Comparative Study on Contrast in Lighting Design at Retail Store Window Display

Reza H.W. Abdulhadi

¹Interior Design Study Program, Telkom University, Bandung, Indonesia rezahwa@telkomuniversity.ac.id (Reza H.W. Abdulhadi)

Abstract Store window display is the entryways for sales in retail industry. It has a big impact to lure customers to enter stores and make purchase, thus creating a big footprint on sales. Despite other factor on window display such as types of window display, placement, theme, layout and materials being used, lighting design has an important role on store window display. As one element in lighting designs, contrast can both attract consumers' attention and interest in the merchandise being displayed and positively affect consumers' footprints to store. Despite its potential, the impact of contrast in lighting often neglected on store window display. This review is intended to observe consumers' attention and interest through comparative study in lighting brightness, lightness and contrast of different retail store window display.

Contribution of this study is to give a new input on how to apply lighting contrast to draw attention and interest for customers in retail industry. These findings will also be beneficial for lighting practitioners, and students of interior and visual merchandising program.

Keywords Lighting, Store window display, Retail, Shopping attitude, Attention, Attractiveness

1. Introduction

Store window display function as the first step for consumers to get information about merchandise and branding that stores want to exhibit [1]. It acts also as marketer that correspond to passing by consumers [2]. Because of its importance, numerous different methods on how to design alluring window display have been made in such manner. This condition result in different placement of merchandise, properties, theme, layout, materials being used and lighting design at store window display [3]. As an element that has an important role at store window display design, lighting has a great impact to attract people's attention and direction [4]. The rule of attraction and perception by using contrast and brightness to its surroundings attract consumers on window display at first glance, thus increase the opportunity of the store to give more information and creating sales at the very end [5].

Perceiving object through contrast and brightness is believed to be the key on getting people attracted. If we take a look closely at theory of perception, contrast and brightness have big impact on how we perceive things [6].

This study is intended to observe consumers' attention and interest through comparative study in contrast and brightness of different retail store window display. This study is will give new input on how to apply lighting contrast to draw attention and interest for customers in retail industry. These findings will also be beneficial for lighting practitioners, and students of interior and visual merchandising program

2. Literature Review

2.1 attention and brightness

Attention in the world of retailing, mainly at store window display gain significant role in itself. It functions as the first object that consumers see before getting into the store, thus the question of how to gain consumers attention is very important in this sense. In relation to the world of psychology attention can be interpreted as setting the mind and its consciousness to something, whether it can be an object, or task [7]. How to create this attention is the next thing comes to mind. Another important aspect that related to attention is light. Part of lighting that highly related to attention is brightness. As scholarly journal state that Attention which related to visual system is dominantly perceived through brightness [8].

Brightness can be interpreted on how human perceived luminance of an object. in store window display this quality of brightness is an important aspect on getting attention of consumers.

2.2 Lightness

Lightness has a very close relation to brightness in terms of human perception. While brightness interpreted on how human perceived luminance of an object, lightness can be interpreted as how light reflectance on an object perceived by human eye [9]. Lightness is highly related on our perception thus creating attention for customers looking at store window display. Lightness clearly can be seen as different kind of grey in different background, as clearly depicted by figure 1

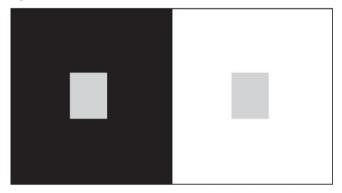


Figure 1. A sample of lightness contrast

2.3 Contrast

Contrast is a function of ratio between two different luminance that close in proximity [10]. In store window display this value can be seen in an object and its surroundings. It can be seen on backdrop of store window display in relation to objects being exhibited.

3. Methodology

Methods being used in this review is observation and literature study. Observation is done in different window display at Trans Studio Mall Bandung. Observation placed in different stores window display which has either dominant brightness, dominant lightness and dominant contrast. Literature used as reference to compare which of three store window display has the main impact to gain attention to consumers.

The study is held on working day to get a clear view of the store and which store has gain more attention in relation to techniques that it used.

Attention in this study is marked by consumers reaction to store window display being used. A glance at store window display is not used as an effective result, since it is not marked as getting more information of the store. The attention that being marked is when consumers try to taking closely at the store window display thus getting more information of the objects being displayed and has tendency to lead costumers into the stores.

The study is located at Trans Studio Mall Bandung, which has different types store window display and types of stores. Three store window display being used is as follows:



Figure 2. store which has dominant brightness

At Trans Studio Mall Bandung, this is the only stores that has dominant brightness that gained from the use of hanging light bulb. The object being presented is lit by spotlight but added with light bulb, thus creating more brightness to the eye of consumers. This technique is not used at any stores at Trans Studio Mall Bandung. As we can see from the store window display that the objects on window display gain more brightness and has specular value compared to other store



Figure 3. store which has dominant lightness

At Trans Studio Mall, Bandung, there are lots of store window display that has this characteristic, predominantly used by clothing stores. This store has more dominant lightness since it has characteristic of white background and bright object which will reflect lots of light to consumers eye. Lighting fixtures being used is LED spotlight with natural white color temperature



Figure 4. store which has dominant lightness

Another clothing store that has dominant lightness using the same technique as figure 3. The use of LED spotlight with natural white color temperature lit object and its background. The background itself use bright HPL as finishing and the object being lit has bright color, thus creating more illuminance at the eye of consumers



Figure 4. store which has dominant contrast

Of all store window display which located at Trans Studio Mall Bandung, this store has different approach with dark background and bright object being lit by spotlight, thus creating high contrast on object and its background. Background being used is gypsum board with dark grey color as its finishing while the object being lit has dominant white color. Hence the shoes being presented there has white color while sweaters and clothes being presented has navy blue color.

4. Result

from three different approach that used by the stores at its store window display, it is noted that stores which strong in brightness gain more attention. At the time of study being held two consumers and a child approach the store in figure 1, while other stores were not getting more attention to their window display. Consumers at Trans Studio Mall Bandung tend to directly went into the stores without noticing what was being presented at stores window display.

It is then clearly noticeable that stores that has dominant in brightness gain more attention. Brightness in this sense is gained through the use of spotlighting for objects being presented and specular object such as Edison Lamp. This Edison lamp gain importance since it creates more luminance in itself. It has specular value to it and consumers tend get attracted to get closer to store window display thus getting more information at object being displayed.

5. Discussion

the use of different lighting approach at every store window display through illuminance is mainly being used at Trans Studio Mall Bandung. In theory both luminance and illuminance have importance at creating attention and attractiveness, but there is more to luminance that create brightness on human perception since the result of this study resulting at luminance is gaining more attention.

The use of specular object such as Edison Lamp also has significant role in gaining consumers attention, thus more study on how to create this luminance and perception on consumers with different approach is needed

6. Conclusion

Based on observation that held, there are several findings that emerges. Consumers at Trans Studio Mall Bandung are not attracted to store window display which has lightness nor contrast but tend to attracted to brightness and specular object being displayed. High illuminance at store window display does not enough to get people attention thus not delivering information that is needed to the consumers

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