THE PRODUCE OF EMOTION AROUSAL FROM WORD AND IMAGE

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ABSTRACT

Words and images are important tools of communication in our daily life. At communication behavior they are often presented at the same time. (talking, facial expression, gestures, posters, medias...). This article, by the arrangement of words and images, is to explore the meaning of the cognitive processes and emotional, if they are. We try to understand the written words and images at the same presenting cases, the emotional factors that have been aroused. This questionnaire is designed to carry out in three stages, the first phase will show words, images and emotions along and to collect the temperature of their feelings. The second phase will be words and images mix in three models with posters, and test the significance of their cognition. The third phase will be these three models posters to test their emotional perception. Through this arrangement, we found that the cognitive aspects of meaning, it seems that the influence of the words is larger than the influence of the image. In the emotional sense, though words still higher influence than images, but the emotional significance of perception will be closer to the instinctive response.

Keywords: emotion, cognition, images, meaning

1. INSTRUCTION

People's brains are always active in shaping the message received from the eyes. Like numbers of cognitive theory, writing for us, not more than just text itself, we read it is actually a number of highly interconnected, simplify and integrate functions carried out by the results, We usually call these functions as a template matching , prototype matching and features matching. Famous art historian Gombrich (1960) also said that "the artist who begins not with his visual impression but with his idea or concept". He said that such a process of "making and matching." It Means that people meaning of the image receive is from their own existing knowledge. In the area of visual culture, As John Berger (1972) said "Seeing come before words. The child looks and recognized before it can speak.....The relation between what we see and what we know is never settled. Each evening we see the sun set. We know that the earth is turn away from it". Through these ideas, we want to verify that our cognitive meaning or an emotion arousal are the similarities or differences.

2. METHODOLOGY

By order to understand the combined words and images in cognitive and emotional process, a questionnaire was designed in three phases. Finally, we will compare the same conditions, the significance of differences in cognition and emotion. The first phase of the questionnaire we have found most of the 18 adjectives (five "hot", 5 "warmth", 5 "cold"), 12 landscape images (4 "hot", 4 "warmth", 4 a "cold") and three emotional states (excitement, joy, sadness). Subjects were asked to choice one of the "hot", "warm", "cold.".

In order to build on the same basis of "hot", "warm", "cold". In this paper, Rusell's (1980) circumplex model, select the excitement, joy, and sorrow of these three emotions, but also capture Osvaldo da Pos and Paul Green-Armytage, (2007) for the basic emotional facial expressions corresponding to the color study. We believe that the three emotional adjectives could be considered are the instructions from the hot to cold. In pre- test, we also confirmed that the three adjectives to represent the hot, warm and cold.

The second phase questionnaire was based on the result of the first phase questionnaire, based on the arranged a matrix of images and words (eg Table 1). x-axis lists the three from cold to hot words, y-axis are arranged from cold to hot three kinds of images. Such an array will be lay out of three types of combinations. The first category is the meaning of worsds and images type of consent, that is, the cold words accompanied by cold images. The second type is the type of conflict, such as the hot words coupled with the cold image. The third type is the type of approximate, like a cold image accompanied by warm words. At this stage of the questionnaire, we sequentially showed off three types of posters, and provide cold, warm or hot to the three fields were checked by the subjects

The third phase and the second phase of the procedure is the same, only the cold, warm and hot these three fields, replacement by excitement, joy and sadness, but by the test persons were sequentially cast for three types of posters conveyed emotional feelings.

Finally we compare the results from second phase and third phase for the conclusion.

Table 1: The matrix of step2	Table 1:	The	matrix	of	step2
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	Cold	Warm	Hot
	word	word	word
Cold			
Image	consent	approximate	Conflict
	poster	poster	poster
Warm			
Image	approximate	consent	approximate
	poster	poster	poster
Hot			
Image	conflict	approximate	consent
	poster	poster	poster

3. RESULT OF THE SURVEY

3.1. Step1 survey

67 for students involved in this phase of the questionnaire, subjects were asked back for the following text, images and emotional adjectives chosen the right circle the temperature feeling. As a result, the following table statistics, these results will also be the basis for the next phase of the questionnaire.



 Table 2:
 The result of words





Table 4: The result of images



Table 5: The result of images



Table 6: The result of emotion adjectives



3.2. Step2 survey

The second stage 34 freshmen participate in a questionnaire, in order to avoid problems arising from memory in the second stage and will not duplicate the text or images. Because of this, first stage questionnaire results can not meet an array of planning, so in some combination of words and images did not appear. However, all of the posters are fortunate to still be able to meet the above three types of combinations. In the following table represents the survey results. Show as the number at the top of posters, C on behalf of the cold, W on behalf of warm, H on behalf of hot. If compare these results with the first phase of the questionnaire, we find that the type of conflict poster are the same with first phase of words questionnaire results, rather than the results of the first phase of the image. The approximate types of posters are the same with the first phase of the two sets of words, and a set of image. The type of consistency, and there is no accident, all the same with the first phase of the questionnaire results.

	Cold word	Warm word	Hot word
Cold	C27 W9 H0	C12 W20 H4	C0 W11 H26
Image	S13 P12 E5	S3 P24 E4	S6 P11 E13
	天寒地魂		日本 日日 日日
Warm	CW-WI	C1 W27 H8	C4 W29 H3
Image		S3 P22 E5	S3 P21 E6
		C0 W22 H13	
		S2 P21 E6	
Hot	C27 W9 H0	WW-HI	C1 W7 H28
Image	S11 P11 E9		S5 P5 E20
	C24 W10 H2		
	S14 P9 E6		

Table 7: The result of step2 & 3

3.3. Step3 survey

The third phase of the questionnaire, in order to avoid duplication of viewing the memory of the impact, we invited another 31 subjects who participate. The result is also recorded on the table 7. In the table7, the S representatives sadness, P on behalf of pleasure, E on behalf of excitement. The sum of the questionnaire for each poster may or may not meet the 31. That is because some subjects who did not fill in all the relations.

4. CONCLUSION

In the first phase of the questionnaire, we have established the temperature felling of the words, images and emotional adjectives. The second stage we find that the combination of words and images into a poster, its temperature is in line with the words the description on the poster but images. Although the words and images are all perceived by the eyes, but they seem to have different paths. Especially in conflict-shaped posters, the word's influence seems to be larger than the image. Perhaps the message of the image are too much, so the words in the poster may be conveyed or transformed the meaning of the original image.

In the third stage of the questionnaire, the results broadly in line with the second phase of the same, but many details were revealed of different emotions on the perception and significance of paired differences. First of all, joy in this field seems very popular in the second stage, we can believe that all of the landscape images are very many people feel visual pleasure, so regardless of the words description of how the temperature of feelings, their feelings of pleasure seems to weaken the sense of the words matching the temperature influence.

At the Consent type of poster to a poster with snow-capped mountains for the scenery as an example, the text on the poster is "ice and snow", so that no one cast for "hot" in this poster in the second stage, , but in the third stage, there are five representatives of the hot cast for "excitement.". The same phenomenon also occurs in the "coconut trees and beach sunset" as the images of this poster, there are 5 cast "sad" that representing the cold. In addition, Two combinations of" hot scenery" and the" cold title" of the poster, from the color psychology point of view, they represent the feelings of hot or warm, but in the second phase, with their posters and temperature matching in, but most of the subjects who were cast for the meaning of the words as a "cold." But it is interesting that, in the third stage, this words strongly influenced phenomenon is less extreme performance. Therefore, the scores of the "joy" and "excitement" are higher than the first phase of the "warmth" and "hot".

Through this experiment, from a cognitive point of view, the process of search for the meaning of the matching from posters, it seems that the words will be greater influence than the images. The third phase of the results are telling us that its general trend as well. However, paired images and emotions, their results are not so absolute as the second stage, but more complex performance. We believe that this is because emotional feelings include personality, experience and culture of these complex factors, which by no means just like the simple of significance matching.

REFERENCES

Osvaldo da Pos and Paul Green-Armytage., Facial Expressions, Colours and Basic Emotions, *Colour: Design & Creativity,* issue 1, <u>http://www.colour-journal.org/2007/1/2/07102article.htm</u>, 2007.

Russell, J.A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*: 39, 1161–1178.

E. H. Gombrich, 2000, "Arts and Illusion", Princeton University Press.

John Berger, 1977, "The Ways of seeing ", Penguin Group, London, pp. 7-34