

## Color Appearance in Oriental Minimalist Product Design

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### ABSTRACT

Researchers of oriental minimalist product color design is associated with people's preconceived beliefs about connect colors to products and identify the style of products. However, research which has empirically documented the link between people's emotional characteristics and cognitive the style of oriental minimalist products is scant. Therefore, the aim of this article attempts to explore how people's emotion about oriental minimalist product color and recognize in oriental minimalist product color are related. This research involved a survey, comprised of two sets of questionnaires concerning emotional characteristics and determining the influence of color on product cognitive. Results of this study showed the emotional characteristics of oriental minimalist product color design were evaluated from elegant and simple colors were used as basic tone, mono-color was widely used on the surface of the product, coloring scheme majorly focused on only one or two colors. To conclude, this study may be of importance in explaining the relationship between emotional color design of product and cognitive the style of products, as well as in suggesting designers with a better understanding of feasible strategy for designing elegant oriental minimalist products.

**KEYWORDS:** color emotion, product color, oriental minimalist product

### INTRODUCTION

#### Background

From the product designing standpoint, affected by the economic globalization, product design from the world provided a consistent international style, lack of regional cultural features. In recent years consumer start to like the personal-oriented and differentiation product, even looking for the product which have cultural identity and features, the world also development of emphasize the unique cultural features. Therefore, cultural uniqueness become pursuit of goal in the world and countries, cause the cultural different, we can see the different face, it is the new trend from the global product design—"the different within the sameness". Humans experience diverse colors throughout their daily lives, and it is well known that color significantly affects human emotions and feelings. According to Wexner (1954), every color has its own characteristics and each color induces different feelings. Colors that are viewed together and produce pleasing affective responses are considered to be in harmony (Burchett, 2002). In product design, it has been suggested that positive emotion would not only add extra value to a product but can further increase the possibility of a product being purchased (Cho & Lee, 2005; Desmet, Overbeeke, & Tax, 2001; Jordan, 1998). Therefore, when designing products, designers endeavor to establish emotional connections among ideas, products, services and brands (Crossley, 2003). 21 century is the general under the influence of global economy, design is influenced by different cultures start to precipitate and exploring the spirituality and harmony from east culture. Kohei Sugiura (2007) said: in the east, there is no aesthetic judgment from black and white, the understandings from "ambiguous" are more beautiful, the points from the aesthetics are more charming. Color is of great importance for deciding product emotion, and it is regarded as a vital element for showing the relationship between a product and its function, shape, material, etc. (Jang & Kim, 2007). Color plays an important role in design. It is a trigger to arouse viewers' emotions and a carrier that designers use to deliver information.

#### Research Aim

In this study, attempt to extract the design element from oriental minimalist, provide the conversion design method that is possible can following to make the basis for oriental minimalist style design. Accordingly, three objectives were formulated as follows:

- To explore emotional factors of emotional characteristics of oriental minimalist product colors
- To identify the nuances of design element of oriental minimalist product
- To develop the guidelines for suggesting during design processes based on the desirable emotional characteristics of a product.

## THEORY

### Oriental Simplicity Style

Oriental design aesthetics applied to creative art are more likely have the concept from abstract, spirituality and intuition, spiritual connotation is more important than the extrinsic design element, that is different from the west to pursue the aesthetic connotation between rationality and pragmatic. "Simple and nature, refined and elegant" become the widely known oriental aesthetics (Zhang, 2006). Minimalism is about creating harmony and not about making simple (Naoto Fukasawa, 2009).

Minimalism was originated in the early 20th century, advocate a formal of objective and simple, not personal and express the simple emotions, emphasize to reduce the subjective emotion from artists, and use a kind of purely and logical simple geometry to present, through image simplify to phenomenology, or simplify to kind of concept. From the design history, minimalism in some of degree is continue the form and cogitation from modernism, against any of extra externally decorated and inorganic geometric modeling in the appearance of the same shape features, the beauty of modeling comes from the proportion of balance, strive to simple and focus on the appearance of color material performance (Chen, 2005). Minimalism is not the simple of outward appearance, it is a culture and try to find out the nature of things, responding the surroundings precisely (Naoto Fukasawa, 2009). Oriental minimalism aesthetics the same point with the west is the simple and neat lines, geometric shape, simple shape, loyal to the texture of the material, few colors and images, quenching the essence and focus on the clean and flawless presentation (Xue, 2003).

### Color Psychology

When color through the retina, people will be stimulated, body reaction from the physiological to psychological, no matter there has awareness or not, it will make us have been greatly affected. Our life just like a color world, color image, color association, color hobby are the result of color life. As a result effect from color psychology, most will be resulting in personal or group different cause the gender, age, life and nation...etc, and these differences are most from the psychologically different responses, so called "Color Psychology". Final goal from color plan is to creative more comfort visual environment, therefore when color present about image, it is necessary to consider the life in people feeling and cognitive attitude.

If one of color is a concept or more than one concept, as this result, combine color or concept from color, we can called "Color Association". In general, color association can divided into two kinds: first kind is associate to specific items, for example we will through "yellow" to associate "banana", "green" to associate "tree", second kind is associate to abstract ideas or emotions, just like we will through "white" to associate "pure", "red" to associate "enthusiasm", these kinds of abstract association are common experience and common reaction, and these image regular the color expression, and build a concept significance, we can called "Color Symbolic". The explanations of color image consisting of the following: the concept, judgment, preferences and attitude of color, emphasize the content on state of mind and feelings, in short, color will make people produce a psychological feeling.

## EXPERIMENTAL

Sorting out the law according to historical method, through the selected of oriental minimalism product to conduct a research survey, after the investigation, analyzed the conclusion about guidelines to design products and conducting questionnaire analysis, verify the results of the analysis, finally summed up the conclusions and recommendations. The selected products are main selection of the award-winning products (Good design award or iF design award), a total of fifty products, and through a 70-person (University of design students) Likert Questionnaire to determine whether belong to oriental minimalist design product, finally concluded 10 pieces of products to conduct elements investigation, include color, structure, application, modeling and material.

## RESULTS AND DISCUSSION

Discussion on the appearance of color expression, through outward appearance express propose specific design principles, expect to produce the style of oriental simplicity style and mind feeling. The following are

according to experimental to induce three levels of results about the feeling: **1.**Color of appearance: Highlight the color of their own material, no extra processing, color with a low-key, simple color, design elements of colors are simple and use the nature material. **2.**Color of overall style: Contracted, minimal, simple, unsophisticated, plain, uncomplicated, less is more, basic and original. **3.**Color of spiritual feeling: Relieved, comfortable, environmental awareness, elegant, peaceful, responsibility, calmly, primitively, straight, clean, superior, regular, gentle and superior-quality. Oriental simplicity style affect product factors are mainly to use of color to express features on oriental simplicity. Color applications are using lots of solid colors, mainly in white, secondly basic in simple color: gray, black, silver...etc. Application in product material use the material properties to direct performance of the product appearance texture, do not use extra treatment on the product surface, for example do not use the painting or plating. As a reference for design guidance, in table 1. Providing the main design transformation of reference on oriental simplicity product design.

Table 1. Main of Oriental Simplicity Style Design Transformation

Transform Hierarchies	Factor	Frequency number of important sorting arisen
1	Surface on subject use lots of single solid color	9
	Use simple color as the basic tone	9
	Main of single color combine or two of color combine	9
	Unsophisticated	7
	Geometric modeling	6
	Elemental arrangement of the low	6
2	Use material properties to performance product texture	3
	Symmetry of element structure	2
	Modularization of structure	2
	Subject of appearance use single material	2

In terms of color element, using lots of simple color, just like white, black, gray...etc, some of single color, it is the most common technique in oriental simplicity style, abandon any kinds of decoration, for example white possible the color can make people to out of people conversation, get the real feeling of emptiness and threshold of transcendence. In terms of structure and product modeling, mainly use the simple and neat lines, mostly geometrical, simple shape, elements law of arrangement, structure modularization. Quenching the select and simple features, strive to appearance the feeling of superior and flawless, creating oriental zen of feeling and minimalist atmosphere contact to “single is more, more is single”.

**Universal Principles of Oriental Minimalism Style Design**

The element of effecting oriental minimalism style, major factor is how to apply color, using lots of single solid color, most of color is white, secondly are the color of gray, black and silver and some of plain color as base color of product. In terms of product modeling application, using lots of simple geometric modeling to be the main feature and the subject of product appearance and structure are symmetrical coordination and balanced. In terms of product appearance detail structure, the elements are law of arrangement and symmetry. On the regular degree using modular design, therefore, the product has additional flexibility and functionality. In terms of material application, using material properties to show the appearance of the product texture, summing up the above contents, principles of design should follow the following specifications, as shown in Figure 1.

<p><b>Transform Subject of Hierarchy 1.</b></p> <ul style="list-style-type: none"> <li>(1) Main of product surface using lots of single solid color.</li> <li>(2) Using naive color as base color.</li> <li>(3) Combine color with single or twin combine.</li> <li>(4) Simple shape.</li> <li>(5) Geometric modeling.</li> <li>(6) Elements of the law.</li> </ul>	<p><b>Transform Subject of Hierarchy 2.</b></p> <ul style="list-style-type: none"> <li>(1) Using material properties to appearance product texture.</li> <li>(2) The elements of structural symmetry.</li> <li>(3) Structure modularization.</li> <li>(4) Product surface using lots of single texture.</li> </ul>
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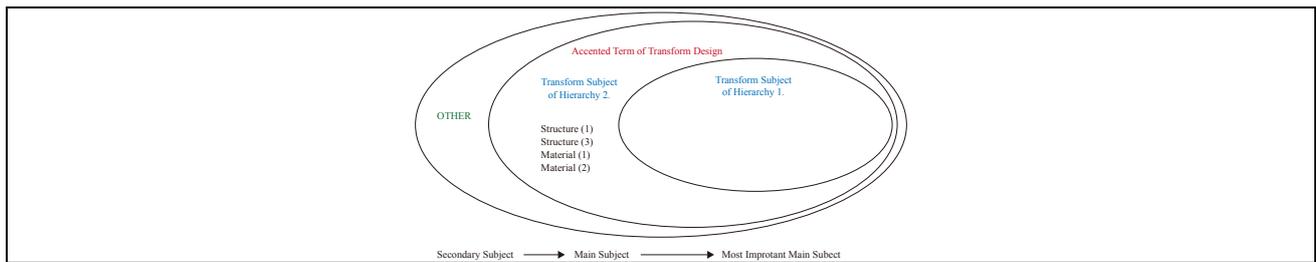


Figure 1: Structure Chart of Oriental Minimalism Element.

### Color Design of Wholeness in Oriental Minimalist Product

Appearance expression of oriental minimalist appearance has clear line and symmetric geometry, loyal to material presentation, use the naive color as base color, trying to use less color and less image to show the simply ethereal and silence of feelings. Mind feel to the color of oriental minimalist product is straight, clean and regular, moreover, there is ideology of back to original and environmental awareness.

### CONCLUSION

Cogitation of minimalism through product design evolution, creating characteristic of unique type, although the characteristic of simple type can be seen as type of style, but if we use strict attitude with it and pursuing point of view from the source, we should use another viewpoint on design thinking. According to viewpoint on phenomenology and development processing in art and design thinking, the initial belief of minimalism on design should against the existence of style, style only relation features on form and representatives to encourage attitude on self-show or following the trend. On the contrary, minimalism is basic, simple, reliable conform to the nature of life, this is a kind of attitude to return to self, no matter in the form of performance or in the concept of performance, meaning of feature simplification is eliminating irrelevant noise and focus on self, meaning of simple is abandoning the yoke of style, facing the diversified style of the times, role of minimalism is pulling back the deviation trend of design, taking the design back to the essential core. Through the spirit of minimalism to look at design, back to original and focus on essential core, without split hairs on the rules of expression or groping in the creating out of thin air. In the other hand, we should discover the creation of infinity.

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