The Reflection of Culture Features on Product Design

Tamer Yousif
Assistant Professor, Canadian International College for Engineering (CIC), Industrial Engineering Department, Cairo, Egypt.
Tameryousif10@yahoo.com

ABSTRACT
There is no doubt that globalization has affected the industrial organizations way to do their business and interact with users. Therefore, today's industrial organizations must offer competitive advantages to their product designs, to succeed in challenging the global environment. The industrial organizations have to face a wide range of cultural challenges in their product designs. Because globalization has some disadvantages: the loss of habits and cultures, destruction of the heritage of local culture, especially for developing countries. The International Council of Societies of Industrial Design (ICSID) advises industrial designers to implement cultural desires of the product design, in order to be culturally appropriate and pleasurable. Industrial designers should take advantage of culture features and cultural considerations to have acceptable and pleasurable products.

Keywords: Culture features, Cultural design, User culture, Culture identity

Introduction
Culture is one of the most various concepts throughout the ages. It defines the nature of each human in life, and includes what human acquires as a society member such as values, customs, knowledge, arts and beliefs. Culture organizes people's emotions and reactions that they express in symbols and languages.

In addition, culture is being created when people gathered together to form a society as no one can live alone away from others. When people gather they form a unique culture distinguishes their society.

Culture builds people's ability to think in themselves, and it helps them to have the unique human advantage of rational thinking. Therefore, we are guided to know and acquire valuable values through culture. Hence, culture represents all related to human's nature.

1- Culture Concept
Culture is the mainframe in which human personality grows. Furthermore, culture affects human's thoughts, knowledge, experience, emotional satisfaction and expressions. Culture gives everyone the ability to think about himself and has the distinctiveness of logical thinking. So, culture represents what relates to human nature.

2- Culture and Design

Culture gives products the meaning and values which are reflected in the form and features. When culture features taken into account in the product design may lead to the user satisfaction. Industrial designers have to extract and benefit from the culture features and elements to create modern designs. This is the way to maintain the cultural identity and spread the soft power of the culture, by interacting with these products.

3- Culture Features
Culture is a very important component of the human personality. Each society has its own culture that distinguishes it from other societies. However, there are public features

of all cultures to help understand people's nature, thus understand the nature of the products they require.

3-1 Culture is Human

Culture is a human only property as it is produced from a human's mind. Human is distinguished from the rest of creatures with his mental abilities that he uses to create many tools he needs. Therefore, there is no creature but human can invent tools and build houses and furniture. Hence, culture is human because it is made and could only transferred by human. furthermore, designers should consider designing the product/system according to this property.

Therefore, user centered design concept considers human and all his moral and material needs. Figure (1) shows two different designs of rays devices designed in a way that reflects the designer's ability to consider user's moral needs through form, texture and color to overcome the feelings of fear of those devices.

Figure 1 Two rays devices

3-2 Culture is Acquired

Scientists, who studied the definition of culture, highly signified the element of "acquisition" and excluded all that is instinctive, innate or biologically inherited from this definition. Moreover, human acquires culture of the society where he lives since childhood whether it was intentionally or in unintentional ways such as, learning and interacting with people surrounding him or with moral and physical materials. Therefore, designing products should support the general frame of the society's culture, thus, designers could affect users' culture and create an emotional response. An example for this property: designing cars through inspiring the car form and color from some of the Chinese heritage figure (2), which would make the Chinese citizen feels happy and help him acquiring his culture and preserving it. Duanshu (2013).

Figure 2 Car inspired by Chinese heritage

3-3 Culture is Variable

Culture is growing and developing constantly, it is changeable according to the addition of human's experience, behaviors and values. Moreover, the change in one of culture's elements affects the rest of the elements. Furthermore, as long as people have renewable needs that change from time to time and from one place to another, culture changes according to time and place.

Cultural change has multiple causes, it could be due to natural circumstances such as an earthquake, the discovery of natural resources that affect the life in the society … etc., or it could be due to cultural communications among people. Therefore, designers change products' forms and features from time to time according to the change of culture. Figure (3) shows the change of a washing machine from a manual machine to an automatic one with new form and features to help the working housewife to save time and effort.

Figure 3 Washing machine (manual, half automatic, full automatic)

3-4 Culture is Integrative

All culture elements merge together to form an integral complete composition. Therefore, this cultural integration helps human to meet his moral and physical needs. Culture combines elements related to spirit and thought, and elements related to body needs. Thus, it achieves an integration between moral and physical elements. For example, an industrial designer in Taiwan was inspired in his designs of the shapes of some products (bag zippers - boat), by the sacred dagger related to country's history, figure (4) Rungtai (2007). This design induces citizens of the country to accept and enjoy the product due to its relation with the holy dagger used in their daily lives. Therefore, that design meets users' varied needs because of the integration between physical element (zipper - boat) and moral element of culture (sacred dagger).
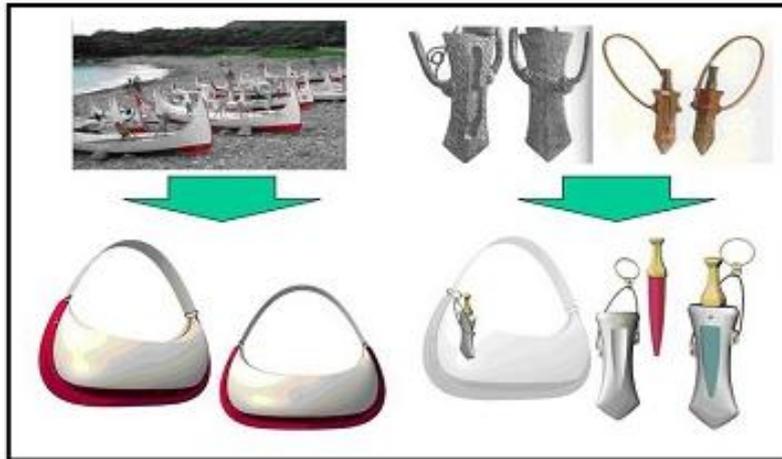
Figure 4 Taiwanese products derived from the sacred dagger

3-5 Culture is Continuous
Culture is created by groups of people who need it. Moreover, the whole society does not last and exist without culture that represents the life style of that society. In addition, culture does not exist exclusively in specific periods of time, and it does not disappear with the death of individuals as it is not the property of anyone. Therefore, culture is inheritable from one generation to another as long as societies exist. An example for that: using Japanese letters inside a lamp unit to make the Japanese citizen feel pleasure when learning his language through the product, figure (5).

Figure 5 lamp unit with Japanese letters

3-6 Culture is Transitional
Culture is a social heritage learned and represented by each individual in each specific group of people. It could be transmitted from a generation to another through socialization, or from a nation to another through developed communications as world has turned into a small village.

An example for that: Indian watch design that is inspired by the insider design of one of the famous places in India which is Rambagh palace which has a unique appreciation by Indian citizens, figure (6). Therefore, desired emotional responses towards the product is guaranteed and transferring Indian culture abroad is targeted.

Figure 6 Watch design inspired by Rambagh palace

3-7 Culture is Cumulative
Culture elements are accumulative. Human would not start from scratch, but rather, he starts from where previous generations end, as well as from the social heritage that represents previous generations experience. Therefore, the accumulation of culture elements develops some of culture aspects. Hence, desires are varied as well as the products to meet those desires.

There is no doubt that the recent development of communication technology has helped designers to anticipate the varied needs of users. Therefore, designers have developed products such as mobile phones. Figure (7) shows the added features, as well as the changes in form and size that enhanced mobile phones to make them more aesthetic and convenient.

Figure 7 Development of mobile phone designs

This development for the products is to meet the needs of today's user, therefore accumulating more experience for the user.

3-8 Culture is Organic
There is an organic relation between physical and moral elements of culture where each element affects the other elements. Similar to any country when policy affects economy and vice versa. Therefore, this organic relation between culture elements is dynamic not static.

The intellectual and psychological bases of Islamic civilization are based on the needs of the whole life from its various spiritual and material aspects Hamza (2014). Therefore, we find the designer influenced by the Arabic calligraphy and its use within the design of some contemporary products, which would lead to user satisfaction as a result to the integration between spiritual and material elements in the product. An example: the lamp unit product shown in figure (8).
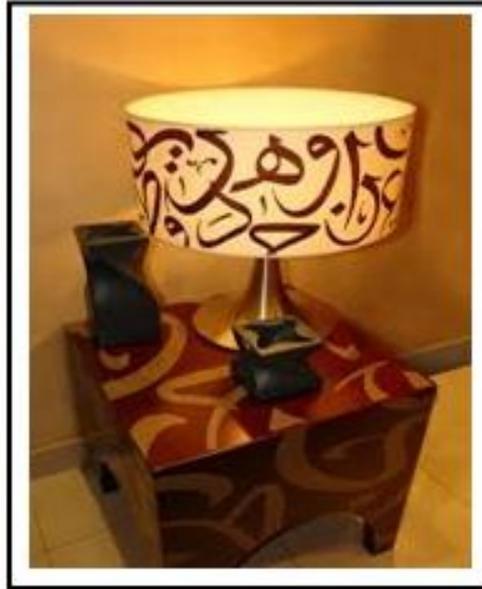
Figure 8 lamp unit product

4- List of Considerations for the Designer
A list of extracted considerations help the industrial designers to take advantage of culture features in the product design. Achieving of these considerations may lead to product acceptance and user pleasure.

• Select the color, form and texture of the product that create a positive emotional response to the user, and to be happy when using the product.
• Expect the future user needs to be included in the product design.
• The message through product elements helps the user to learn the culture of his society, and transfer it from a generation to another.
• The product elements should refer to the culture of the targeted society, it may help to preserve the cultural identity in the era of globalization.
• Expect the future cultural form of a society that helps to expect the desires and the necessary products of this society.
• Achieve consistency in symbols and meanings in the product with the targeted society culture.
• The product design should reflect a moral value to the user according to his cultural identity.
• The product design should integrate between the psychological and physical needs of the user.
• Avoid the conflict between the product design and the user's culture.
• Taking advantage of cultural heritage elements in the product design may help to achieve user pleasure.

Conclusion
Culture features have a direct reflection on the product design. Taking advantage of culture features in designing products can help to gain acceptable products. In the era of globalization, designers in the developing countries has to design products derived from

the local cultural heritage. These products may help the societies to maintain their values, habits and history.

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Tamer Yousif is an Assistant Professor in the Canadian International College for Engineering (CIC), Cairo campus of University of Ottawa and Cape Breton University. Tamer has Ph.D in industrial design and worked as an industrial designer in many firms. Tamer has a good teaching, research and practical experience in the the field of product design.

Figure 9 Two rays devices

Figure 10 Car inspired by Chinese heritage

Figure 11 Washing machine (manual, half automatic, full automatic)
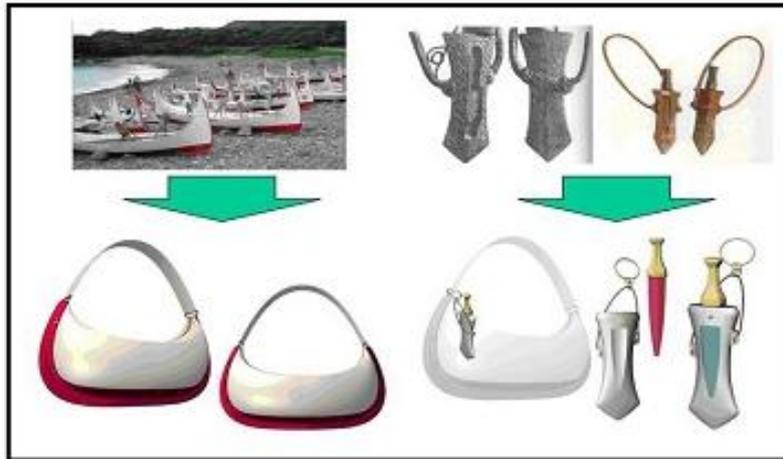
Figure 12 Taiwanese products derived from the sacred dagger

Figure 13 lamp unit with Japanese letters

Figure 14 Watch design inspired by Rambagh palace

Figure 15 Development of mobile phone designs

Figure 16 lamp unit product