

TRANSFORMING ROTE CULTURE INTO KIDS FURNITURE DESIGN FOR LENTERA HARAPAN SCHOOL IN ROTE

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Abstract: Indonesia has unique and rich cultural background which is a precious resource of inspiration for designer. The study discussed how to apply the cultural values and elements into design features and apply it on design project designing kids furniture a Lentera Harapan School in Rote. Rote is currently under development and needs to preserve its cultural value. The design vision is to educate young children about Rote's cultural heritage. The aims of the study is to identify cultural elements and values for product design application and to translate them through design principle. The study contribution has been firstly the study create guideline built from previous research on how to classify culture into three layers: outer, middle and inner layer. Secondly, from the design study case elaborate on how the framework is used in real design process.

Keywords: culture-inspired, product design, Indonesia culture

INTRODUCTION

Many reasons drive consumer to buy certain products, it can be for utility value, cultural value, aesthetic value or emotional value; while emotional value can play important role in driving consumers to purchase a certain product as it elicits customer's emotion and elicit pleasurable like giving customer sense of joy, fantasy and nostalgia (Wang, 2013). Moreover, According to Spark P. (2004) since 1970s, there is a tendency for developing countries to embrace local culture by applying it into contemporary product design, and this become a mean to attract consumer's emotional value.

The culture inspired contemporary product design is considered more sophisticated than other product available in market. This pattern can be seen in Indonesia design landscape as well, where many products that integrated local cultural characteristic has won Good Design Indonesia (GDI). GDI is a prestigious design award given to Indonesia best design works conducted by Trade Ministry of Indonesia since 2017.



Figure 1. Good Design Indonesia 2020 Winner
Source: <http://iddc.kemendag.go.id/gdi/>

From the example above, many products that receive good design Indonesia awards use local culture and material can be seen. The name Waerebo is taken from Flores indigeneous house. Batik is an Indonesian cultural icon and still consistently developed into contemporary culture. Through this observation, it is clear that designers embrace culture as inspiration in the design process, not just simple copy the traditional elements but transfer these elements into a more refined and sophisticated product design. In condensed, there is a great trend and been proven by market demand that transforming cultural elements and values into contemporary product design bring certain advantages and better product positioning in the market.

Now the question is how to translate the cultural elements into product design elements that can stand for themselves without any other explanations? This paper aim to give framework for designer how to translate cultural values and elements into product design elements through reviewing existing framework by previous research and apply the framework into design study case in which designing kids furniture for Lentera Harapan School in Rote, NTT. The basic premise is that cultural values embedded in the product should be proper and appropriate to the existing cultural knowledge and context. The research questions are:

1. What are the essential and transferable cultural elments in the existing cultural artefacts?
2. What are the design methods and guides that can be applied to cultural inspired products?

3. How to apply the design guide in design project context?

The design project background is about designing early childhood educational furniture for a Lentera Harapan School (LHS) in Rote, NTT. The school project is an integrated community service project within the faculty of design of Pelita Harapan University. The architect's department designed the building, the interior laid out the school space, visual communication designed the sign system inside and outside the building, and finally the furniture designed by the product design department. The aim is to bring equal education and facilities for children living in remote areas and to bring local culture as a design inspiration from the building to the furniture. The vision is to make local people proud of their local heritage from an early age.

Layer Of Cultures

Leong (2003) stated that there is three structural cultural levels in a inverted triangle shape. The inverted shape come about as the outer layer is the broadest part of culture and the inner layer has the smallest part.

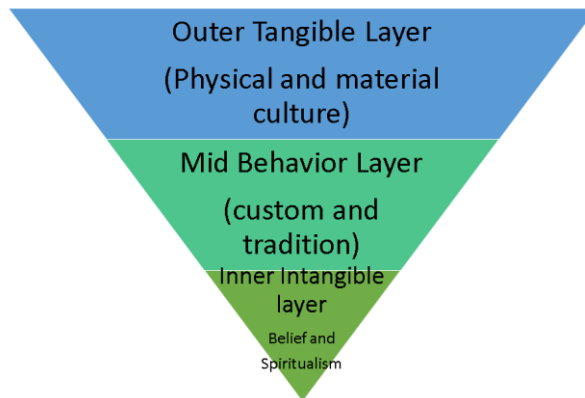
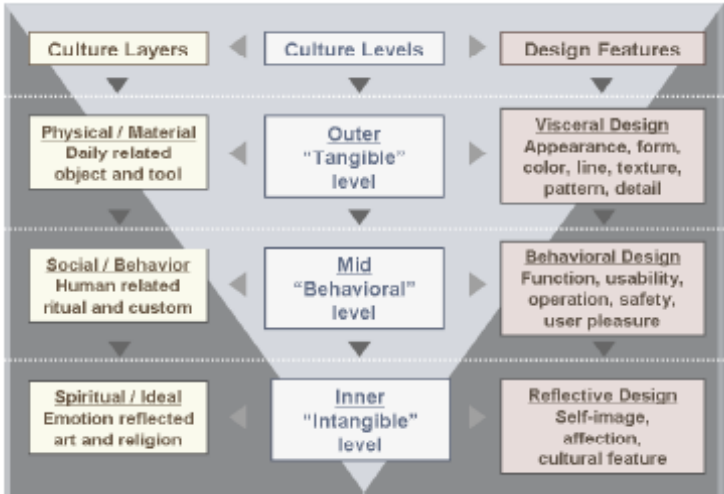


Figure 2. Three Cultural Layer
Source: Leong (2003)

Cultural definition that is more relevant to design according to Universal Declaration on Cultural Diversity is “the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, in addition to art and literature, lifestyles, ways of living together, value systems, traditions, and beliefs”. The cultural values can be carried over through products, the artisans as the maker and how they are produced.

Literature review	Key contents	Reference
Culture definition	- Definition - Values - Invisible assumptions	Schein, E.H. (1985)
	- Tangible - Behavior - Intangible	Hatch, M.J. (1993)
	- Artefacts - Values - Assumptions - Symbols	Throsby, D. (2001)
	- Values/belief/customs - Activities	Leong, B.D. and Clark, H. (2003)
	- Spiritual - Material	Voon, T. (2007)
	- Visual - Manner - Philosophy	Moalosi, R., Popovic, V. and Hickling-Hudson, A. (2007)

There are some previous research about translating cultural values and elements into contemporary product design.

Research title	Key Findings	Source
Culture-inspired design principles, methods and tools in current products	<p>Product design that is inspired by culture has certain characteristic which is transforming image from 2D to 3D through simplification of figures, color, altering proportion and materials.</p> <p>Aside from transforming form, traditional craftsmanship can also be transformed into new products for example traditional wood joinery is applied to glass frame.</p> <p>Wang (2013) proposed that several design rules such as abstracting, imitating, deconstructing, integrating, combining, simile, metaphor can used to translate cultural elements and values into product design.</p>	Wang (2013)
Transforming Taiwan Aboriginal Cultural Features into Modern Product Design: A Case Study of a Cross-cultural Product Design Model	 <p>Lin (2007) proposed that each layer of culture can be transformed to design feature based on Donald Norman's emotional design theory a (Norman, 2005). In which culture outer layer the physical and material part can be translated into viscreal design features like form, shapes, line, color, texture, pattern and detail. The mid behaviour layer can be translated into behaviour design feature, for instance function, utlitiy, safety, operational feature that can give user sense of pleasure. Inner layer of culture can be translated into reflective design, design features that represent self image and affection.</p>	Ling (2007)

METHODS




Build upon previous research model. The paper build a framework how to translate cultural elements and value into contemporary product design and apply the framework into designing kids furniture case study.

	Design Elements	Form	Shapes	Color	Pattern	Texture	Material	Utility	Meaning
Cultural Layer	Outer elements							Middle elements	Inner elements

By combining each design elements row with each colom of cultural elements idea can be generated.

RESULT

The above framework is used as structure in design project to design kids furniture Lentera Harapan School in Rote. First the Rote cultural elements are identified.

	Design Elements	Form	Shapes	Color	Pattern	Texture	Material	Utility	Meaning	
Cultural Layer	Outer elements								Middle elements	Inner elements
	tenun ikat 	Geometric	Flat	natural dye like mengkudu, kunyit and tarum	Repetitive	Textured	Weaved	The cloth is used for used in daily life and formal ceremony.	Weaving is important skill for Rote women, as her maturity is measured from her ability to tie, weave and dye.	
	Traditional house Musalaki 	Form taken from traditional boat	Elongated shape	Natural color	-	Textured	Local fiber	a tribal leader's house that is usually used as a place to hold gatherings, ceremonies, and solve community problems	The elongated shape also represents Rote's people desire to be closer to their God.	
Sasando String instrument 	Circular		Natural color			Bamboo	Traditional instrument to accompany local dancing	A myth that it is a special instrument made as a special gift for a princess		

Another factor to consider is the geographical aspect. Rote land is arid and in barren conditions due to the long dry season and short rainy season. Rote people livelihood is farming and fishing. Many of Rote people work in a sugar field and Lontar trees farm

The yellow marks inspire designer to create the first design creating modular furniture inspired by Rote cultural elements and values. The shape of the table and seating part is taken from Maselaki Roof elongated shape. Some modification is done for functional purpose.



Figure 1. Kids Furniture inspired by Rote Cultural Values and Elements
Source: Researcher Data, 2020

The modular has special feature in which it can rotated and changed into a desk with a height for 70 cm for lecturer to work. So it is a kids furniture while it also can be desk for the teacher. The material is wood panel with a thickness of 20 mm and 30 x 30 mm metal cube with a thickness of 2mm.



Figure 2. Desk for the teacher
Source: Researcher Data, 2020

CONCLUSION

Incorporating cultural values into design elements can be quite a challenge without proper structure through the matrix. Unfortunately, due to Covid 19 pandemic situation, the ideas developed here have not been tested into real functional prototypes. In this study, the framework and example how cultural values and elements can be translated into design elements is described.

Furthermore, through this study designers can have a framework while designing product inspired by local culture that is demanded by current market. As designing while incorporating local culture can bring sense of emotional value to the consumer.

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