

Product Identity Recognition: A Cultural Product Design Approach

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Abstract

In design field, culture plays an important role. Designing culture into modern product design is essential in the global market. So, a study to understand how to communicate culture in product design is needed. The paper studies how to translate local culture into modern product design to create strong identity recognition. Identity recognition is the result of complex experience of presentational and representational product dimensions, and it is key for recognition in global market. Hence it is important for designers to understand how to construct strong recognition through cultural design elements. Design case study in jewelry design is used to illustrate the possible product design that have strong recognition through translating local design elements. In this paper it is proposed a framework how to translate cultural elements into design elements with a method called IMO. The method become the means for recognizing and developing strategies to create product design with a strong product recognition. The framework can be utilized as a conceptual framework for academic tool in design education and designers when considering different approaches when designing product with local culture content. The result of the framework is implemented in a design case study Toraja Carving Pattern-Inspired Jewelry Design With The Application Of Torajanese Granulation Technique.

Keywords: identity, recognition, cultural product design, semantic

1. INTRODUCTION

Indonesians have a strong sense of creation and high appreciation of arts and design as a result of the country's diverse nature, culture, and traditions. The creative economy in Indonesia thrives due to the country's wealth in creating and appreciating works of art. The first phenomenon that underpins this paper is the creative economy's enormous potential. According to BEKRAF (Badan Ekonomi Kreatif) and BPS (Badan Pusat Statistik), creative economy exports increased significantly from 2012 to 2016, with an average increase of 6.93 percent (BEKRAF & BPS, 2018). The potential of the creative economy is enormous. Table 1 shows that the creative economy's GDP continues to grow, increasing from 535.96 trillion rupiah in 2010 to a significant increase of 1.211 trillion rupiah in 2019. The creative economy's exports increased while other non-oil and gas sectors' exports decreased (BEKRAF, 2017). The creative economy created many new jobs, with a positive increase trend from 13.45 million people in 2011 to 17.43 million people in 2018 (BEKRAF & BPS, 2018). Table 1 shows the Creative Economy GDP growth from 2010 to 2019.

Table 1. Creative Economy GDP growth from 2010 to 2019

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
525.96	581.54	638.39	708.27	784.87	852.56	922.59	1000	1105	1211

Note: In triliun rupiah

According to Presidential Instruction No. 6, 2019, the creative economy is "an economic activity based on the creativity, skills, and talents of individuals to generate economic value and influence on the welfare of the people of Indonesia." In contrast to other industries that rely on the exploitation of natural resources and tool technology, human resource creativity, creative ideas, and human knowledge are the most important assets in the industry. As a result, human resource skills are critical. According to The Presidential Regulation of the Republic of Indonesia Number 72 of 2015, the creative economy is divided into 16 sub-sectors: architecture, interior design, visual communication design, product design, movies, animations, and videos, photography, craft, culinary, music, fashion, app and game developers, publishing, advertising, television, and film. The largest contribution to the creative economy's export is made by the fashion, craft, and culinary subsectors, which account for 16 of the 16 subsectors (BEKRAF, 2017). Obstacles cannot be separated from creative industries with great potential. According to a Bekraf survey conducted in 2016, the five most significant challenges faced by Indonesian creative industry players are as follows (BEKRAF, 2017):

- a. 41.89% domestic marketing barrier
- b. 37.4 % lack of research and development
- c. 31.88% lack of physical infrastructure constraints
- d. 31.56% lack of education
- e. 22.26 % regulatory restrictions

Based on this information, it is possible to conclude that the creative economy, particularly the subsector of craft is in need research and development methods to help them creating valuable and distinguishable craft products for the global market. The research questions addressed in this paper are as follows: What are the craft product research and development methods that can aid designers in the creation process of producing strong local identity craft products? The goal of this research is to create a framework for research and development of craft products with local cultural inspiration, in order to revitalize local culture.

1.1 Culture and Product Design

The relationship between culture and product design gave birth to a new concept called by researchers "cultural product design (CPD)", which is defined as a process to rethink or review the features of an ancient cultural artifact to be adapted to the functional and aesthetic needs of contemporary society by integrating (Luo & Dong, 2017).

2. METHOD

The IMO method is a method of translating cultural elements into design elements formulated author developed from Leong and Clark (2003) with the approach of emotional design theory (Gumulya & Nastasia, 2016). IMO is a short description of the "inner, middle and outer" IMO model connecting cultural levels and design features. The IMO method begins with the identification of cultural elements on the outer level, such as artifacts, architectural, cultural performance such as dances, traditional clothing, and jewelry. Essentially, all visible and touchable outer cultural elements can be extracted for design features such as shapes, forms, colors, materials, patterns, details, styles, and proportions of cultural elements. The following step is to identify middle-level cultural elements such as traditions, behaviors, and customs. All cultural elements related to a society's behavior. Middle design elements such as functions, utilities, behavior, craftsmanship, and construction

of middle cultural elements can be analyzed from middle level cultural elements. The inner cultural elements, such as beliefs, values, basic assumptions, and philosophies, form the deepest layer. Design elements for storytelling narratives such as motivation, symbolic meaning, self-image, moral value, hope, fear, affiliation and belonging can be obtained from this inner level cultural element. Following identification, the next stage is implementation, which moves from the inside out, from the inner, middle, and outer levels, beginning with knowing the element of meaning that will be implemented, then moving to usability, craftsmanship, and finally to design elements such as shapes, forms, materials, colors, patterns, surfaces, details, and style.

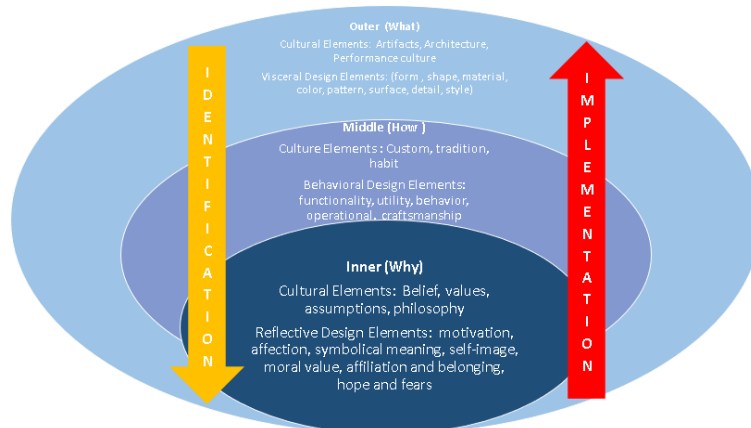


Figure 1. Improved IMO Method
(Authors's data, 2021)

3. FINDINGS AND DISCUSSION

The imo method is implemented on design study case Toraja Carving Pattern-Inspired Jewelry Design With The Application Of Torajanese Granulation Technique. First identification of outer, middle, and inner of Toraja Culture is explored. Then the designs focus on exploring the outer and middle layer. The outer layer taking the toraja wooden carving as inspiration. Each pattern in the wood carving has a unique geometric motif and contains different meanings. Toraja carvings are most commonly found on the exterior wall of the Toraja tribe's traditional house, Tongkonan. Three Torajanese carving motifs were chosen as the main inspiration for designing this jewelry from hundreds of Torajanese carving motifs. Pa'manik-manik, Pa'doti siluang I, and Pa'boko 'komba kalua' are the three motifs. Pa' manik- manik means hope to live in harmony, Pa'doti means female elegance , Pa' boko means authority and greatness of the Toraja nobility (Sande, 1991). The goal is for the user to be able to relate to the meanings contained in the pattern used on the jewelry.



Figure 2. (from left to right) *Pa'manik-manik*, *Pa'doti siluang I* dan *Pa'boko' komba kalua'* (Sande, 1991)

The three patterns above then developed into a single pattern that could depict the three previous patterns without eliminating the meaning contained within each carving. The combined motif is a guideline for the design inspiration of the jewelry.

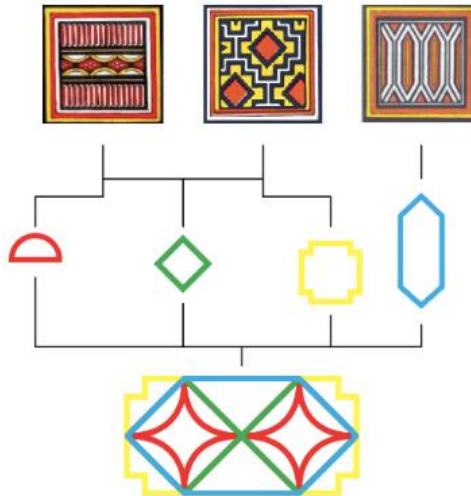


Figure 3. Result of the combined carving patterns
 (Authors's data, 2021)

Then inspiration come also from middle level, the traditional jewelry technique of Toraja which the granulation method. The visit to the jewelry craftsman's workshop revealed that the granulation technique used by Torajanese craftsmen is a very complex and intricate technique that requires a great deal of patience to produce a high-quality product with a high artistic value. After the observation at the jewelry craftsman's workshop, the next step was to do several experiments. Based on this experiment it was found geometric shapes are better for these approaches to facilitate the production process. Also, the process of making granulation needs to be done carefully to avoid any holes that can affect the appearance of the jewelry.



Figure 4. Results of the experiments with Pong Sera, (from left to right) stacked, two dimensional planes joined together to make a three-dimensional form, using a mold to shape the granulations into the desired form
 (Authors's data, 2021)

Then final design was developed where the chosen design has high innovative value and high comfort value with new meaning that Jewelry can serve as a reminder to users of their hardwork, as well as a means of bringing charm and making the user feel more powerful.



Figure 5. Final Design renderings
(Authors's data, 2021)

4. CONCLUSION

With IMO method several discoveries were made throughout from the middle level where various experiments and explorations were performed, resulted in new approaches to creating three-dimensional forms in jewelry making, as opposed to the original technique of using only one approach. These new approaches may serve as inspiration for Toraja jewelry artisans to create a variety of shapes and forms in order to increase the artistic value of the product. With these discoveries, the product can also have more appealing designs, allowing it to compete with other products. Nonetheless, these new discoveries have some flaws, such as the fact that the production process takes a long time because the product is handmade and still uses traditional equipment. Furthermore, the resulting shape is only limited to geometric shapes, so organic shaped openwork granulation is currently not possible. To improve the technique, more research is required. Contemporary jewelry design inspired by local meaning and developing local craftsmanship can capture the target user's attention and broaden the target market, allowing the product to compete in a larger market due to its stronger identity and meaning. Hopefully, this paper will provide designers with ideas for translating culture using the IMO structure.

REFERENCES

- BEKRAF. (2017). *Hasil Survei Khusus Ekonomi Kreatif*.
<http://www.bekraf.go.id/pustaka/page/data-statistik-dan-hasil-survei-khusus-ekonomi-kreatif>
- BEKRAF & BPS. (2018). Infografis ringkasan data statistik ekonomi kreatif Indonesia.
https://www.academia.edu/38141999/Infografis_ringkasan_data_statistik_ekonomi_kreatif_indonesia
- Gumulya, D., & Nastasia, P. (2016). Kajian teori emotional design. *Jurnal Dimensi Seni Rupa Dan Desain*, 12(2), 121. <https://doi.org/10.25105/dim.v12i2.41>
- Leong, B. D., & Clark, H. (2003). Culture-based knowledge towards new design thinking and practice—a dialogue. *Design Issues*, 19(3), 48-58.
<https://doi.org/10.1162/074793603768290838>
- Luo, S. J., & Dong, Y. N. (2017). Role of cultural inspiration with different types in cultural product design activities. *International Journal of Technology and Design Education*, 27(3), 499-515. <https://doi.org/10.1007/s10798-016-9359-y>
- Sande, J. S. (1991). *Toraja in carving's*. Eigenverl.
<https://catalogue.nla.gov.au/Record/1086663>