

PLACEMENT OF CARVED COMPONENTS IN TRADITIONAL TIMBER HOUSES OF KELANTAN AND TERENGGANU

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ABSTRACT: *Woodcarving is considered as an integral component to the vernacular Malay houses of Kelantan and Terengganu which are located in the east coast of Peninsular Malaysia. Carved components with various features were fabricated according to its placement and configuration in the interior as well as exterior setting of the houses. This paper presents an analytical study of the visual forms and placement of carved components in the timber houses of Kelantan and Terengganu which reflects its significant attributes and uses. An analytical study on ten houses in Kelantan and five houses in Terengganu was conducted by visual descriptive and interpretative analyses on 15 sets of reports and carving measured drawings of the houses which were obtained 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). The method of analysis was triangulated and validated with interpretations from the prominent woodcarvers on art and crafts of woodcarving, and supported by literatures of Malay woodcarving. The analysis revealed that several types of carved components with distinctive features including wall, door and window ventilation panels, roof and gate panels, railings and stringers were fitted in harmonious relationship with the architectural components within the house fabrics. The placement of these components with specific carving motif, shape, size and layout in the houses reflects certain orders and regional identity of the Kelantan and Terengganu traditional houses.*

Keywords: *Woodcarving, traditional timber house, architectural elements, visual forms and carving motifs*

INTRODUCTION

Woodcarving as an embellishment is a significant unifying element between the traditional Malay house forms and its building components. 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; Lim, 1987; Ismail 2002; Mohamad Tajuddin et al., 2005). Woodcarving is ornamentation to the timber architecture and it is part and parcel to the vernacular Malay houses of Kelantan and Terengganu which are located in the north-eastern states of Peninsular Malaysia. Carved ornamentation with distinctive features contributes to the identity of this region which originated from the architecture of Langkasuka Empire dated as early as 14th century (Farish and Eddin, 2003). Carvings from Kelantan and Terengganu exhibit visual aesthetic which are the most refined and beautiful of all Malay woodworks and the shape and carving techniques comprise a degree of beautification not found elsewhere (Raja Bahrin, 1988; Syed Ahmad Jamal, 1994). Inasmuch, woodcarving was one type of ornamentation much-admired for its intricacy and complexity in design which embellished the timber houses of Kelantan and Terengganu existed in 1850s to late 1940s. This dwelling type of architecture represents the

vernacular forms with common characters, materials and embellishments for common people of this particular region.

Various forms of woodcarvings which adorned the timber houses were made of local hardwood species, namely cengal (*Balanocarpus heimii*) and represent fine craftsmanship (Ismail, 2005). The carvings were crafted with certain characters, showing their regional identity and often much-admired for its distinctive beauty. Carving composition including forms of motifs and patterns, types of perforation and incisions give distinct characteristics and features of carved components which are in parallel with the distribution of architectural elements and its designated use as house components. Various components with different shapes, layouts and sizes including ventilation panels of doors, windows, and walls, railings, gates and roofs panels depict different types of motifs, namely flora, geometry, and Islamic calligraphy. These elements are the three major types of motifs used by Malay woodcarvers Zulkifli (2000). Differences also arise in the degree of intricacy and complexity of the carving motifs and its stylization and techniques applied on the carved components. The intricacy and complexity of carving suggest a certain degree of skillfulness and creativity of the traditional craftsmen in the fabrication of the carved components (Muhammad Afandi, 1995). The proficiency of shaping woodcraft with the skilful use of the media offers the craftsman a means of artistic expression (Jackson and Day, 2005).

This paper presents a preliminary finding of a descriptive and interpretive study of the various forms of carving components fitted on different types of house components found in the traditional timber houses of Kelantan and Terengganu. The major research questions pertaining to this study include: (1) What are the types of woodcarving forms and features produced as architectural components?, (2) What are the layout and pattern of distribution of woodcarvings in the timber houses?, and (3) What are the types and contents of carving composition and motifs depictions that are applied in the components?

METHODS

Analytical Review on Measured Drawings and Interview with Woodcarvers

The analytical review was conducted on fifteen prominent Malay timber houses. Ten houses were located in Kelantan and the other five houses were located in Terengganu. Table 1.0 shows the information of the houses including the types of architectural forms and year of construction, owners and locations of the houses as well as types of carved components. The selection of the houses for the analytical study was determined by the following factors: (1) the houses represent the type of dwelling architecture that originated from the east coast region of Peninsular Malaysia, (2) the houses were decorated with excellent carvings which are regional and distinctive in character, and (3) the houses provide a comprehensive collection of carved components which are relevant for visual analysis purpose.

Table 1: Timber houses of Kelantan and Terengganu and carved components

Type of House	Year Built	Owner	Location of House	Carved Components
Rumah bumbung perabung lima	1920's	Encik Hassan Mohd Amin	Jalan Pengkalan Chepa, Kota Bharu, Kelantan	Ventilation panels of door and window, ventilation panel of wall, roof eave panels

Rumah Bujang Berserambi Dua Beradik	1850's	Tuan Mohamad Dobah (Tuan Mohamad Abdullah)	Jln. Post Office Lama, Kota Bharu, Kelantan	Ventilation panels of walls
Rumah Bujang	1800's	Wan Aisyah	Jalan Sultanah Zanab, Kota Bharu, Kelantan	Ventilation panels of walls, bracket panels
Rumah bumbung perabung lima	1920's	Wan Ahmad Abdullah	Jalan Post Office Lama, Kota Bharu, Kelantan	Ventilation panels of doors ventilation panel of wall
Rumah bumbung perabung lima	1930's	Yaakub Mohammad	Kampung Sireh, Kota Bharu, Kelantan	Ventilation panels of doors, ventilation panel of wall, decorative panel of door
Rumah bumbung perabung lima	1937	Wan Hussain Wan Abdul Rahman	Kampung Sireh, Kota Bharu, Kelantan	Ventilation panels of doors, ventilation panel of wall, stringers
Rumah bumbung perabung lima	1933	Hassan Yusof	Lorong Tukang Perak, Kampung Sireh, Kota Bharu, Kelantan	Ventilation panels of doors, ventilation panel of wall, stringers
Twelve-pillarded house/ Long-roofed house	1800's	Tok Yakub	Kampung Belongan, Bachok, Kelantan	Ventilation panels of doors, ventilation panel of wall, wall panel
Rumah bujang berserambi dua beradik	1920's	Wan Sulong	Jalan Sultanah Zanab, Kota Bharu, Kelantan	Ventilation panels of doors and windows, ventilation panel of wall, wall panel, gable end panels
Rumah Bujang Berkembar Dua Beradik	188?	Mariam Mat	Kampung Hiliran Masjid, Kuala Terengganu, Terengganu	Ventilation panels of doors, ventilation panel of wall, railing panels, stringers, decorative carving of roof beam
Rumah bujang berselasar	1850's	Awang	Kampung Losong Haji, Su, Kuala Terengganu, Terengganu	Ventilation panel of wall,
Rumah bumbung limas	1914	Dato' Biji Sura (Nik Mohamad bin Hitam)	Duyong Kecil, Kota Duyong, Kuala Terengganu, Terengganu	Ventilation panels of doors and windows, Railing panels, gate leaves, door leaves, wall panel
Rumah bujang berserambi dua beradik	1800's	Tok Ku Paloh 1	Paloh Makam Tok Ku, Cabang Tiga, Kuala Terengganu, Terengganu	Ventilation panels of wall, stringers
Rumah bujang berserambi dua beradik	1800's	Tok Ku Paloh 2	Paloh Makam Tok Ku, Cabang Tiga, Kuala Terengganu, Terengganu	Railing panels, panels of staircase, handrails
Rumah Bujang Berserambi Dua Beradik	1880's	Nik Salleh Wan Ahmad	Kampung Pulau Panjang, Kota Bharu	Ventilation panels of wall

A set of measured drawings which consists of plans and elevations of the 15 houses including crossed sectional and detail drawings was reviewed for detail descriptive and interpretive analysis. The purpose of this analytical review was to identify the types of carved components and its orders of placement, determine its carving motifs and principles of composition. The measured drawings and the reports were obtained 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). These documents were produced and documented by the students of architectural program from the Universiti Teknologi Malaysia. Edition and reproduction of a few documented drawings were made to improve its visual quality and accuracy for the purpose of analysis and data display. The data gathered from the measured drawings and reports were categorized in tables (matrices) through systematic format of 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).

Personal interviews were conducted with the two prominent woodcarvers to obtain their verifications on the attributes of carving components and its visual composition. The first woodcarver interviewed was Norhaiza Nordin from Kampung Raja in Terengganu and the second one was Muhaimin Hasbullah from Temerloh in Pahang. Each interview was carried out in approximately two-hour period with the adoption of standardized open-ended interview questions. Narrative information from the woodcarvers was triangulated with the pictorial data gathered from the analytical review.

RESULTS AND DISCUSSION

The analysis revealed that a collection of 13 types of architectural components were fitted with specific carvings: ventilation panels of window, door and wall, railings of verandah and staircase, wall panel, leaves of door and gate, stringer, gate, roof eave, bracket and gable end (Table 2). The visual forms of the carved components were fabricated with specific attributes of carvings including types of motifs, types of perforation and incision, shapes and layouts and style of depictions. The distinctive forms of the various carved components are apparent with respect to its placement and layout in the interior as well as exterior fabrics of the Kelantan and Terengganu timber houses. In terms of pattern of distribution of carved components in the houses, the ventilation panels fitted on top of walls that have various design forms were major carved components of the houses. These components were carved either in forms of perforated single rectangular or perforated continuous horizontal panels. Perforation in carving is a fully piercing technique done on a piece of wooden panel leaving a cut-through section (Norhaiza, 2008; Ismail, 2002)

Table 2.0: Types of carved components with attributes of carvings

Carved Components	Attributes of carvings																
	1			2			3						4				
	Flora	Geometry	Calligraphy	Perforated with relief	Perforated with non-relief	Non-perforated	Square	Vertical rectangle	Horizontal rectangle	Rectangle with embedded semi-circle	Continuous horizontality	Semi-circle	Right-triangle	Mountain	Naturalistic	Stylized	Abstract
Ventilation panel of window	✓	✓		✓	✓				✓	✓		✓			✓	✓	
Ventilation panel of door	✓	✓	✓	✓	✓				✓	✓					✓	✓	
Ventilation panel of wall (repeated)	✓	✓			✓						✓					✓	
Ventilation panel of wall (single)	✓	✓		✓	✓			✓	✓						✓	✓	
Railing panel of window	✓	✓			✓						✓					✓	
Railing panel at <i>serambi/ Sorong</i>	✓	✓			✓				✓		✓					✓	
Railing panel at staircase	✓	✓			✓			✓								✓	
Wall panel	✓					✓	✓								✓		
Door leaves panel	✓	✓			✓			✓								✓	
Stringers						✓											✓
Gate leaves panel	✓	✓			✓				✓							✓	
Roof eave panel	✓				✓						✓					✓	
Bracket panel	✓	✓			✓							✓				✓	
Gable ends panel	✓					✓							✓	✓			

Note: (1) Types of motif, (2) Types of perforation and incision, (3) Shapes and layouts and (4) Styles of depiction

The table illustrates that most of carved components found in the selected timber houses represent floral motifs either in forms of naturalistic or stylized depiction with perforated or non-perforated carvings. This is suggestive indication that traditional craftsmen had strong preference for plant-based motifs. According to Norhaiza (2008), Malay woodcarvers prefer to use creeping plants and flower producing plants because they were eye-catching and suitable for woodcarving. A possibility is that the motif of flora can be formed and composed in unrestricted fashion for various carved panels with unlimited types of pattern and carving layout according to the artistic and technical skill of craftsmen. Apart from flora, motifs of geometry and combination of different elements are also apparent on different types of carved components including panels of ventilation, railing, door leaves, gate leaves and window bracket. Arabic calligraphy motif was only applied on ventilation panel above door and stringers of stairs were equipped with abstract representation. Relief

carving with floral motif was mostly found on single ventilation panels fitted on top of windows, doors and walls either in vertical or horizontal rectangular layout. In short, the various carved components found on several architectural elements were fabricated with specific carving forms and motifs.

The analyses signified a certain pattern of distribution of carved components in each house and its compositional motifs in relation to the architectural elements and the house form. The placements of the carved components were fixed within the specific arrangement and significant functions and uses. It appears that the carved components in forms of ventilation panels were widely found on walls at *rumah ibu* (core house). It is the core area of the traditional house and usually located at the centre of the house. Rumah ibu is the largest and principal area of the traditional Malay house that serves most of household activities such as receiving house guests, sleeping, praying and gathering (Lim, 1987; Abdul Halim and Wan Hashim, 1996). Muhammad Dobah' house from Kota Bharu, Kelantan is one of the examples of the traditional house that exhibits the placement of several carved panels as an integral part of the wall component as illustrated in Figure 1a. The carved panels were produced with distinctive features of carving attributes that gave the front façade of the house its defining character. For example, as appeared in the carved ventilation panel fitted on the upper left hand side of the wall as shown in Figure 1b.

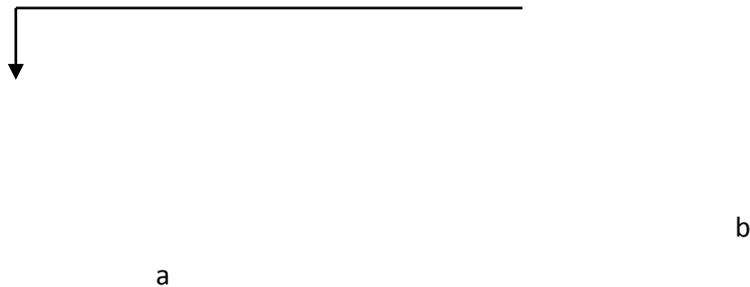


Figure 1: The layout of carved components at wall facade of *rumah ibu* at Mohamad Dobah's house (a) and one of carved ventilation panels (b) found on the wall

Combinations of foliated patterns with geometrical outlines were the central theme employed in this panel. They were combined to form one complete carving within the horizontal rectangular panel. This perforated panel in relief carving is equipped with floral elements including a central flower probably *Leucas zeylanica* (ketumbit: a bright yellow flower of a weed) that serves as an origin. The central motif is encircled with the frame in diamond lozenge shape which is embedded within the rectangular panel. The central flower is surrounded by the complementary motifs of other plant elements including stems flowers, flower buds, leaves and shoots in curvilinear movements. Carving with central motif represents the unending growth and movement of life in natural plant (Rosnawati, 2005). The fabrication of the carving with the distinct characters of central elements within a specific shape of frame was perhaps a defining feature of the panel. This character is perhaps an important identifying feature for this particular type of a house which is known as *rumah bujang berserambi* (bachelor house with front verandah).

House of Tok Ku Paloh from Terengganu with the same type of dwelling architecture also exhibits the same pattern of distribution of carved ventilation panels at the main façade

of this house. Figure 2a illustrates the wall façade of rumah ibu which exhibits the repetition of several vertical rectangular ventilation panels in various designs of motifs. The carved ventilation panels at this house were equipped with a vertical arrangement of floral motifs within the vertical rectangular shapes and layout. Figure 2b illustrates a single perforated ventilation panel with a type of carving composed of plant motif possibly *Amaranthus species* (a weed with serrated leaves). Several plant elements including branches, leaves, leave shoots, buds and flowers flow in a rhythmic intertwining movements within a vertical rectangular frame. The floral elements were composed as top and base motifs. The composition of plant element as base motif is more compact than those at the top panel. Carving with this type of format determines the right orientation of the carved components. This carved component was placed within the thick wooden panels on the upper part of the wall façade together with the other components in rhythmic configurations of (2-2-3-2-3-2-2). The placement of the carved panels with the specific layout and features breaks the monotonous arrangement and verticality of the thick wooden frames. It appears that the fabrication of the carved panels facilitates in natural ventilation as well as creates visual interest.



a

b

Figure 2: The layout of carved components at wall facade of *rumah ibu* at Tok Ku Paloh's house (a) and one of carved ventilation panels (b) found on the wall

It is apparent that the placement of the carved panels on the main façade of the houses represents a certain mode of ornamentation for the earliest type of Kelantan and Terengganu dwelling architecture which had reached over a hundred years old. The design of the houses stands out clearly with the carved panels as complementary elements to the house overall form. It is apparent that the form of carvings was kept within certain dimensions and configuration in relation to the shapes of the wall facade and together they form the image of regional house architecture. The placement of carved panels on wall of rumah ibu probably denotes the importance of space utilization of this main area of the house.

Ventilation panels are the predominant types of carvings which are prevalent in most of the timber houses of Kelantan and Terengganu. Most of them are in forms of ventilation panels fitted on the upper sections of walls as well as on top of doors and windows. For example, the perforated continuous horizontal panels at the front elevation of Wan Aisyah's house in Kelantan as apparent in Figure 2. These ventilation panels were fitted on the upper sections of walls as well as on top of doors and windows facing the front compound of the

house. The placement of the two ventilation panels with different features was probably fitted to signify the allocation of separate domains for male and female visitors of the house. Inasmuch, fabrication of carved panels on the front wall of these areas suggests the significant use of spaces specifically for guest reception.



Figure 2: Front elevation of Wan Aisvah house with the placement of carved ventilation panels

Carved panel fitted as railings was another type of carved component that dominate the front façade of the house. For example, the carved railing at *serambi* (front verandah) situated at Biji Sura's house was equipped with a combination of geometrical and stylized floral elements in vertical layout as shown in Figure 3. In this case the panel seems to be appropriately fabricated to suit the architectural elements fitted as external features. The *serambi* which faces the front compound of the house is embellished with this type of perforated panel. The perforation is probably to provide a view with a certain limit of sight or vision while allowing the natural flow of air to this front area of the house.

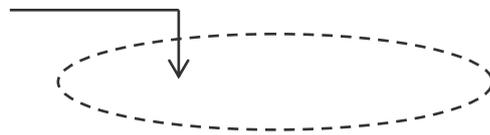


Figure 3: Placement of carved railing panels at *serambi* (front verandah) of Biji Sura house

From the various carved components found at the 15 houses located in Terengganu and Kelantan, it was found that various types of carved components were widely fixed across the external and internal walls of guest areas like *rumah ibu* and *serambi*. Carvings were also fitted to the architectural components found in the exterior fabrics of the house including staircase, gate and roof. These components which were fabricated as external features had become the central object for decoration as well. Flora was represented as the predominant theme in a few samples of carved components found in the houses as apparent in the ventilation panels. In short, most of carved components were fabricated with its appropriate carving forms and attributes for significant use in house setting as seen in many perforated wall ventilation panels which were found in almost all timber houses analysed thus far.

Analysis of the drawings also indicated that the timber houses from Kelantan and Terengganu exhibited carvings with distinctive features particularly in the forms of carving techniques and motifs. In general, woodcarvings from Kelantan and Terengganu have different forms in which a thick plank is used for cut out technique according to a specific

design motif with different depth of incision (Norhaiza, 2008). The various types of architectural woodcarvings with a certain degree of low or high relief carving motifs which are mostly derived from flora demonstrate a mastery of designs with a highly technical competence. Carvings with high relief motifs create a sense of three-dimensional composition which is commonly found in a single panel with rectangular layout as apparent in the ventilation panel found at the external wall of Wan Sulong's house shown in Figure 3.

Figure 3: Single perforated ventilation panel with the highest complexity in carving form found at the external wall of Wan Sulong house

This panel has carving in perforation with high-relief plant motifs in quadruple overlaps character. Various plants such as flowers, branches, stems and leaves were intertwined by having their organic lines to cross over or under each other in delicate movement. The complex arrangement of plant elements gives almost a three-dimensional look. The design qualities in the panel including perforated carving and complex composition of floral motifs in high relief with several overlaps were contributory to probably the highest degree of visual intricacy and complexity. According to Muhaimin (2008) the detail characteristics of floral motif in three-dimensional format with complex arrangement of compositional elements and carved in several layers of overlaps is certainly the most difficult carving technique applied on woodcarving. The fabrication of this type of carving requires high level of skillfulness and ingenuity in craftsmanship. In short, the significance of carved components was apparent with respect to its design qualities besides the visual forms of carvings and its layout and configuration in interior as well as exterior fabrics of the Kelantan and Terengganu timber houses.

CONCLUSION

Carved components of Kelantan and Terengganu timber houses displayed distinctive visual forms with specific carving attributes. The visual forms of the components were skillfully crafted and formatted by the woodcarvers to be used primarily in domestic setting and synchronized with the pattern of its distribution. Consistency in the pattern of fabrication of the woodcarvings as carved ornamentation and its placement in the timber houses contribute to the regional identity of the houses. It was enriched by the placements of various woodcarvings in a beautiful spectrum of ornamentation. Inasmuch, the development of carving design for the specific house forms in this north-eastern region of Peninsular Malaysia has given identity to a vernacular type of dwelling architecture of its own. The study found certain language of design qualities in the fabrication of carved components and its placements in the timber houses. The carvings for house components with regional characteristics probably served as identifying building features and they were certainly not objects crafted in a simple way but inextricably bound up with designated function, artistic qualities and skillfulness possessed by the traditional craftsmen.

ACKNOWLEDGEMENT

The authors like to express their gratitude to the Centre of Research for the Study of Built Environment in the Malay World at the Department of Architecture in the Universiti Teknologi Malaysia.

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