# Vernacular Design: Adaptation of Traditional Malay Motifs for Modern Ceramic 'Lubang Angin' Design

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Abstract —Traditional Lubang Angin concept on a wooden Malay houses detailed the innovation of human civilization creativity and innovation of finding design solution to a design problem in older Malay architectural houses. It prevailed the incorporation of green and sustainable technology design through detail aesthetic wood carving of craftsmanship that functioned to cools down buildings, absorbs moisture during the evaporation phase and lowers humidity in a natural way and providing a pleasant environment. These traditional cooling technologies however have been vastly imported outside Malaysia. Throughout its commercialization of business oriented, the traditional Malay motifs of lubang angin are no longer inherited into the design. This research paper discusses on the traditional iconic Malay motif that can be potentially implement for future lubang angin.

Keywords - Ceramic; Lubang Angin, motifs, Kepala Tingkap, Vernacular Design

# 1. Introduction

Classic traditional Malays house enriched with deep culture and traditional influences that unlocks the both aesthetic and functions purposes. Air vents or so called *lubang angin* in the older days considered as cheapest resources in maintaining natural breeze ventilation and considered as part of important design feature in the older Malay traditional house construction (Wahab, 2012).

This *lubang angin* channels not only green ventilation system thus it is also signifying traditional aesthetic of Malay motifs throughout its design construction. The problem arises when nowadays *lubang angin* design are mostly coming from all over outside Malaysia. Throughout modern *lubang angin* design, the design motifs are no longer cater traditional Malay motifs concept. Not only that, multi-cultural designs of the ventilation blocks used in Malay Traditional Houses seems to be coming from other countries; it is important to use Malaysian iconographic in designing the ventilation blocks to promote to unique local culture in global market. this also involved emotional design which proved to be more effective in promoting the product since it can fulfill a user's desired experiences.

This vernacular style has fully operable windows header that is known as *lubang angin* in Malay; a designed that allows constant air flows that worked merely as air ventilator (Yakub, 2013) in today's housing construction. It is however it has lost its design approach in vernacular point. It is also has lost its aesthetic value both in semiotic and semantic representation prior to modernization of culture (Ju, 2012). Even worse, the local context of 'Lubang Angin' identity have been replaced with the conventional *lubang angin* which are moulded (ventilation block) could not identify on where it is from as well as what culture does it represent (Ju, 2012). Spending money on development and managing imported *lubang angin* design will never resolve the problem of immersing the local Malay context product influence. Therefore, the aim of this research is to provide product development exploration underpinning through Malaysia local iconic attributes that influenced through the development, planning and management of successful *lubang angin* design improvement:

- To discover local iconic Malaysia influences within student of Industrial Ceramic observation.
- To report iconic motif styling of Malay local context through design activity.

This study invokes the early descriptive statement gathered through 48 students of Industrial Ceramic Design of Art and Design as representation of future leading designer in ceramic design modalities. Through the study, the researchers tried to identify most significant Malaysian icons through designers' reflections and design feedback

# 2. Methodology

This research focuses on architectural construction where it must be a compulsory guideline for architects to use this vernacular system as it can reduce the heat accumulated through the use of mechanical power in a building. Whilst the design recommended also can help to reintroduce the Malay motif to the modern world by modifying the elements using morphology concept and turn it into a more suitable element accepted in our modernized culture. Through observation method of direct evidence of descriptive Verbal Protocol Activity (VPA) activity model that portraying future ceramic designer feedback; looking through the study of Vermol, 2017, probing through design thinking within industrial ceramic context and description. This research however limited within the context of managing design element Malaysia iconography context through *lubang angin*.

#### Stage 1: Early knowledge

This early stage pre-determines the understanding of Malay cultural, the respondent was required to provide Malay motifs that is incorporated with Malaysia in accordance to their 'early understanding'.

#### **Stage 2: Intervention references**

In order to provide selection that may represent Malay local context icon or identity, in Stage 2 they were given 5 icons as 'early intervention' which put as references. Icons given were '*Bunga Raya'*, '*Keris'*, '*Wau Bulan'*, KLCC, and MAS logo [6]; and they should select which one is more likely ideal in related to their impersonation to ideal Malaysian icon adoption.

#### Stage 3; Design Refinement

On the final stage of the activity, Stage 3, the respondents requested to provide assimilation drawing of a form cultural Malay icon through 'inner thoughts' to represent as vent block. The assimilation took Malaysian traditional motifs and local context to a level where respondents are engaging practicality of industrial ceramic product dimension.

#### 3. Results and Discussions

Respondents selected for the activities were considered mature student whose considered as future industrial ceramic designer which important for this country. They are selected from final year students that are coming from Group A for semester 5 with 13 respondents and Group B for semester 6 with 25 respondents.

### **Group A Results**

Group A results for Stage 1 activity indicates 19% for 'Itik Pulang Petang', 15% for 'Pucuk Rebung' and in third most voted at 10% is 'Bunga Lawang'. 'Bunga Padi' at 9% and 'Siku Keluang' with 'Kedudut' at 7%. 6% for 'Bunga Raya'; 'Bunga Pecah Empat', 'Bunga Cengkih' and 'Awan Larat' at 4%. Second least voted, at 3% is 'Tahi Lalat'. The rest shared result of 1%.



Fig 1: Group A results for Stage 1: Early Knowledge

However, for Stage 2 KLCC as an icon indicates more than 80%, leaving 'Keris' and 'Bunga Raya' less than 10%. Secondly, goes to MAS logo at more than 60%. 'Bunga Raya' at less than 30% and KLCC just below 10%. Third in line projects 'Bunga Raya' with 30%, 'Wau Bulan' at 27%. Tie at 20% are MAS logo and 'Keris'. Next in favour is 'Keris' that hold the majority of 60% and finally in the fifth place is 'Wau Bulan' 45%. Whilst on Stage 3, KLCC indicates the highest numbers of influencing elements with total of 15%, 'Wau Bulan' at 13% and 'Bunga Raya' at 10%. 'Itik Pulang Petang'. 'Bunga Lawang' and MAS logo tie at 8%. Next to tie at 5% are 'Keris', 'Awan Larat', 'Pucuk Rebung', and 'Bunga Pecah Empat' collectively with 3% in results.

# **Group B Results**

The results activity on Stage 1 activity results for Group B indicates that that 15% chose 'Itik Pulang Petang', 14% for 'Pucuk Rebung' pattern, and tie at 10% are 'Bunga Pecah Empat' and 'Bunga Pakis'. 'Awan Larat' hold one percent more than 'Lebah Bergayut' at 6%. Second least voted, at 3% is 'Bulan Sabit', 'Kuntum Bujang', 'Selumbayung', 'Motif V', 'Bunga Lawang', 'Itik Sekawan', and 'Bunga Cengkih'. The rest shared result of 1%.

However, on the Stage 2 activity results indicates that KLCC present the highest number with 90%. Next in lign MAS logo had the majority influence with 40% against 'Bunga Raya', 'Keris', 'Wau Bulan' and KLCC. Third place goes to MAS logo again at 50% with 'Keris' and 'Bunga Raya' tie at 20% and the lowest goes to 'Wau Bulan'. In fourth place, 'Wau Bulan' won the majority votes of 70% and in the fifth place, 'Keris' took the highest percentage. Whilst on Stage 3 result, KLCC indicates 25%. 'Itik Pulang Petang' at 20% and 'Bunga Pecah Empat' at 15%. Sharing the result of 10% are 'Pucuk Rebung' and 'Bunga Raya'. The rest of the participants tie at 5% results.

Through this model of studies, researcher managed to identify selective numbers of design icon to represent each one of the audiences involved. From the results, the objective of this research was achieved through selection of design icon presented through numbers of percentage feedback. However, it has interesting part ware KLCC can be refine as the most significant icon selected by most audience. Perhaps in this era, new generation select more towards structured aesthetic prior to their modern environment in which the icon or motif are commonly been seen or represented; alas through human experience and perception.



Fig 2: Group B results for Stage 1: Early Knowledge

This investigation model might as well be the novel reference in future improvement for universal purposes. In further commercialization purposes, this procedural approach is not only important for the Malay houses but the concept from the product can be the next respond to universal house with design improvement by incorporating Malaysian product design appearances consistently in every production through semantic and syntactic interpretations. This is to promote Malay ethnic culture and heritage as the national identity.

The real meaning from executing this project was to actually benefit an idea of enhancing the quality life of one another, which on this typical respond looking over the house planning perspective and trying to understand the misery they went through and using *lubang angin* approach and knowledge to provide tools of an instrument in educating and helping. The long target of the project, is to change the current design of the ventilation block by incorporating a newer design which is based on the Malay context. the problem with our current design is, there is no local element inserted since this design comes from other countries. since ventilation block is a must in every house in Malaysia, it is also a must to insert a more local element in its design. the Malay culture used to be recognized worldly, thus the represent of the Malay culture is a need and must be proved that it can still be on the same level with other universal design. Through the combination of design principle and knowledge understanding, the project will provide greater meaning in sharing true meaning in life where some of us may not aware the little thing that we do can actually benefit our community.

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