

Utilization Of Semantic Values And Local Community Metaphor In Creating Furniture Identity

Alexander Anak Sigau, Dr. Musdi Shanat

Abstract: Investigating furniture metaphor and identity are challenging because the metaphors are mostly deliberated in the context of language. This paper explores how the extent to which a source represents the meaning a designer intends to convey and is related to a target affect the selection of that source. By providing a thorough analysis of metaphor's characteristics and express meanings to users via furniture form and appearance, systematic research survey was employed to obtain the first-hand data in presenting identity of Sarawak in furniture design that focus on local content of Dayak and Orang Ulu's of Sarawak. Findings of the studies and provisional results are discussed from a theoretical and practical point of view, and recommendations for generating successful furniture design according to popular metaphors. The researchers believe, by embedding the semantic values and mapping local identity metaphor in the product aesthetics increase consumers desire to pay furniture items with high value for quality products rather than buying products at low prices. In conclusion, this paper aims to identify Sarawak's local identity that potential to be a design elements of furniture design; Finally, this research intentions to analyze, identify and apply biomimicry of Sarawak local's identity that able to symbolize furniture of Sarawak.

Index Terms: Design metaphor, furniture, identity, semantic values

1. INTRODUCTION

Furniture industry in Malaysia is considered one of the most profitable industries. The exportation of timber products from Malaysia in year 2010 has increased a massive income in which 4 billion Ringgit Malaysia has been generated according to Sakina Mohamed [1]. This phenomenal triggered the creation of job opportunities for more than 5,000 peoples under furniture projects that was revealed by the Malaysia Industrial Development Authority in year 2011. Evidence shows very high prospects for Malaysia's local cultures to become crucial cultural elements in future design applications due to the demand of product that able to portray local identity. Consequently, Sarawak is picked as a subject reference because of beautiful and unique visual arts and crafts. Emaria in [2] stated that Sarawak's aboriginal cultures and identities offer great potential for enhancing design value and becoming recognized in the global market due to cultural beliefs, values, and social practices. Featherstone also mentioned that the awareness in study of the relationship of metaphor, identity and sentiments among the researcher has aroused in these decades [3]. Narotzky in [4] has mentioned that most of the researchers nowadays interested and focused in the study of relationship between national identity and product designs.

2 LITERATURE REVIEW

2.1 Metaphor as design creativity aids

According to Wiley in [5], metaphor frequently used to describe objects and it has been referred to transfer and construe of source properties to target in a conceptual level of the study. Furniture is a build subject of the tangible artefact that formulated from metaphor assets. In order to interpret a metaphor, researchers are required to create the appearance of a source visible in the appearance of its target. Two distinctive sources mapping are utilizing to manifest the tangible form which are semantic and physical mapping. In this study, the semantic elements to describe Sarawak is selected from cultural material of Iban tribe known as Terabai (one example out of many). Terabai or known as shield by the Dayaks in Sarawak are used during the war in the past years

(Refer to figure 1). According to Anggat in [6], Terabai has unique tattoo and motifs pattern carved on the shield which purposely to scare the enemies. Terabai are also described as the toughest shield which represents the attributes of bold, strong and indigenous. Researchers believed metaphors functions as a design creativity tools in providing cues to end users of how to understand products that are familiar and personify. Metaphorical reasoning is an iterative process (design process) through which designers gradually increase their knowledge of a design situation and stimulate design creativity. The design process starts from creating a thumbnail sketch, drawing, development of idea, final design, technical drawing, mock-up and prototype and final production; Design, as a process, has been severely confined as a management strategy for delivering products that conform to customers' specifications



*Figure 1 Terabai, known as Dayak's shield
(Photo by Alexander, 2017)*

3 RESEARCH METHODOLOGY

This research embarks quantitative methodologies in which the application of semantic differential (SD) approach is employed to measure consumers' perceptions. Musdi Shanat in [7] stated that if SD questionnaires is disseminated together with actual scaled prototype, the research finding will be able to provide a proximity precise prediction and suggestions what to embed into furniture creation in order to increase consumers' satisfaction and fulfil end user preferences. The application of five to seven-point rating scale are common for

the Semantic scale and must consists of two opposites that represents good or bad. In this research the five-point scaling were applied as shown below:

TABLE 1
CONSUMERS' PERCEPTIONS BASED ON THE LEVEL OF EXTREMITIES

Based on your opinion, what type of characteristics that should exist in furniture item?						
Unpleasant image	1	2	3	4	5	Stylistic looks
Standard jointing system	1	2	3	4	5	Unique jointing system
Insecure	1	2	3	4	5	Safe to use

Five distinctive categories of local objects were engaged in this study namely flora, fauna, cultural material, tattoo motifs and foods. The selection of these cultural objects was elected according to the popularity results after the survey which have been conducted among 150 participants. The researcher used the three levels of design features namely visceral, behavioural and reflective design to identify and confirmed the subject is appropriate for the study. Generally, Norman has mentioned in his article [8] that the visceral design focuses the physical appearance of an object and aims to translate its form, shape, textures, and patterns into a new object. The visceral design emphasised on the appearance and impressions. Finally, the behavioural design level deliberates the practicality of the items, function, performance and the use of the object. Significant findings indicated that most popular local elements and metaphors that reflected the feelings, emotions, and cognition involved in experiencing a cultural object to represent furniture items.

TABLE 2
CONSUMERS' PERCEPTIONS BASED ON THE LEVEL OF EXTREMITIES

Categories	Metaphors	Descriptions
Flora	 (i)Engkabang	(i) Engkabang is a local fruit and commonly associate as a flower that lived near the river. It is used for medical purposes according to the Dayaks tribe.
	 (ii) Dabai	(ii) Dabai is an exotic fruit with black skin and yellow on the top. Dabai are well known as one of the most delicious fruit in Sarawak with buttery texture and the flesh is soft and mushy.
Fauna	 Hornbill	Hornbill or Rhinoceros Hornbill is known as Kenyalang in a local Sarawak dialect. The Rhinoceros Hornbill, has deep cultural links to Sarawak and its indigenous people.
Cultural Material	 Terabai	Terabai is a popular cultural item that originated from Iban's tribe in Sarawak. It is used as a shield during the war from the past years and

		the shape is based on the hexagon.
Tattoo Motifs	 Teku	Teku is one of the tattoo motifs that has the highest percentage during the survey. It's represents the balance nature of human life.
Food	 Kek Lapis Sarawak	Kek Lapis Sarawak or Sarawak layered cake is popular among local Sarawak people as well as Malaysian. This layered cake are well known for its intricate pattern, unique colours and delectable.

3.1 From Metaphor to Furniture Design

To materialize the scopes of translating metaphor or subject matter into furniture is through understanding the conceptual framework. In this research the three important elements of the Sarawak identities and values are included semantic, metaphor and identity. Based on Ying, Xiaochen dan Xiaoyong research in [9] explained that metaphors are described as the transformation of meaning of which the processing of meaning in certain object and symbol is used and change to different form but the identity of the original character of the metaphor is preserved. The use of biomimicry techniques in designing the furniture items are applied and utilized. According to Zari in his research [10] stated that the designers are trained to surface the concept, idea and design through biomimicry solution without an in-depth scientific understanding or collaboration with a scientist and engineer if they are able to observe organism or ecosystems or are able to access available biological research. In fact, the designers are seeking inspiration in nature is nothing new and they stylized the shape and form of the metaphor or subject matter according to the need for an improvement naturally or even artificially. Logically, a design for a product exists due to imagination and observation of human needs and the existing surrounding as coined by Wan in [11]. Table 3 illustrates how researchers applied and translated metaphors of Sarawak identities into beautiful furniture without compromised the characteristics and semiotic meaning of the subject matters.

TABLE 3
APPLICATION OF SARAWAKS' IDENTITIES IN FURNITURE DESIGN

Categories	Metaphors	Furniture items(s)
Flora	Engkabang & Dabai	 Engkabang Table  Dabai stool
Fauna	Hornbill	 

		Kenyalang chair	Kenyalang table
Cultural Material	Terabai		
Tattoo Motifs	Teku		
Food	Kek Lapis Sarawak		

Cultural Material	 Terabai table and cabinet	Terabai are one of the famous cultural items in Sarawak which resembles the attributes of bold and strong. The adaptation of Terabai's features such as motifs and shape are highly anticipated in the design as seen in the figure. Obviously the Terabai table and cabinet form were constructed according to the hexagon shape that have been extruded.
Tattoo Motifs	 Teku table and chair	Teku is one of the popular tattoo in Sarawak. Teku is a geometric pattern and has small circle and dot elements in the middle of it. The designer apply this pattern on the top of table and the backrest of the chair, however the stylize of the Teku is made to simplified the overall pattern. The Dayaks in Sarawak believed that this tattoo motifs resembles the balance nature of human life.
Food	 Kek Lapis Sarawak table and chair	Kek Lapis Sarawak is popular cakes among Sarawakian during festive session. The vibrance colour and patterns of the cake represents the harmony in unity. Both proposed table and chair have derived from elements of vibrant colours and geometric shapes of the cake. These elements has been applied on the top of the table as well as on the backrest and seat of the chair.

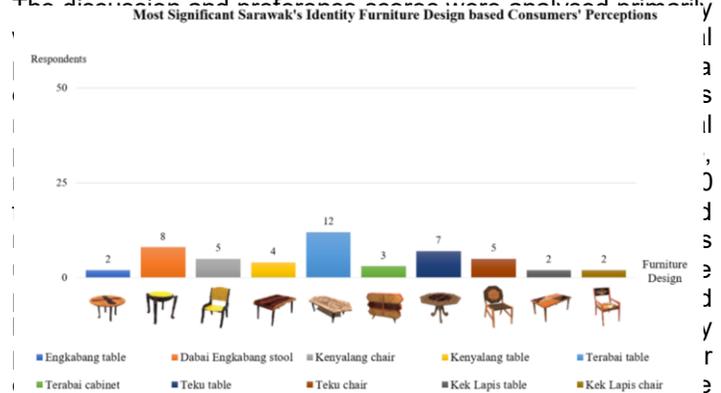
Table 4 explains the rationale of furniture design and concept that adapted from the selected subject matter based from Sarawak local identity. These subject matters always bring attention to the new features. Seems the authors are also an industrial designer, they can use metaphor to influence user emotions and makes the design more engaging and memorable.

TABLE 4
THE ADAPTION OF SARAWAKS' IDENTITY AND METAPHORS

Metaphor / Furniture items	Rationale
 Engkabang table	Four petals of Engkabang flower have been applied to the table top in enhancing the identity of the flower petal shape. Implementation of Engkabang's colour and texture were used to enhance aesthetic appearance of the table.
 Dabai stool	Dabai stool was inspired from Dabai's oval shape. The adaptation of black and yellow colours are applied to resemble and strengten the fruit shape and characteristic.
 Kenyalang chair and table	The horn (casque) of the hornbill or Kenyalang in Malay language are utilized and adapted to both Kenyalang chair and table. The hornbill casques is symbolize of the god of war and power. Focus of the design is essentially on the horn of the hornbill. The inspiration from the hornbill's horn are adapted and applied as an armrest of the chair and trimming or side-edge of the table top.

4 RESEARCH FINDING AND ANALYSIS

The discussion and preference survey were analysed primarily



Semantic differential process, participants able to focus and access the 'object of thought' accordingly to a range of subjective and objective criteria that are relevant to the time, history, culture and context. Figure below illustrates the consumers' perceptions toward the significant design that resemble of Sarawak identity and symbol. Participants seek to buy uniquely furniture items that have significance and meaning in their lives, possibly reflected their own uniqueness of identity. Majority of the respondents believed that Terabai is the most significant identity of material culture that potential to represent Sarawak (Terabai table, 24 %) and followed by Dabai Stool (16 %) and Teku Table (14%). In contrary, the lowest percentage of Sarawak's identity that least preferred are Engkabang and Kek Lapis Sarawak. The characteristics and descriptions of the furniture items are identified from the participant's image to the explicit or denotative meaning of any

specific word or phrase in a language.

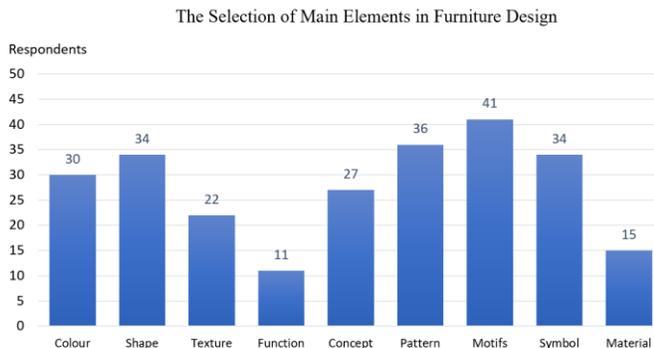


Figure 3 The selection of main elements in designing Sarawak's identity furniture design.

Figure 3 demonstrates the favourite selection of design elements that capable to inject local representation. 82% of respondents believed that the utilization of motifs was crucial and must be employed when designing a furniture with Sarawak's identity. In this study, motifs are referring to the decorative image especially when recurring idea in an artistic work. Motif must have some story behind it and must consists of symbolic meaning that associate with culture and belief. Respondents also agreed that the element of patterns should be implemented widely when designing furniture with local characters. A pattern is an arrangement of lines or shapes, especially a design in which the same shape is repeated at regular intervals over a surface. Pattern is chosen as the second highest (72 %) followed by symbol and shape (56 %). The researchers strongly believed that visual appearance of cultural arts of Sarawak is important attribute influencing them before purchasing the furniture.

5 CONCLUSIONS

Nowadays, the use of semantics, metaphors and identity could derive a new idea in promoting the national identity in industry via furniture making. These significant elements have an impact to industries as its implied expressions, meaning and promoting design culture. Participants may have responded the questions based on their design experience and knowledge of design that is proposed to meet consumer needs and desires. The results of these studies have identified that participants' preferences do exist and that it is possible to measure them. They have their own differing design preferences and when they are analysed and presented, the information does generate or will generate useful and positive information for guidance of the designer in refining and developing the design. The final findings conclude that emotional reactions to furniture items by different people often vary across educational background, design awareness and lifestyles. However, there are still common elements that attract people to select and purchase. Application of identity, semantic and metaphors design could be considered as an alternative way in generating ironic implication that could raise awareness among the designers on how important to promote our culture through design. Apart from expressing emotion, the enactment of these elements provided additional values that has potential to enhance the visibility of symbolism and

cultural value in furniture design while acted as a medium for comprehensive communication between the products and users.

REFERENCES

- [1] Sakina, M., Malaysia furniture: export quality and local prices, *Bernama*. Retrieved from <http://smeshack.bernama.com/news.php?id=564495>, Feb. 2011. (Online news)
- [2] Emaria, A., Zahari, M. S. M., & Nur-Adilah, M. Z., Tourism signatures and moderating effects of by-products in building Sarawak state destination image, *Theory and practice in hospitality and tourism research*, 201-205, 2014. (Journal)
- [3] Featherstone, M., Postmodernism and the aestheticization of everyday life, in S. Lash & J. Friedman, eds., *Oxford: Basil Blackwell*, 1992. (Book)
- [4] Narotzky, V., Beyond perfection: object and process in twentieth-first century design and material culture. in P. Sparke & F. Fisher, eds, *London Routledge*, pp. 156- 168, 2013. (Book)
- [5] Wiley, D., Connecting learning objects to instructional design theory: A definition, a metaphor, and a taxonomy, *Association for Instructional Technology & Association for Educational Communications and Technology*, pp. 1-35, 2000. (Journal)
- [6] Anggat, G. A., & Singki, J., *Asas ukiran Iban: suatu pengenalan*. Dewan Bahasa dan Pustaka, Kementerian Pendidikan Malaysia, 1991. (Book)
- [7] Musdi, S., & Jamayah, S., Forecasting consumers' satisfaction of furniture design through semantic differential method, *Global Business and Management Research: An International Journal*, Vol.10, No.2, 2018. (Journal)
- [8] Norman, D., *Emotional design: why we love (or hate) everyday things*, A Member of the Perseus Books Group, 1981. (Book)
- [9] Ying, Z., Xiaochen, Y., & Xiaoyong, S., Study on the Application of metaphor in Modern Furniture Design, *IEEE 10th International Conference on Computer-Aided Industrial Design & Conceptual Design*, 2009. (Journal)
- [10] Zari, M., *Biomimetic approaches to architectural design for increased sustainability*, School of Architectural, Victoria University, Wellington, New Zealand, 2007. (Thesis)
- [11] Wan, W,N,F., Abdul Rahman, K,A,A., and Abdullah, M,A. (2015). Development Of Conceptual Framework Of Biomimicry Thinking Process. *International Journal of Arts & Sciences*, CD-ROM. ISSN: 1944-6934:: 08(05):55-76