

# A Comparison of Color Schemes and Images in the Package Design of Sweets in the US and Japan

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## ABSTRACT

This study compares the color schemes and design of packages of sweets in the US and Japan from the viewpoint of the cultural history of color. To visualize this comparison, color charts representing typical Japanese and American sweets packages are presented. The central aim of the comparison is to clarify cultural differences in color that characterize appetizing sweets, between the US and Japan. The research method was as follows: I purchased a total of 120 items, 20 items each of hard candy, chocolate, and chewing gum sold nationally, both in the US and Japan in 2013-14. Using ColorMunki Design of X-Rite, I measured the color scheme of these packages and listed the data in the form of color charts. These data are significant in revealing the fundamental cultural differences in the package design in these nations, a valuable insight for the field of international marketing and graphic/package design. Generally, there is a strong tendency for Japanese sweets packages to use a warm and light color scheme, whereas American ones apply a vivid multicolor scheme. Japanese sweets manufacturers produce various novelty items that promote seasonal and regional marketing, whereas American mass-produced sweets and its coloring are generally aimed at children and their dreams. Therefore, the color scheme of and the images on packages of US sweets resemble American comics.

## KEYWORDS

Color Scheme, Sweets, Packaging, Color Culture

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## 1. INTRODUCTION

This paper compares the color schemes of the package design of sweets in the US and Japan from the the cultural studies of color perception and representation<sup>a</sup>. To visualize this comparison, color charts representing typical Japanese and American sweets packages are presented. The main objective of this paper is to clarify the cultural differences in color that characterize appetizing sweets between the US and Japan. Hues in the color scheme of these package designs are primarily examined. Sugita reported that colors that infants see everyday largely influence the human color perception<sup>b</sup>. Considering Sugita's biological experimental result [1], I hypothesized that the color scheme of the packaging of sweets can be a root cause of forming color culture since human beings habitually see packages of sweets from childhood. The result of this comparison can expose the cultural distinction in the color perspective and will be valuable in international marketing when exporting Japanese sweets. As precedence research, Birren published a series of books on color and consumer psychology [2]. Kawasome presented a paper examining the relation between food color and human appetite. Iyenger, in her book, *"Art of Choosing"*, wrote on the issue of how people choose color [3].

## 2. METHOD

The research method was as follows. I purchased 120 items: 20 items each of hard candy, chocolate, and chewing gum sold nationally, both in the US and Japan in 2013-14. The names of stores were *Wegmans*, *ACME*, and *Hudson News* in New York and New Jersey; and *100 Lawson*, *Aeon*, and *Okashi-no-Machioka* in Tokyo and Kanagawa. Both in the US and Japan, retail stores displayed an average of 18-30 competing products on the same shelves. (Figure 1 and 2) Using Color Munki Design of X-Rite, I measured the color scheme of these packages and listed the data in the form of color charts. From 20 items I selected 3 representative colors<sup>c</sup> each: background, main subject motif, product name logotype. Figures 3-8 represent the hues of hard candy, chocolate, and chewing gums, which are frequently used. For reference, I compare the typical colors of the sweets packages in the US and Japan in Munsell notations and RGB variables (Figure 9 and Tables 1-3). Moreover, as an example of the cultural image influencing color, I mention American comics (Figure 10).

a - This paper is based on the presentation in AIC 2015 Tokyo: Hidaka, K. "A Comparison of Color Schemes and Images in the Package Design of Sweets in the US and Japan", Poster presentation with the proceedings, AIC 2015 Tokyo, 2015, p. 426-431. However, in this paper I have redone the color analysis, revised the text and added some figures based on the reviewers' comments.

b - Sugita experimented color perception of four monkeys by exposing them under various colored light for extensive period of time, and then he proved lighting and experience during infancy considerably change their color perception.

c - There are also some cases that only 2 colors can be seen in the design.

## 3. COLOR SCHEMES

### 3.1 HARD CANDY

Figure 3 shows that Japanese hard candy packages tend to use warm hues, such as red to yellow and light gray; however, they use less green to purple. The use of warm hues and grayish colors gives bright and soft impression overall. Furthermore, the Japanese data show middle ranges of value and chroma.

Figure 4 shows the similarity with the Japanese data, which also use warm hues. However, there are two differences: first, there is no use of gray, and second, there is frequent use of green. The tendency of not using gray in the US hard candy packages makes it look very colorful and vivid. The US hard candy uses low value (brightness) and high chroma (vividness).

### 3.2 CHOCOLATE

Figure 5 shows that the colors frequently used in Japanese chocolate packages are red, brown (orange and red-purple low in value and chroma), black, and light gray. Moreover, they use gold frequently for product logos. In the data, gold appears as yellow and silver appears as gray since RGB colorimetric device does not consider metallic surface. Red, brown, black, and gold are four hues that seem to be typical colors for Japanese chocolate. In Japan, black reminds bitterness and red reminds sweetness. Additionally, brown is in between red and black; to make brown hue, people mix these two colors. Typical products such as *Glico's Pocky* and *Lotte's Ghana* milk chocolate also use red packages. The bitterer taste and more cacao ingredients the products have, the darker are the hues of the package from brown to black.

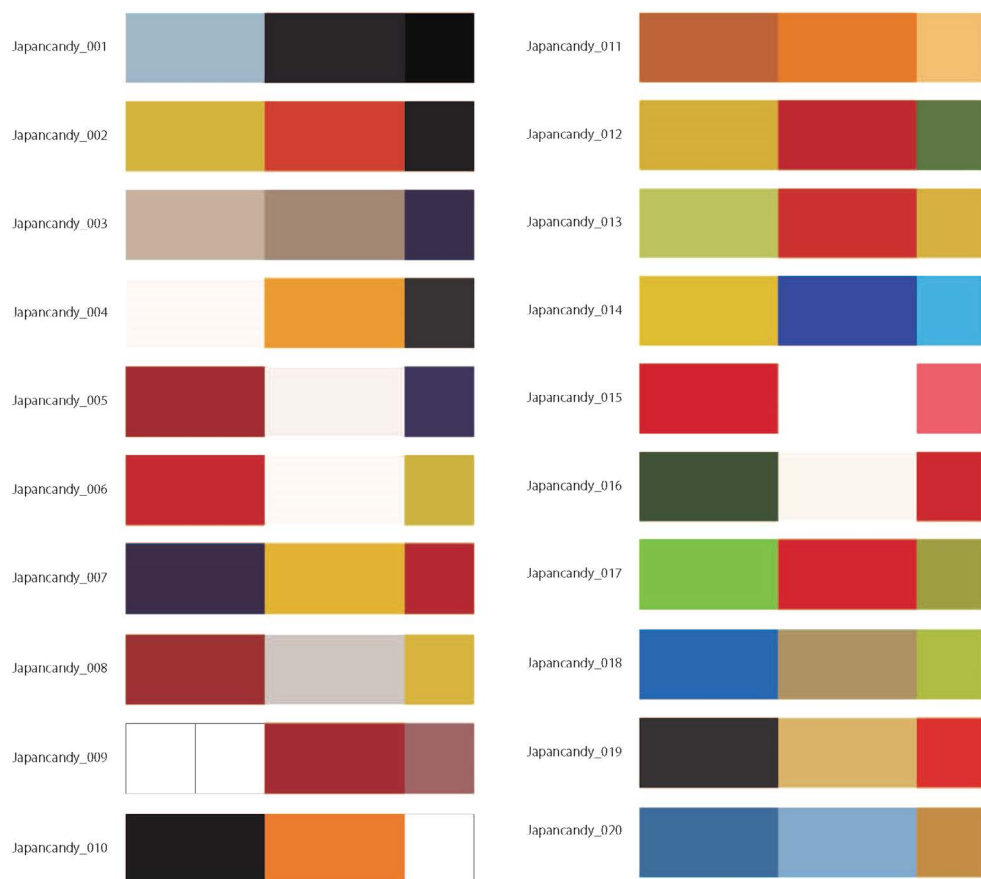
In contrast, Figure 6 displays the frequent color scheme in the US. They use brown, dark gray, yellow-green, and blue. *The Hershey* chocolate currently uses brown in red-purple hue and silver gray. American traditional chocolate snacks, such as *Milky Way* and *Reese*, use orange and green, which are not found in the Japanese color scheme.

### 3.2 CHEWING GUMS

Both Japanese and US chewing gums frequently use yellow-green to blue-purple and silver (gray) for their packages. These hues represent cool, refreshing sensation of menthol flavor. On the contrary, they scarcely apply orange and brown for their overall background. Figure 7 shows that the most frequent hue in Japan is silver (gray). Japanese chewing gums use metallic colors and do not apply many hues to give an impression of a cool, sharp feeling. Black is also often used to express a sharp stimulus. Moreover, Japanese have an image of healthiness in green color. A unique Japanese chewing gum flavor is



# Japan Candy



# U.S. Candy

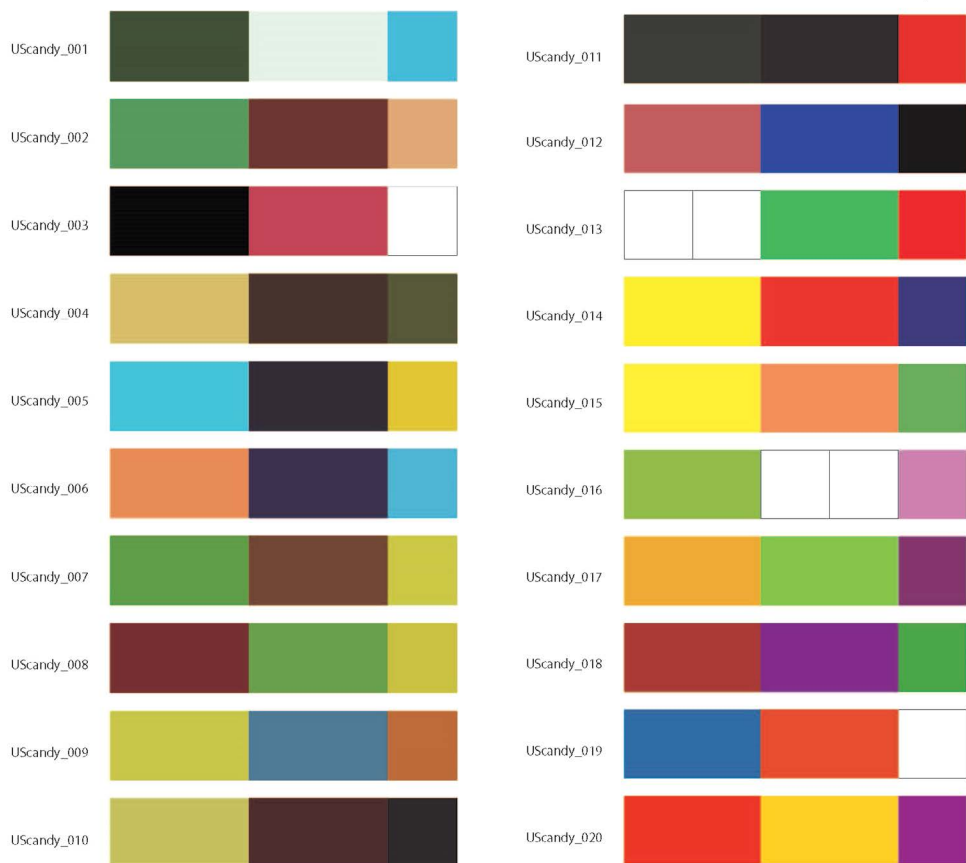


Figure 3 - Japanese Hard Candy (above)

Figure 4 - US Hard Candy

# Japan Chocolate



# U.S. Chocolate

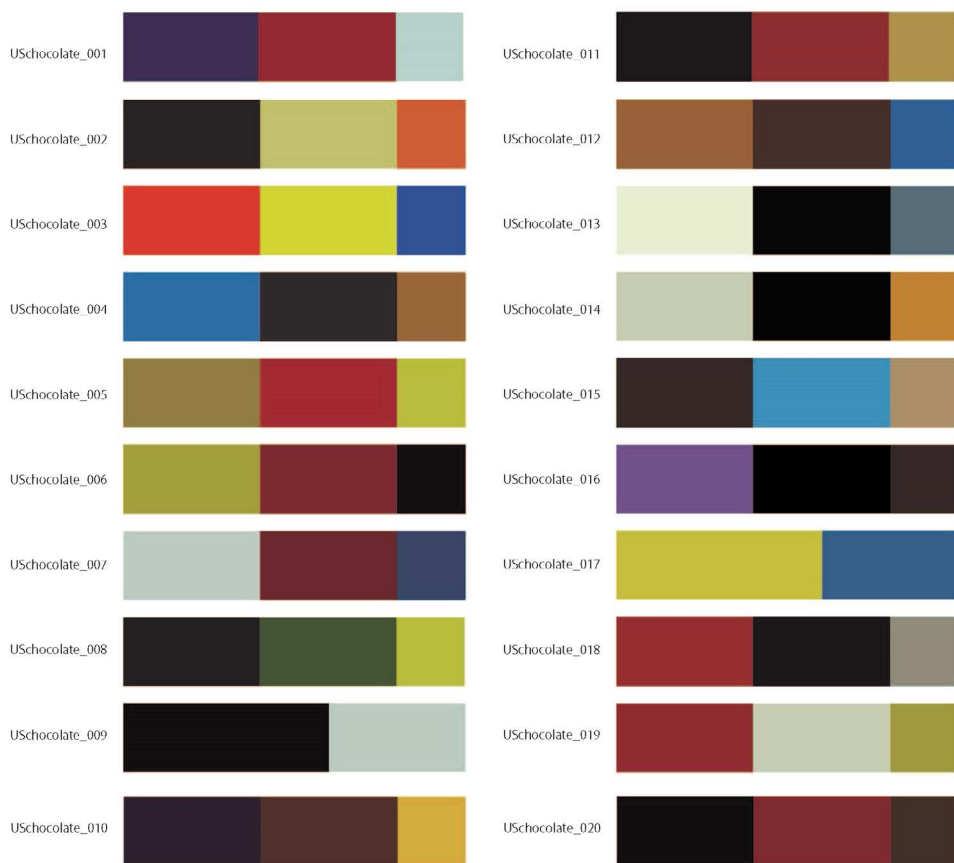


Figure 5 - Japanese Chocolate (above)  
Figure 6 - US Chocolate



Figure 7 - Japanese Chewing Gums (above)

Figure 8 - US Chewing Gums

# The Typical Colors in Packages #1-5



d - Red & green for Christmas, yellow & pink for Easter, and orange & black for Halloween.

Figure 9 - Typical Colors in Packages

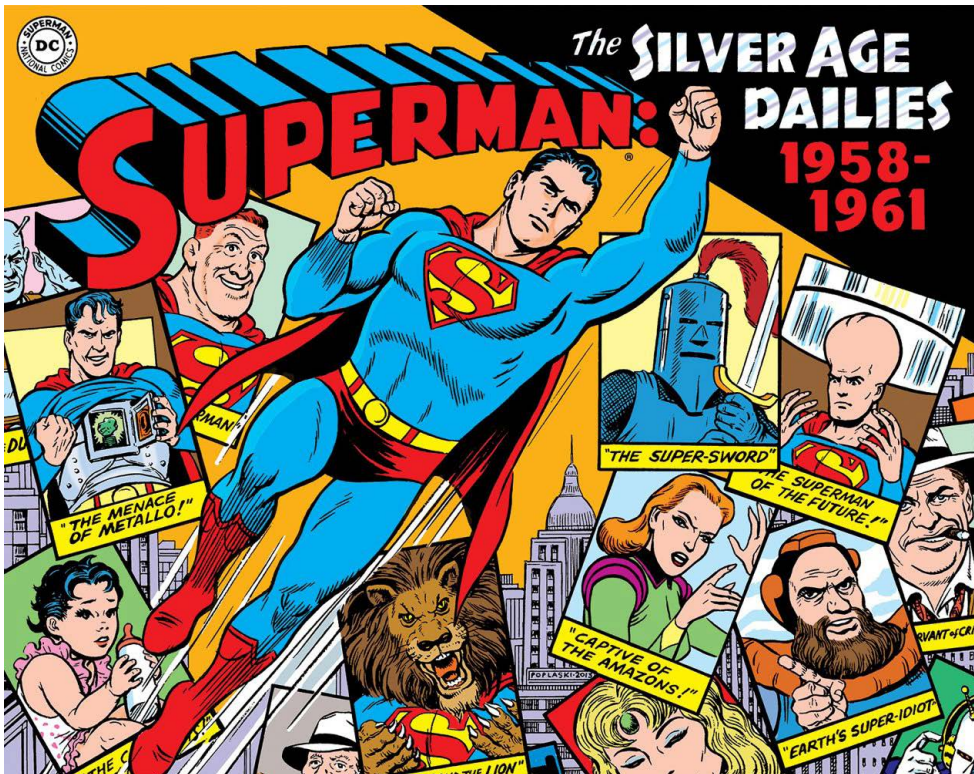


Figure 10 - "Superman: Silver Age Dailies Vol. 1: 1959-1961" the Library of American Comics, 2013, Superman TM and © DC Comics, Inc

children recognize brands [5]. In particular, *M&M*, *Kellogg's* cereal, and *Oreo* cookies use this marketing strategy [6]. Thus, it is predictable that the color scheme of these snacks and sweets packages resemble toys and cartoons. In Figure 10, Superman's color, which are blue, green, and red shows

similarity to the one used in the US sweets. In Japan too, children purchase sweets because of bonus toys and the popular anime cartoon characters that are seen on the package. Yet, the colors of Japanese toys and cartoons may not be as vivid as those of the US.

Table 1 - Comparison of the Typical Colors of Hard Candy in Japan and the US

Japan	Munsell (HVC)	RGB	USA	Munsell (HVC)	RGB
1	6.6R 4/11	179: 57: 44	1	7.6R 4/12	195: 67: 45
2	4.9Y 6/7	187: 158: 66	2	1.9G 4/6	72: 134: 82
3	3.5YR 5/9	213: 122: 57	3	9.2R 4/10	197: 83: 46
4	N 8.0	207: 205: 199	4	4Y 7/9	234: 187: 65
5	1GY 6/7	153: 161: 60	5	1.2B 6/5	88: 161: 176

Table 2 - Comparison of the Typical Colors of Chocolate in Japan and the US

Japan	Munsell (HVC)	RGB	USA	Munsell (HVC)	RGB
1	6.2R 4/11	180: 57: 50	1	N7.0	180: 181: 159
2	8.6YR 5/5	173: 130: 72	2	0.2GY 6/7	164: 163: 59
3	6.7R 1/3	72: 35: 29	3	1YR 1/1	49: 38: 32
4	N8.0	207: 199: 195	4	7.6PB 3/8	65: 81: 142
5	N1.0	32: 28: 24	5	7.3YR 4/5	137: 96: 47

Table 3 - Comparison of the Typical Colors of Chewing Gum in Japan and the US

Japan	Munsell (HVC)	RGB	USA	Munsell (HVC)	RGB
1	5.1GY 7/1	176: 181: 168	1	9.2G 4/3	82: 129: 117
2	1.7PB 3/4	66: 96: 124	2	8GY 3/4	69: 98: 50
3	9.2GY 5/8	78: 140: 59	3	1.3P 2/2	56: 54: 74
4	3.3R 3/7	128: 50: 40	4	7.9RP 5/9	188: 93: 136
5	9GY 3/4	61: 92: 49	5	1.2GY 7/1	183: 185: 169

## 6. CONCLUSIONS

The packages of long seller sweets can become the evidence of perception and representation of color in every country. In Japan, warm and light colors are used in the basic long sellers, and color scheme variations are seen in seasonal, regional, and limited items. In the US, marketing to children and color scheme of American comics deeply influence the design and colors of sweets packages. Humankind forms the color culture—perception and representation by looking at these items on a daily basis since childhood.

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## BIBLIOGRAPHY

- [1] Sugita, Y. "Experience in Early Infancy for Color Perception", *Journal of the Color Science Association of Japan* 34(2) 2010, p.164-167
- [2] Birren, F. "Color Psychology and Color Therapy", University Books, 1961
- [3] Iyengar, S. "The Art of Choosing", Grand Central Publishing, 2010
- [4] Okuda, H., Tasaka, M., Yui, A., and Kawasome, S., "Correlation between the Image of Food Colors and the Taste Sense: The Case of Japanese Twenties", *Journal of Cookery Science of Japan* 35(1), 2002, p. 2-9
- [5] Story, M. and French, S. "Food Advertising and Marketing Directed at Children and Adolescents in the US", *International Journal of Behavioral Nutrition and Physical Activity* 2004, P. 1-3
- [6] Ibid.