

A Comparison of Color Emotions on Shopping Mall Websites by Country

LingWu*¹, SehwaKim**

*Graduate School of Design, Dongseo University, Korea, **Graduate School of Design, Dongseo University, Korea

E-mail : lala.wu.505@gmail.com, cvetlana@gdsu.dongseo.ac.kr

1. Introduction

In web design, color is an important aesthetic element that determines the first impression of a website, as well as maintains the unity and consistency of the site. In this study, shopping mall sites representative of six countries were chosen and the main colors used in the shopping mall's home page were extracted to compare between countries the emotion of color the shopping mall was attempting to evoke. In this study, the Image Scale was used, which was developed to express the relationship between color and emotion in an objective way.

The Image Scale is based on the Munsell color system and was developed by Kobayashi (1999), and the IRI design research institute in Korea modified it to fit Korean society. Kobayashi divided ten representative colors to twelve tones and added ten achromatic colors, resulting in 130 mono colors, with which he suggested the Hue & Tone system, with colors corresponding to three emotional spaces, such as 'warm-cold', 'soft-hard', or 'clear-murky' and extracted sixteen representative emotional words that correlated to the colors. The Image Scale can be sorted into the solid color image scale and the matching color image scale, and the IRI Language Image Scale shows the placement of emotional words regarding emotional responses to colors in a two-dimensional space through the Korean matching image scale developed by the IRI color research institute.

2. Survey Method

The targets of the survey were online shopping home pages that have high internet traffic in six different countries, namely China, Korea, Japan, USA, UK, and France. In each country, Amazon also had high traffic, but the Amazon global site wasn't counted in this survey. The banners and the product images were removed by simplifying the screen to be captured, the screen capture was blurred out, and the amount of surface area that the dominant and secondary colors took up on the website was calculated. The Munsell color system and I.R.I Hue & Tone 120 system was referenced and applied to the Image Scale to extract the corresponding emotional adjective.

3. A Comparison Between Color Emotions by Country in Regards to Colors used on Online Shopping Malls

Figure 1. Target websites of the survey (China, Korea, Japan, USA, UK, and France)



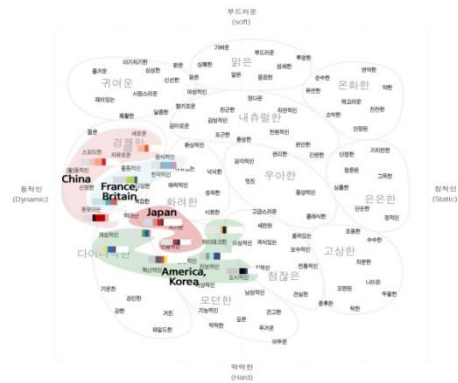
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The matching colors on internet shopping malls were typically cheerful, dynamic, showy, and focused on modernistic emotional expressions. When each country is examined individually, China's shopping mall websites used reddish tones to emphasize tradition but also had a more light, cheerful form of expression, whereas Korea used dynamic, modern color composition, similar to the USA. On the other hand, the UK and France exhibited a more cheerful and showy color scheme compared to the USA or Asian countries.

[Table 1] Emotional Adjectives Regarding Shopping Mall colors

Country	Percentage of Color Schemes	Color Adjectives (Sub categories)	Color Adjectives (Major Categories)
China		Cheerful	Cheerful, Dynamic
		Sporty	
		Standout	
Korea		Progressive	Modern, Dynamic
		Innovative, Practical	
		Innovative, Progressive	
Japan		Complex, Cold	Showy, Modern
		Artificial	
U.S.A.		Modern	Modern, Dynamic
		Outstanding	
England		Urban	Cheerful, Showy
		Standout	
France		Diverse	Cheerful, Showy
		Charming	



4. Reference

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