

Jurnal Alam Bina, Jilid 11: No.2, 2008.

COMPOSITION OF MALAY WOODCARVING: CASE STUDIES ON TWO TRADITIONAL TIMBER HOUSES

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ABSTRACT: *Woodcarving is considered as an integral component to the vernacular Malay houses in the east coast of Peninsular Malaysia. The traditional timber houses are adorned with carving motifs of flora, calligraphy, geometry, fauna and cosmic features which are depicted according to the specified shape, size and dimension of wooden panel. This study presents an analysis of woodcarving in two prominent Malay houses, Mohamad Dobah and Hassan Mohd. Amin, both located in Kota Bahru, Kelantan. The methods of investigation include review of measured drawing reports of timber houses from the Centre for the Study of Built Environment in the Malay World (KALAM) at the Department of Architecture in the Universiti Teknologi Malaysia (UTM) and personal communication with two woodcarvers on art and crafts of woodcarving. The analysis revealed that Malay craftsmen applied several design qualities in making and fabricating their carvings into distinctive compositions. The qualities include visual attributes, ordering principles and craftsmen's knowledge and skills on woodcarving. Besides these qualities, the meanings and significance of carved components are apparent with respect to its placement and configuration in interior as well as exterior fabrics of the timber houses. The ordering principles and visual attributes are considered as regulating factor that determines the beauty and meaning of the carved components and its relation to the house form and architectural elements. This is a suggestive indication of Malay craftsman's mastery of skillfulness, intuition, ingenuity and creativity, logical thinking and wisdom in portraying visual composition and identity of woodcarving which emanate from crafts tradition.*

Keywords: *Woodcarving, vernacular house, visual attributes, ordering principles, craftsman*

Introduction

Malay traditional timber houses exhibit various forms of carvings which represent fine craftsmanship. The houses are normally decorated with excellent carvings with distinctive feature such as on external walls, over doors and windows to provide ventilation as well as decoration, and fascia board of gable end (Abdul Halim, 1987;

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Lim, 1987; Ismail 2002; Mohamad Tajuddin et al., 2005). Inasmuch, as early as 1850s to late 1940s, woodcarving is one of Malay crafts much-admired for its intricacy and complexity in design which embellished buildings such as palace, houses, and mosques. Apart from beauty, perforated carvings allow sunlight into the buildings and at night their silhouettes from indoor light add another beauty. Simultaneously, the fenestrations allow air to enter the building and ventilate the indoor spaces such as sorong, rumah ibu, and kitchen of a house.

The carved components with carving motifs of flora, calligraphy, geometry, fauna and cosmic features are depicted according to the specified shape, size and dimension of wooden panel fitted to the timber houses. The fabrication of these carved components requires high quality of craftsmanship and artistry. In the art of woodcarving, craftsmanship refers to the aptitude, skill or quality workmanship in the use of tools and hardwood timber species especially chengal, red balau, merbau and sena (Ismail, 2005). The skills of transforming a solid plank or block into a relief and non-relief components are learned through process of apprenticeship (Norhaiza, 2008). The fundamental motifs are retained and allowing minor modifications to ensure the carving is a dynamic craft that demands ingenuity and innovation.

Woodcarving is considered as an integral component to the vernacular Malay houses in the east coast of Peninsular Malaysia in the northeastern states of Kelantan and Terengganu. The architecture of this region may have originated from the Langkasuka as early as 14th century (Farish and Eddin, 2003). Their carvings exhibited a wealth of high levels of artistry and technique (Jamal, 1994) on door leaves, wall ventilation panels, railings, fascia boards, gable ends, and kingposts. Notwithstanding, the fabrication of the carved components as building decoration reflects the craftsman's adherence to the specific style of Malay architecture spring from the east coast region. This style consists of the constantly repeated mode of structure and expression that has been carried on from generation to generation (Syed Ahmad Jamal, 1994).

Physical Form and Basic Feature of Woodcarving

Traditional Malay woodcarving is an art component which is strong in definition of the character and visual form. It is an art work formed according to a specific pattern with specific composition of motif coordinated by specified principles and usually

produced for beauty (Norhaiza, 2005). It is considered as an outstanding piece of art work that is shaped and identified by a specific pattern and motifs that serve as defining feature. Hence, the physical form of Malay woodcarving are basically characterized by the shape of pattern, composition of motifs, pattern of ordering principles and type of perforation and incision within a specified shape, size and dimension of a wooden board or panel.

Malay woodcarving has three basic patterns namely, the single pattern, the frame pattern and the complete pattern (Abdul Halim, 1987; Muhammad Afandi, 1995; Rahmah and Nor Azlin, 2002). There are three basic types of carving techniques for perforation and incision used in woodcarving namely, direct-piercing, semi-piercing and embossed-relief piercing (Abdul Halim, 1987; Raja Fuziah and Abdul Rahman 2000). The visual organizational principles are used to construct the relationship among the visual elements of form, the compositional elements, and the intended meaning (Wallschlaeger and Busic-Snyder, 1992).

The elements of woodcarving physical form are fashioned according to knowledge and skill of Malay craftsmen to craft a carved panel from a piece of wood. There are three types of woodcarving components found in a vernacular architecture namely, ornamental, elemental and structural (Ismail, 2001). Carved panels for building elements are mostly found in a form of non-structural as well as elemental components and usually with naturalistic and abstract carving motifs. The three major motifs used by Malay woodcarvers include the floral motif, the geometric motif and calligraphy (Zulkifli, 2000). Flora motif dominates the carvings in Malay houses. Hence, the shape and form of a woodcarving component are fashioned in accordance with its basic function and position on building elements.

Woodcarving as House Components

Woodcarving is considered as an integral component to the vernacular Malay houses in the east coast of Peninsular Malaysia. The placement of carved components in interior as well as exterior fabrics of the buildings relates well with the house form which indicate that there is an inherent visual elements and principles of composition that is interrelated in nature and attributed to vernacular values. For example, woodcarvings in forms of ventilation panel and perforated wall panels are fenestration members of the

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house to afford circulation of air and penetration of natural lighting through perforation. The basic form of a Malay traditional house is a manifestation of two complimentary factors of representing the skills and wisdom of the traditional craftsmen and of the provision of vernacular values for the comfort living environment. Abdul Halim and Wan Hashim (1996) posit that the psychological characteristic of a house is that it affords to provide the dwellers with feelings of peace and harmony. As such, carved panels are formed based on the selection, taste and sensitivity of the Malay craftsmen to the vernacular values. Inasmuch, the level of creativity, artistry and technical skills of the craftsmen determines the distinct characteristics and features of the carved components which have harmonious relationship with traditional architecture.

This paper presents an analysis of woodcarving and its placement in two prominent Malay houses, Hassan Mohd. Amin and Mohamad Dobah, both located in Kota Bahru, Kelantan. The analysis focuses on woodcarvings fabricated as house components in relation to its design qualities and composition, meanings and craftsmanship. The analysis reveals the design qualities including visual attributes and ordering principles of composition which are inherent in the carved components found in the two houses.

Method on Two Case Studies

Data Collection

This study was conducted as explorative and descriptive research, where a significant number of required information was gathered from two sources: (1) measured drawing and reports of timber houses from the Centre for the Study of Built Environment in the Malay World (KALAM) at the Department of Architecture in the Universiti Teknologi Malaysia (UTM), and (2) personal communication with two woodcarvers on art and crafts of woodcarving. The analytical review was conducted on two prominent Malay houses, Hassan Mohd. Amin and Mohamad Dobah, both located in Kota Bahru, Kelantan. The measured drawings strongly suggest that these houses exhibited distinctive carving of excellent craftsmanship. Table 1.0 highlights the information of these houses and the placements of carved components. House plans, black and white plan view drawings, elevations of the houses and detail drawings were referred for detail, descriptive analysis to identify the types of carved components and determine its design qualities including visual attributes and ordering principles of composition. Certain measured drawings were redrawn and edited to ease the analysis process.

Table 1.0: The Malay timber houses with carved components

No	Type of House	Year Built	Owner	Location of House	Area of Placement	Carved Components
1	Rumah bumbung perabung lima	1920's	Encik Hassan B. Mohd Amin	Jalan Pengkalan Chepa, Kota Bharu, Kelantan	Bedroom 's front wall	Ventilation Panels above door (DVP1)
					Guest area (male)	Ventilation Panels above window (WVP1)
						Perforated wall ventilation panels (PWVP 1)
Roof eaves at front facade	Roof eaves panels (RP 1)					
2	Rumah Bujang Berserambi Dua Beradik (Pattani influence)	1850's	Tuan Hj. Mohamad Dobah (Tuan Hj. Mohamad Abdullah)	1408, Jln. Post Office Lama, Kota Bharu	Rumah Ibu (front and rear wall)	Perforated wall ventilation panel (PWVP 1, PWVP 2, PWVP 3, PWVP 4, PWVP 5, PWVP 6, PWVP 7, PWVP 8)

Several factors determine the selection of the houses which include: (1) the houses represent the skills and aesthetics of the traditional craftsmen and builders, (2) the houses are decorated with excellent carvings with regional and distinctive features, (3) the houses provide a significant number of carved components for analysis purpose and (4) the houses represent the typical vernacular architecture of the east coast in Peninsular Malaysia.

The Analysis

The objects which provide raw materials for visual investigation must be also viewed, understood, or placed in some analytical framework before they can be regarded as data (Emission and Smith, 2000). The measured drawings were analyzed in two design qualities: (1) visual attributes, and (2) ordering principles of composition. The visual attributes of the woodcarvings include motifs, shapes of components, types of incision and perforation, types of depictions, pattern of motifs, principal forms and carving

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qualities. The analysis also aims to ascertain types of ordering principles visible on the woodcarving composition namely, symmetry, rhythm and repetition, variety, focality (visual emphasis), contrast, harmony and unity. The data from the drawings was triangulated with information gathered from the two craftsmen. The information gathered from the craftsmen was needed for analytical studies apart from the author's opinions and inferences.

Apart from descriptive analysis, the method of visual analysis matrix was used to provide information on the pattern of distribution of carved components for each house in relation to the design qualities. The analyses signified a certain pattern of distribution of carved components in each house and its composition in relation to the architectural elements and the house form. Figure 1 and Figure 2 indicate the pattern of distribution of carved components in the house of Mohamad Dobah and house of Hassan Mohd. Amin, respectively. Detail analysis on carved components in relation to the design qualities including visual attributes and ordering principles for both houses are shown in Figure 3, Figure 4, Figure 5 and Figure 6.

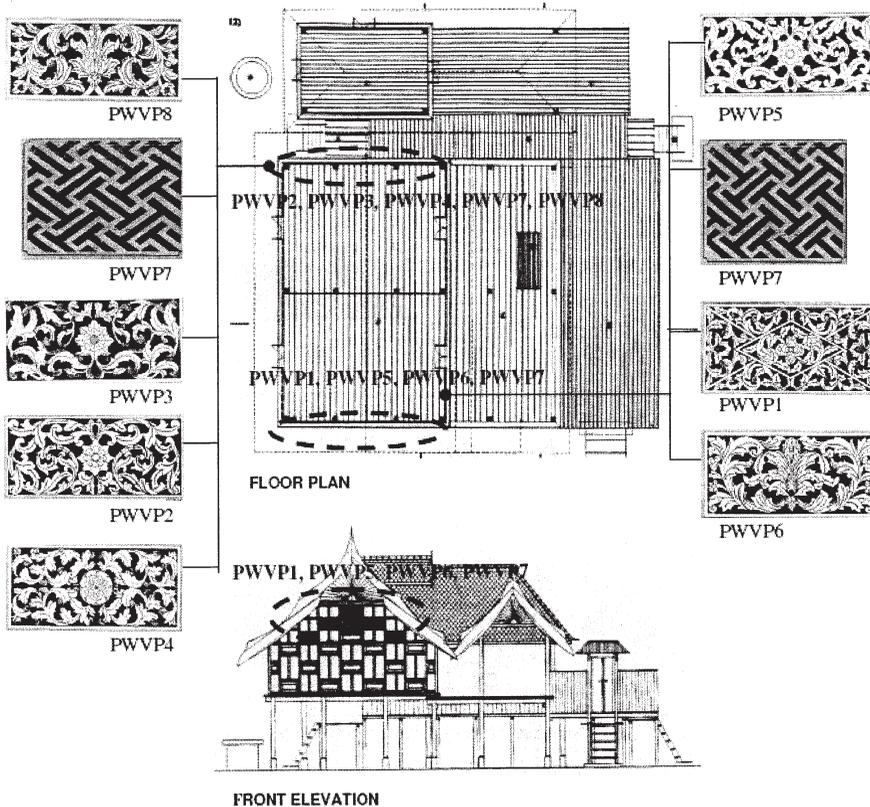


Figure 1: Rumah Hj. Mohamad Dobah with the placement of carved components

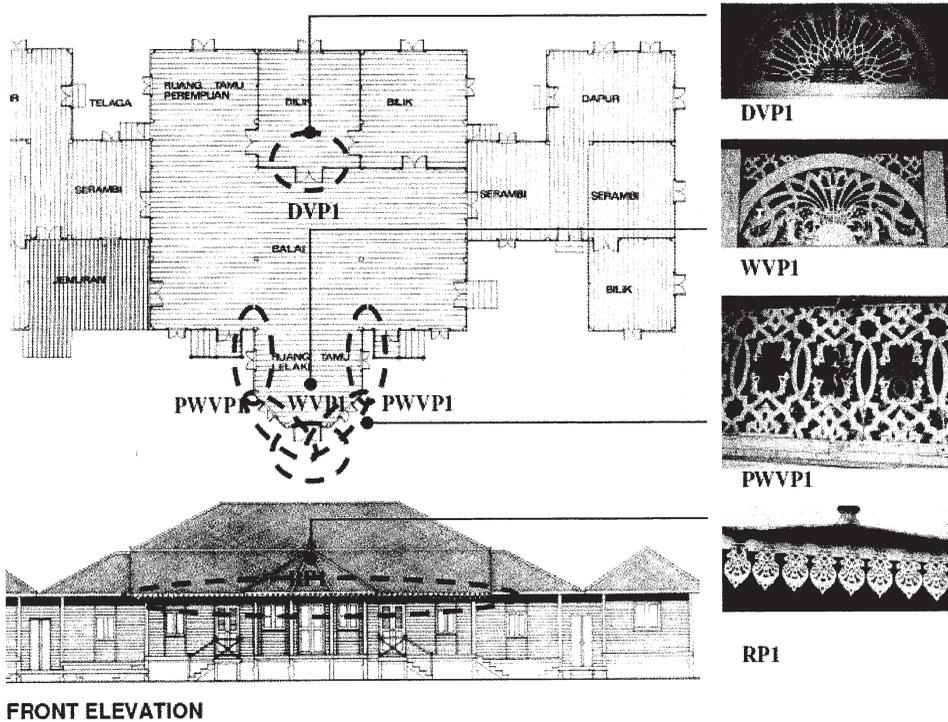


Figure 2: Rumah Encik Hassan with the placement of carved components

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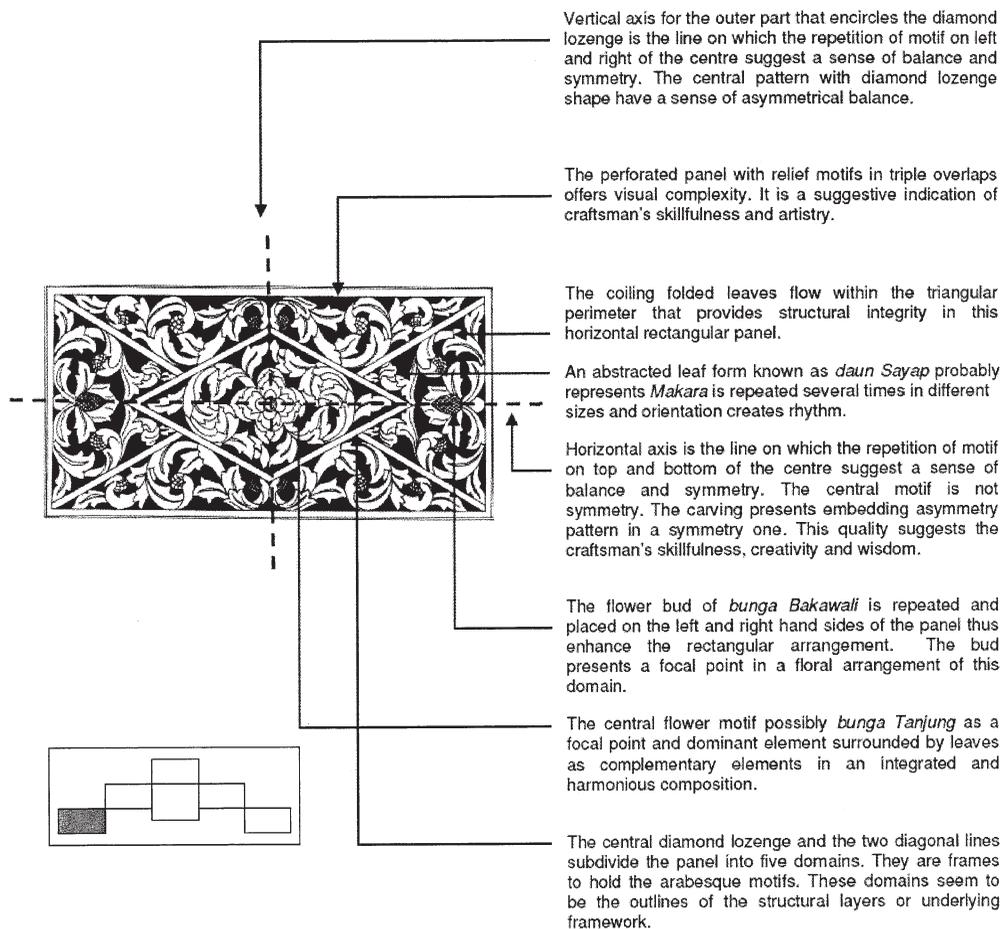


Figure 3: Carved ventilation panel (PWVP1)

The panel in Figure 3 exhibits a type of design composed of complimentary of two motifs of *daun sayap* (a wing-like leaf) also known as *daun Melayu/daun Langkasuka* and geometry in a successful combination. The carving presents embedding asymmetrical pattern with a diamond lozenge shape in a symmetrical pattern. It represents the rendition of the rectilinear pattern and the foliated pattern according to the ordering principles, namely, symmetry, asymmetry, repetition, variety, focality (visual emphasis), harmony and unity. It is a suggestive indication of the concept of duality; the floral motifs are arranged next to the geometric motifs resulting in duality of the floral and the abstract form. Basically the complimentary patterns between the flora and the geometry ones offer a unique composition, which differs from the other panels (PWVP1, PWVP2,

PWVP3, PWVP5, PWVP6 and PWVP7). This carved panel also presents five different floral arrangements in the specific domains with the specific focal points. These carving qualities suggest the craftsman's creativity, skillfulness, logical thinking and wisdom.

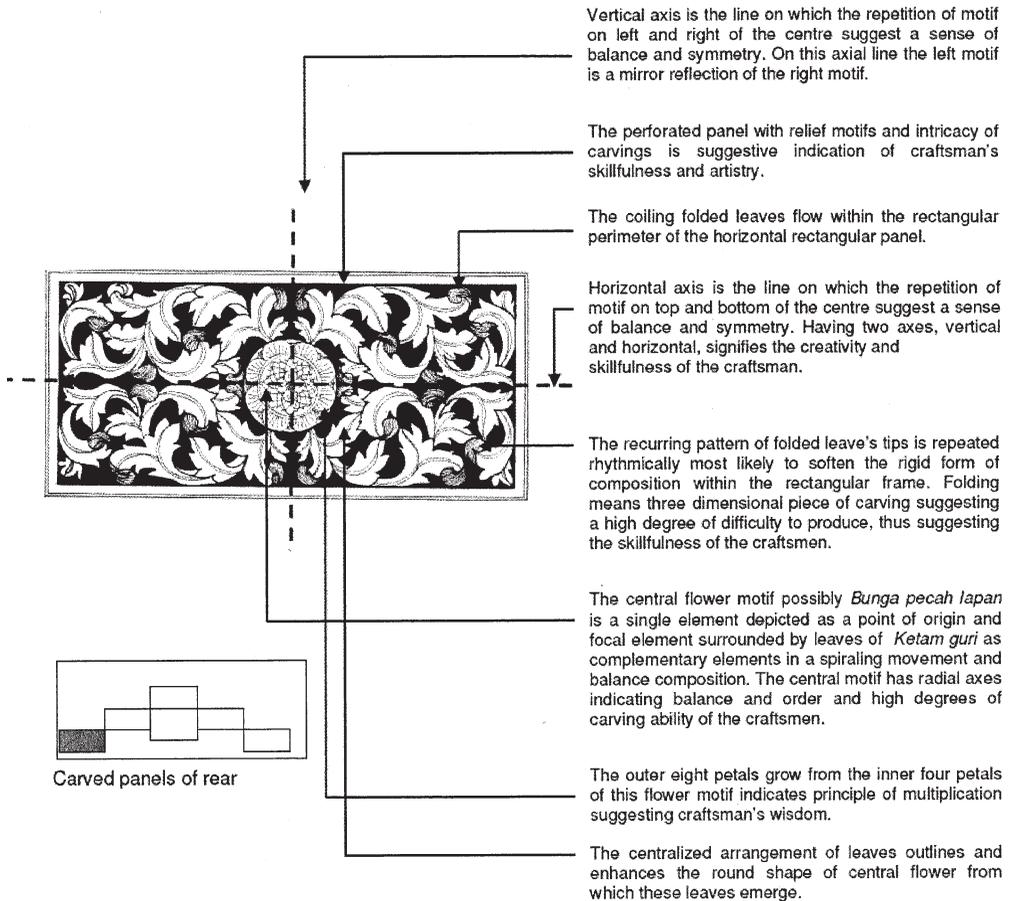


Figure 4: Carved ventilation panel (PWVP4)

The panel in Figure 4 exhibits a type of design composed of complimentary of two motifs of Daun Ketam guri and bunga ketumbit in a balance composition with two (2) axes of symmetry. It represents the rendition of the swirling leafy pattern and the focal and central flower dominate the rectangular panel. It is a suggestive indication of the concept of duality and unity; duality of floral motifs which are arranged next to each other resulting in unity of pattern regulated by the duality of the axial planes. Apparently the complimentary motifs between the two types of flora in a similar layout and different

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composition signify the craftsman's mastery of skillfulness, creativity, wisdom and logical thinking.

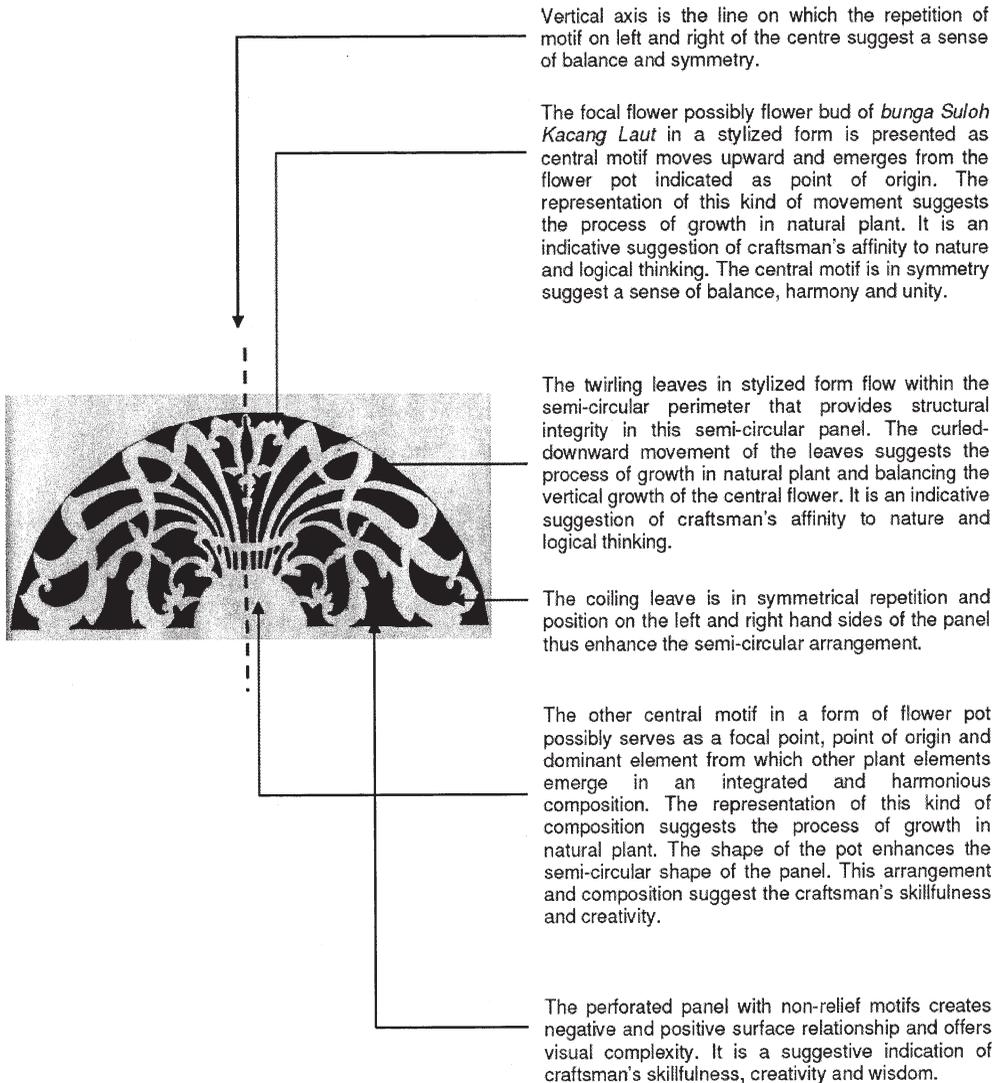


Figure 5: Carved ventilation panel (WVP1)

The panel in Figure 5 exhibits a type of design composed of stylized motifs of *pokok Suloh Kacang Laut* in a balanced arrangement with the focal motif of flower vase. The carving presents the growing plant in a symmetrical pattern within a semi-circular

shape of ventilation panel. It represents the rendition of the curvilinear and foliated pattern according to the ordering principles, namely, symmetry, repetition, variety, focality (visual emphasis), contrast, harmony and unity. It is a suggestive indication of the concept of growth to reflect the craftsmen's affinity to nature. These carving qualities suggest the craftsman's creativity, skillfulness, logical thinking and wisdom.

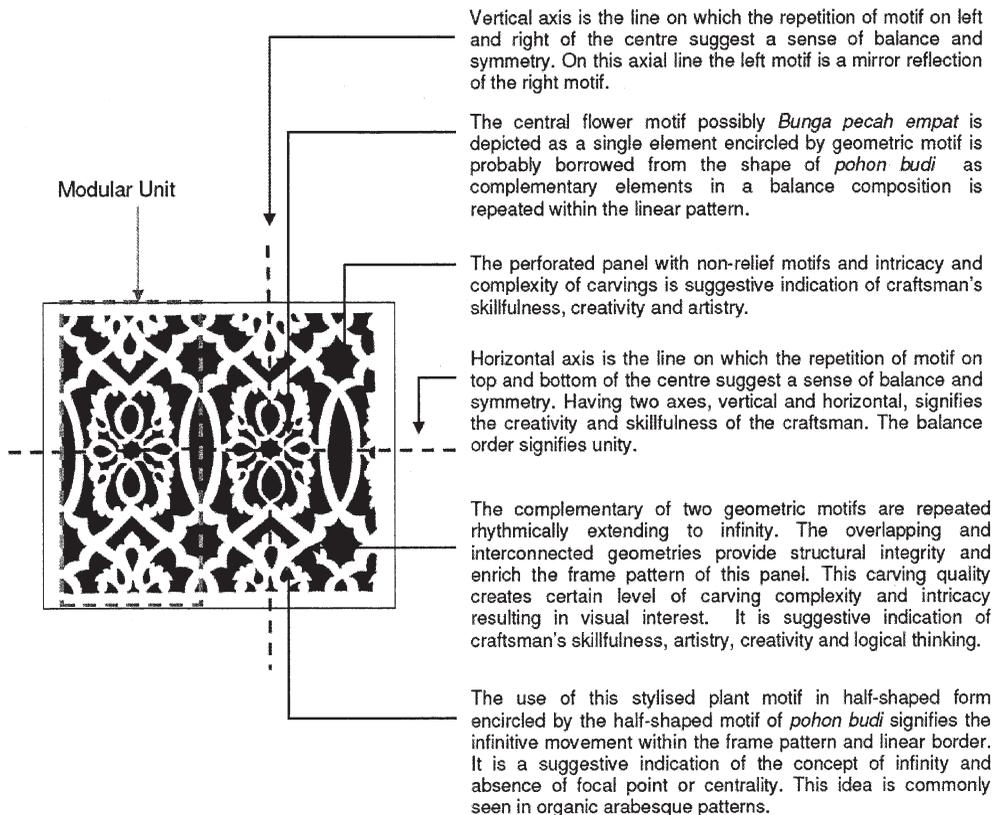


Figure 6: Perforated wall ventilation panel (PWVP1)

The panel in Figure 6.0 exhibits a type of design composed of complimentary of two motifs of abstract geometry and flora in a balance composition with two (2) axes of symmetry. The repetitive motifs of geometry and single flower flow in rhythmic pattern are regulated by several ordering principles. It appears that this type of floral and geometrical pattern could also suggest a consistent and endless repeated composition. Apparently the complimentary motifs between the geometry ad flora in a continuous horizontal layout and linear composition suggest the craftsman's mastery of skillfulness, creativity, wisdom and logical thinking.

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Preliminary Findings: Design Qualities Prevailing in Carved Components

The analysis revealed that Malay craftsmen applied several design qualities in making and fabricating their carvings into distinctive compositions. The qualities include visual attributes, ordering principles and craftsmen's knowledge and skills on woodcarving. Besides these qualities, the meanings and significance of carved components are apparent with respect to its placement and configuration in interior as well as exterior fabrics of the timber houses.

Visual Attributes of Carved Components

The research has identified several visual attributes serve as defining physical form of the carved components including: (1) the types of motifs, (2) the principal forms, (3) the shapes of component, (4) the types of depiction (5) the types of incision and perforation, (6) the types of patterns, and (7) carving qualities. These visual attributes are considered as regulating factor that determines the visual composition, beauty and meaning of the carved components and its relation to the architectural elements and the house form.

From the twelve carved components found at Mohammad Dobah' house, it appears that floral motifs of leaves and flowers dominate the carving found in this house. It appears that only certain type of flowers and leaves are depicted as central and compositional motifs. From the carved panels presented in the analysis as shown in Figure 1.0, the depicted flowers are *bunga Ketumbit*, *bunga bakawali*, *bunga Tanjung* and the generic flower known as *bunga pecah lapan*. Most of the leaves are in generic form known as *daun sayap* and *daun ketam guri* was depicted as well. It appears that seven types of carved ventilation panels (WVP1, WVP2, WVP3, WVP4, WVP5, WVP6 and WVP8) found at the house are adorned with floral motifs in a form of complete pattern and in naturalistic depiction. In this type of pattern, several elements of plants like leaves, flower, flower buds, stems and shoots are combined to form one complete carving with a higher degree of complexity and intricacy, for example as appeared in the carved ventilation panel 1 (WPVP1) in Figure 3.0. This panel is equipped with floral carving possesses a central flower that serves as an origin. The design of motif in a wood carving is usually illustrated as growing plant emerges from a single point which serves as an origin (Rosnawati, 2005). A total of ten carved components were in a form of horizontal rectangular panels fixed across the front and rear walls of rumah ibu. These

components were perforated wall ventilation panels with relief motifs in triple overlaps offer visual complexity and serve as fenestration.

Each carved component found in the house portrays similar design quality but in different character where series of plant elements are arranged in various intertwining compositions. This type of carving quality was used to overcome the flat surface thus creating a complex overall design. Instead of setting one layer on top of the other, they were interlaced, partly running over and partly under each other. The outlines of the structural layers therefore merged harmoniously. This quality suggests the level of carving talent of the craftsman. Muhaimin Hasbollah, a craftsman from Temerloh, Pahang, notes that complex carvings are usually with intertwining composition, where the most intricate carving has four overlaps. The degree of difficulty in the creation of intertwining composition is determined by the setting of interlaced layers. These qualities reflect the skillful and artistic qualities possessed by the traditional craftsmen whereby the intrinsic beauty of the natural plants have become their inspiration.

Ordering Principles Regulating Carving Composition

The study has identified several ordering principles that governed the visual composition of the carved components. These ordering principles are considered as regulating factors that determine the specific form and beauty of the carved components and its relation to the house form and architectural elements. Most of the carved components are crafted in balance composition, suggesting an employment of ordering principles namely, symmetry, rhythm and repetition, variety, focality (visual emphasis), contrast, harmony and unity.

Most of the house components found in the two houses were carved in symmetrical composition. For example, the wall ventilation panel (PWVP4) shown in Figure 4.0 and the wall ventilation panel (PWVP1) shown in Figure 6.0 demonstrate the harmonious and balance composition of carving elements with two axes of symmetry. The panel (PWVP4) exhibits a type of design composed of complimentary of two motifs possibly *daun ketam guri* (a weed with bright yellow flowers) and bunga pecah lapan (a generic motif) in a balance composition. Repetition of motif on left and right of the centre suggest a sense of balance and symmetry. Perhaps, the symmetrical theme conveys the idea that the craftsman perceives the visible order of things in nature. Inasmuch,

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many flowers and leaves are in symmetry. Symmetry means balance, and balance is a principle of beauty (Zakaria, 1989; Syed Zulflida, 2004). Beauty is accompanied with rhythm of curvilinear and rectilinear lines and textures of shapes of motifs, pattern, perforation and depth of incision. Rhythm of lines is an element of aesthetic pleasure. In woodcarving, the meandering and intertwining of elements of motifs such as stems, tendrils and leaves around a flower and the whole vegetal motifs are in rhythmic and harmonious arrangement thus creating a unity and a pleasing composition. Thus in carving rhythm means the repetition of visual elements such as flowers, leaves, tendrils, stems and branches in specific movements and arrangement within a specific shape of panel.

Craftsmen's Knowledge and Skills on Woodcarving

The research has revealed that several factors including the visual attributes and the ordering principles had governed the physical forms of the carved components gathered from the case studies. These are suggestive indications of Malay craftsman's mastery of skillfulness, intuition, ingenuity and creativity, logical thinking and wisdom in portraying visual composition and identity of woodcarving which emanate from crafts tradition. In the art of woodcarving, skillfulness refers to the specialized ability in the application of carving techniques that require uses of hands. Creativity in woodcarving means having the ability to bring out details about the originality of a piece of woodcarving. Both abilities are superiority in every stage of carving works. Thus a dynamic form of a carved panel results from the skillful use and creative choice of carving devices by the craftsmen.

Most of the floral motifs depicted on the carved components found in both houses are not in a life-liked image. The craftsmen transformed the peculiar characteristics of the selected plant species into simpler forms with stylized character. For example the window ventilation panel (WVP1) as shown in Figure 5.0 is in a semi-circular form adorned with stylized floral motifs of *pokok Suloh Kacang Laut*. The translation of natural beauty to a man-made beauty is suggestive indication of the ingenuity of skillfulness and creativity of the Malay craftsmen in carving. It is also true in *batek* and *songket* that symbol (abstraction) rather than literal depiction is performed. The natural elements in textile and weaving are done in the geometric or organic style (Siti Zainon, 1997).

Discussion

The art of woodcarving is part and parcel of the art of traditional Malay houses in Kelantan since both are contributing factors in defining the character of the house architecture. Mohamad Dobah and Hassan Mohd Amin houses exhibit distinctive forms and features that distinguish their house architecture. Apart from the house architecture, the carving motifs, shapes and patterns of carved components found on the houses show the distinct characters that serve as defining features of the houses. For example, carved components found at Mohamad Dobah house were fabricated in forms that are in consonance with the building façade establishing structural integrity and identity. Each regional house form exemplifies distinctive features in design form and these qualities are also reflected on each carved component found on both houses as shown in Figure 1.0 and Figure 4.0.

Woodcarvings are made out as integral components to the timber Malay houses with a defined composition. In this sense composition means an organization of parts in agreement with principles of organization that leads into the order of a unified whole (Ocvirk et al., 2002). As an individual piece, the woodcarving is a type of carved component that depicts several carving elements in harmonious composition in accordance with the regulated principles and meanings as appeared in the perforated wall ventilation panels found at Mohamad Dobah and Hassan Mohd Amin houses. Various parts of plant are depicted in a harmonious and symmetrical composition which appears in several ventilation panels including PWVP1, PWVP2, PWVP3 and PWVP5 create variety and unity. Whereas in a set of group composition, several carved components with similar or different shapes are juxtaposed in harmonious configuration establish integral relationship with the building elements and façade. For example a group of six carved components with similar shapes were fitted at the center of the front façade of rumah ibu at Mohamad Dobah house. It appears that the central position of the panels at the wall creates a focal point which is in harmony with the wall panels. The choice of this configuration for the wall is in harmonious relationship with the forms of the building facades thus creates a visual unity. Focality (visual emphasis) is one of organizing principles that characterize visual unity (Wallschaeger and Busic-Snyder, 1992). Apparently, these two modes of composition achieve balance and harmony through the use of ordering principles namely, symmetry, rhythm and repetition, variety, focality (visual emphasis), contrast, harmony and unity. The embodiment of these ordering principles seems to create balance composition within the specified shapes

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and dimensions of the carved components. It is a suggestive indication of Malay craftsman's mastery of skillfulness, intuition, ingenuity and creativity, logical thinking and wisdom in portraying visual composition and identity of woodcarving.

Perhaps the design qualities prevailing in the woodcarvings are reflection of traditional Malay craftsmen's adherence to the ascendancy of traditional craftsmanship. For example the use of abstract plant motifs of *daun sayap* depicted on carved components like wall panels found in Mohamad Dobah house. A common way to secure traditions was to continue the artistic achievements of past glories from olden generations (Farish and Eddin, 2003). This scenario suggests the craftsmen's keen interest in preserving and protecting the pre-eminence of crafts tradition. It appears that the art of woodcarvings produced by the craftsmen for the two houses indicates a careful balance of craft traditions and innovations shaped by artistic sensibility and ingenuity.

This preliminary study gives insight on the significance of carvings in Malay architecture. It appears that the craftsmen understood well the language of design qualities in the fabrication of woodcarvings for house components in the east coast region of Peninsular Malaysia. It opens the need to investigate further on how and why Malay craftsmen from this region develop the skillfulness and ingenuity in the carving. Pertaining questions to ask are (1) Do the craftsmen's skillfulness in the fabrication of the beautiful carved panels as house components reflect their adherence to the specific style of Malay craftsmanship and architecture?, (2) Do the distinct characteristics and features of carved components suggest the craftsmen's keen interest in preserving and protecting the pre-eminence of the crafts tradition including carving techniques, design ideas and artistic expression?, (3) Do the craftsmen understanding of the Malay philosophy of beauty determines the distinctive features and physical form of carved components?, and (4) Do the level of creativity and mastery of technical skill of the craftsmen reflect the individual interpretation (intuition) and translation which achieved through specific training or work experience?

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