (C1)(M= 1.50). This demonstrated that text-image interaction generated by usage situation under text was the best, followed by creation inspiration and then the worst product feature.

Table 2 Descriptive statistical table for text-image interaction created by text and image narrative

Treatment Level		M	SD
Character (B1) Under Image	Product Feature(C1) Under Text	1.53	0.39
	Creation Inspiration(C2) Under Text	2.05	0.31
	Usage Situation(C3) Under Text	2.41	0.36
Product(B2) Under Image	Product Feature (C1) Under Text	1.75	0.44
	Creation Inspiration(C2) Under Text	2.05	0.37
	Usage Situation(C3) Under Text	2.19	0.44
Atmosphere (B3) Under Image	Product Feature (C1) Under Text	1.50	0.34
	Creation Inspiration(C2) Under Text	2.06	0.34
	Usage Situation(C3) Under Text	2.44	0.33

Table 3 Simple main effect test summary table for text-image interaction created by text and image narrative

Source of Variation	SS	df	MS	F		p
Image Narrative (B)						
for product feature(C1)	1.56	2	0.78	9.28	***	0.000
for creation inspiration(C2)	0.00	2	0.00	0.04		0.960
for usage situation(C3)	1.59	2	0.80	8.67	***	0.000
Text Narrative (C)						
for character (B1)	17.28	2	8.64	46.61	***	0.000
for product (B2)	4.58	2	2.29	8.88	***	0.000
for atmosphere (B3)	19.33	2	9.67	56.47	***	0.000

$*p<.05$ $**p<.01$ $***p<.001$

Conclusions

4.3 Investigated presentation of handmade products on web pages from the perspective of text and image narrative

No clear conclusions have been made yet for the term handmade product in the academic area. In the past, discussions about text-image presentation of products on the internet often focused on text-image sizes, numbers or presentation styles, whereas relevant studies of narrative for novels and movies have been conducted. Also, there have been some applications in the field of journalism. Recently, the extended discussions about picture books, documentary photos and even articles on web pages have been held. It was a new attempt that this study explored presentation of handmade products on web pages from the perspective of text and image narrative.

4.4 Summarized text and image narrative attributes for handmade products on web pages

During the process, the expert group was retained for holding more open discussions and consolidating viewpoints of the three major fields, namely photography, product proposals and marketing. By making mutual verification between practical experience in the field and the above relevant literature, the preliminary study result was clarification made for text and image narrative attributes often used for handmade products on web pages. Image narrative includes three attributes (product, atmosphere and character) and so do text narrative (product feature, creation inspiration and usage situation). In the future, not only text and image narrative subjects can be further studied but also relevant studies of other product types can be extended.

Nevertheless, there is still plenty of room for improvement during the study process and so support and advice from scholars with high academic achievements are needed.

4.5 Image narrative and text narrative attributes have significant differences in text-image interaction

When planning contents of product web pages, designers or operators can firstly consider using usage situation words together with product pictures including elements of character or atmosphere for product description. This facilitates a better text-image interaction and consumers' memory and impression on products can be enhanced so that they will be more willing to buy those products. Also, if daily life observations or situations can be part of text-image presentation on product web pages, it will be easier to arouse consumer resonance. Moreover, if it is a wearable product (such as clothes or socks), then it is suitable to have a picture that has a person wearing it to have better advertising effects. Nevertheless, when deciding combination strategies of text and image narratives of products, designers or operators need to clearly understand positions of their own products and the target consumers they would like to communicate with. Only by doing so can they clearly choose key messages they want to convey.

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