

VISUAL COMPOSITION OF MALAY WOODCARVINGS IN VERNACULAR HOUSES OF PENINSULAR MALAYSIA

ISMAIL SAID*

Abstract. Malay timber houses of Peninsular Malaysia are embellished with carved components that served both functional and aesthetic purpose, thus acting as one of the determining factors in defining the character of the regional architecture. The physical form of woodcarving is governed by four factors, namely, principal forms and arrangement, types of incisions and perforations, types of motifs and design principles regulating its composition. The Malay craftsmen of Kelantan, Terengganu, Perak and Negeri Sembilan applied these factors in their carvings which resulted in similarities and differences of visual compositions. The major similarities included the application of four principal forms of carving patterns and seven shapes of carving arrangements. On the other hand, the differences occurred in types of motifs and types of incisions.

1.0 INTRODUCTION

Woodcarving is part and parcel of traditional Malay architecture of Peninsular Malaysia. It is among the prominent crafts done by Malays depicting their quest for beauty and keen observation of the natural surroundings and their elements. The quest for beauty is manifested through hardwood carvings by incising or cutting the timber using sharp tools conforming to specific patterns and compositions. The love to manifest beauty is seen as an act of devotion to the Creator as well as a gift to his fellowmen (Mohd Taib, 1997). Floral motifs and symmetrical arrangements dominated the carved components; this being due to value system, rites and rituals that governed the design.

A typical Malay timber architecture such as a house or a mosque would be adorned with more than 20 carved components. These components are categorized into three types according to structure, element and decoration. They can be seen on the façade of the buildings such as fascia boards, barge boards, door leaves, ventilation panels over doors or windows, and perforated wall panels. The ventilation panels and perforated wall panels are fenestration members to allow for breeze to circulate into and out from the building. Furthermore, they allow sunlight to pass through its perforation and consequently lit the interior. Simultaneously, intricate shadows are casted on the house floor adding beauty to the interior. Thus carved components of the timber buildings performed both functional and aesthetic purposes. Without the woodcarv-

* Department of Architecture, Faculty of Built Environment, Universiti Teknologi Malaysia, 81310, Skudai, Johor, Malaysia. isaid04652@hotmail.com

ings, the Malay architecture would be not completed; it is part and parcel of the language of Malay architecture.

The abundance of hardwood species in the rainforest of Peninsular Malaysia has allowed the Malays to practice woodcarving as a craft. The practice may have originated in the northern states of Peninsular Malaysia during the Langkasuka Empire as early as 14th century. The desire to imitate natural forms and to manifest them tangibly occurred through the master-student apprenticeship. The natural tropical settings with their abundance of floral, fauna and cosmic forces become the source of inspiration to be depicted in abstract or stylized form onto timber boards. Later with the coming of Islam, geometric and calligraphic forms were added as motifs in the woodcarving. The physical forms of the carving are governed or controlled by four factors, namely, principal forms and arrangement, types of incision and perforation, types of motif, and design principles regulating its composition. These factors were discovered in a research done by the author, *Visual Composition of Malay Woodcarving in Traditional Houses in Peninsular Malaysia*, completed in May 2001.

This paper explains the four factors that characterized the form of Malay woodcarvings and subsequently become the visual and intrinsic features for identification of regional variations. The findings of the research were based on investigation of 16 traditional houses in the states of Kelantan, Terengganu, Perak and Negeri Sembilan of Peninsular Malaysia.

2.0 PRINCIPAL FORMS AND SHAPE OF CARVED COMPONENTS

In terms of iconography, the forms of Malay woodcarvings were derived from four principal forms including *stupa*, *makara*, lotus and *gunungan*. These forms were actually from Hinduism motifs which the Malay craftsmen adopted and adapted that were derived through thoughtful observation towards their living surroundings (*see* Figure 1).

The stupa form can be found in house component such as *buah buton* or newel of stairs or gate. These are decorative components that enliven the interior of the building. Buah buton is attached to the end of kingpost hiding the tenon and mortise joint

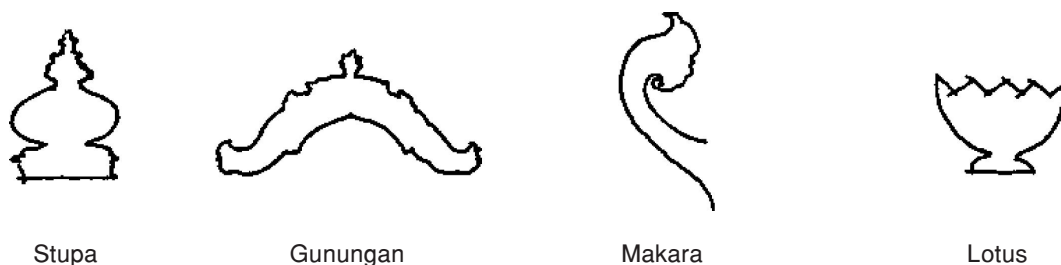


Figure 1 Principal forms of Malay woodcarving

to a tie beam of the roof structure. It is the only volumetric component that becomes the jewel of carving, beautifying the interior of the house. The motifs generally applied to the buah buton are stupa (3 to 5 tiers) and lotus.

The gunungan is a silhouette of a mountain or tree of life; a symbol of status (Ismail Said, 2001). The gateway of a house compound is vividly carved in gunungan. This form is also applied to other components including ventilation panel of doors or windows and door learies. The makara refers as center of cosmological imagination for a mythology of sea-monster in Pattani and Kelantan. Bargeboards on Terengganu houses distinctively depicted the form of makara that enhance the façade of the building. This component differentiates the form of the house in Terengganu over houses in Perak and Negeri Sembilan. Lotus is the symbol of purity and its form is applied to a variety of house components including door leaf, fascia board, ventilation panel and buah buton. Apart from house components, the form is also carved at the foot of tombstone and base of kris hilt.

The making of carved components in Malay houses are based on a least seven geometrical and flora shapes, namely, square, horizontal and vertical rectangle, circle, octagonal flora, semi-circle and triangle (*see* Figure 2).



Figure 2 Shapes of carved components in the Malay houses

The square and rectangle are the common layouts for many components particularly for door leaf, ventilation panel and wall panel. They are easier to carve since the outline is straight. Façade of Terengganu and Kelantan houses are dominated by these perforated components in flora motifs. The layout and size of the components are in proportion with the elevation of the building and volume of its interior space. The craftsmen applied their skills to place sufficient amount of fenestration of perforated woodcarvings to allow for cross ventilation, thus providing thermal comfort to residents without depending on mechanical means. The perforations also allow sunlight to lit the interior spaces of the house.

Occasionally, flora octagonal or circle layout is carved for special components such as the base of ceiling-lamp. Such carving can be found in aristocrat's houses in Terengganu such as the house of Dato Biji Sura in Kuala Terengganu town. The intricacy of the shape and carving denotes the skillfulness of the Malay craftsmen and affordability of the house owner.

Apart from the shapes, the carvings are generally laid symmetrically on at least one axis. The axis orientates the carving pattern, repeating the pattern from the left to the right or from the top to the bottom of a component. Figure 3 illustrates a perforated carving of a wall panel of Wan Embong's house in Kuala Terengganu. Most of the



Figure 3 A sample of perforated wall panels; a symmetry form laid on an axis and carved in flora motifs

ventilation panels, wall panels, door and window leaves, and flat railings are done in symmetrical format with flora motifs.

3.0 TYPES OF INCISION AND PERFORATION

The woodcarvings in the Malay traditional houses can be recognized further by its depth and complexity of incision. The research has identified three types of incision, namely, relief, perforation and combination of the two types. The process of carving begins by drafting a motif with pencil on a timber board. Then the timber is incised with a chisel or a knife called *pisau wali* following the pencil outline. The depth of incision varies from one component to another, for example, incision on a door leaf ranged from 5 to 8 mm deep. The thickness of the perforated component varies from 15 to 30mm. Generally, the Malay craftsmen incised more than one motifs onto the timber board and laid on one to four layers. As the number of motifs and carving layers are added to the board, the complexity of carving increased. This complexity differentiates the status of the house owner; noble houses and sultan's palace are adorned with intricate carvings whereas the commoner houses are attached with simple perforated carvings. For example, an aristocrat house, Rumah Haji Mohammad Dobah in Kota Bahru, is embellished with ventilation and wall panels carved in a combination of perforated and relief forms. The houses and their carved components are commonly made from cengal, a heavy hardwood species with fine texture fiber as well as powder-post beetles and fungus resistant.

Apart from the status of the house owners, the degree of carving complexity also differs from one component to another. Door leaf and *tiang seri* (main post of the house) is more intricately carved than other components such as wall panel, ventilation panel, stair stringer and gable. Thus the complexity of carving may signify the hierarchy of importance of the components to the house architecture.



Figure 4 Railing (left picture) is carved in perforation whereas a ventilation panel of a door (right picture) is done in combination of relief and perforation forms

4.0 TYPES OF MOTIF

Malay craftsmen applied five types of motif, namely, flora, fauna, calligraphy, geometric and cosmos onto the carved components. Flora dominated the scene of Malay woodcarving, not only for house components but also on other crafts or equipment including weapons, boat and house utensils. The abundance of plant species in the house compound and nearby forest has inspired the craftsmen to manifest them into the craft. The parts of plant that are manifested include the fruit, stem, tendril, leaf, and more conspicuously the flower. Fruit of pomegranate, flower of lotus, sunflower, ketumbit, ketola and bakawali, leaf of getamguri and stem and tendril of ipomea are depicted in a variety of abstract forms on the house components. Pomegranate is chosen as a motif due to the interesting shapes of and the bright fruit orange flowers. Lotus is selected due to the auspicious flower form and color, and its sacredness. Pitcher plant is depicted due to its interesting foliage form and it can be found in the rural living environment. Weeds such as ketumbit with its bright yellow flower and the wavy foliage of getamguri are recognized by Malay craftsmen in Terengganu and Kelantan, who translated their beauty into the tangible art. Likewise, craftsmen in Perak and Negeri Sembilan favoured the bright yellow flowers and twining character of *ketola* and the large bright sunflowers to be depicted onto doorleaf and ventilation panel. Thus Malay craftsmen observed the beauty of their surroundings and symbolize the intangible value into a physical product that can be appreciated by others.

Tendrils of sulur kacang laut



Figure 5 A ventilation panel of Dato Biji Sura's house carved in flora motif depicting foliage and tendrils of sulur kacang laut, *Ipomea pea-caprae*

Fauna is rare in Malay woodcarvings due to the prohibition of Islamic teaching to depict figurine motif. But a few craftsmen still carved fauna motifs such as a pair of roosters, a group of ducks waddling in a row, or a lizard's head. Interesting behaviours of the animals have inspired craftsmen to manifest them into their carvings. These motifs are generally carved in abstract forms, thus the fauna form is difficult to be recognized as a figure. Wall panels at Tukang Kahar's house in Negeri Sembilan abstractly depicted two roosters that were unlikely to be recognized at a glance.

Calligraphy is also applied as motif on walls and ventilation panels in Kelantan, Terengganu and Negeri Sembilan houses. It is either carved in relief, perforated or combination of both. Quranic verses are depicted onto wood panels written in several Arabic styles. An excellent example is a wall panel at a house in Kampung Pulau Panjang, Kelantan where a Quranic verse is carved in perforated form and laid symmetrically on an axis (see Figure 6).



Figure 6 Example of wall panel carved in traditional calligraphy motif

This carving demonstrated their devotion to Islam and adoration to the Quran as a collection of God sayings. The legacy of calligraphy in Malay letter writing has influenced the use of calligraphy as one of the motifs in wordcarving (Sheppard M, 1978).

Apart from the arabesque motifs, the craftsmen applied geometric motifs on doorleaves, ventilation panels, wall panels, railing and partitions. The configuration can be a series of diagonals repeatedly copied throughout the component. Swastika and star are among the complex motifs that can be seen on walls and doorleaves. Repetition of similar motif creates sense of beauty and contrast against adjacent foliate or calligraphic motifs. Geometrical carving is more likely easier to carve than the other four types and thus repetitive components such as railings are done by apprentices or sometimes wives of the master craftsmen.

Cosmos motif is the least seen in Malay woodcarving. In contrast, Chinese shophouses and temples in Peninsular Malaysia are rich in such motifs particularly the symbols of sun, clouds and waves. The depiction of this motif in Malay carving illustrates the influence of Chinese craftsmanship and pluralism of cultural value in the vernacular architecture. Ventilation panel at Mohd Ali Kulup Mat Yassin's house in Perak is an example where flora leaf and flower are combined with cosmic clouds.

5.0 DESIGN PRINCIPLES REGULATING CARVING COMPOSITION

Visual composition of woodcarving can be understood by analyzing the design principles that regulate its form and pattern. The research found three to four fundamental principles regulating the design of the carving including symmetry and balance, repetition, and order and harmony. The beauty of a piece of woodcarving such as ventilation panel can be easily seen on its layout, either symmetry or asymmetry. Most of the house components are carved in a symmetrical layout, suggesting the vivid balance layout. Hence the carving pattern is laid on at least one axis, suggesting simplicity in design. Sometimes a master craftsman would devote his time to carve a ventilation panel with four axes. Therefore, the degree of difficulty to carve a layout consisting of four axes is higher than a single axis, denoting the skillfulness of the craftsman. But this does not necessarily mean that a carved panel with two or more axes is more intricate than those with a single axis. For example, a ventilation panel at Tengku Anjang Palace in Terengganu is done on a single axis with intricate flora motifs (*see* Figure 7). The carving pattern begins from the center which is a vase and then turn right and left in an identical and balanced composition comprising of a flower surrounded by leaves and tendrils. It is a combination of relief and perforated incision with several overlaps.

The Malay woodcarvings are sometimes being carved in asymmetrical formats but always in a balanced compositions. The visual richness and energy is high, if not better than a symmetrical layout. Again, this type of carving is attended by a master



Figure 7 A ventilation panel carved in flora motifs and laid on a single axis at Tengku Anjang Palace in Terengganu

craftsman manifesting a genuine skill that becomes an example for his apprentices to copy.

Another visual quality of the Malay woodcarving is the repetition of motif, arrangement and form throughout the building. Railings of varendah at Terengganu and Kelantan houses are made up of timber board carved in simple flora or geometrical motifs. The same design is repeated in all railings resulting an order and visual dominance towards the architecture. Likewise, shoot of fern, flowers of ketumbit and leaves of getamguri are carved on a timber board which are later copied to similar boards. The boards are arranged and attached to the wall or varendah of the houses. Hence, the collection of a simple design carving has become a visually complex composition, giving distinctive character to the architecture of the houses. Similarly, wall ventilation panels in Perak and Negeri Sembilan houses are repeatedly carved following a similar design that dominates the façades of the houses, creating a sense of unity.

The final design principle applied by Malay craftsmen in their carving is order and harmony. This is done by placing an important motif in the center of the carving which is surrounded by subsidiary motifs. For example, a lotus blossom is placed in the center of the carving in Perak house demonstrating the auspiciousness of the flower and surrounded by its leaves and the tendrils of ketola. Such harmonious character is achieved in Mohd Ali Kulup Mat Yassin's house where the craftsmen intentionally use the lotus flower as the center-piece encircled by ketola leaves in all the ventilation panels. Likewise, bakawali flower which is considered a high status plant is either boldly carved in the center or repeatedly depict on the doorleaves or ventilation panels of Terengganu or Kelantan houses. The composition is completed by tendrils and leaves of getamguri functioning as the background to the bakawali flowers. This principle of order is well understood by the craftsmen in each state or region in Peninsular Malaysia. The order signified the language of woodcarving that is different to a certain degree from one state or region to another. Furthermore, utilizing similar motifs throughout all components in a house, for example, lotus and ketola flowers in Perak houses would draw the sense of harmony both to beauty of carving and the building. Whatever the appearance, simple or intricate, all Malay woodcarvings are designed in bal-

ance and proportion to the house architecture. Repetition of motifs throughout a component brings unity, harmony and rhythm to the carving.

In addition, the size of motif is always proportionate to the size and form of the carved component. Thus a motif of getamguri foliage or ketola blossom would be large on a doorleaf and relatively small on a ventilation panel since the former is smaller than the latter. The craftsmen would also carefully relate the size of the carved component to the elevation or facade of the house demonstrating a strong sense of rhythm in art of woodcarving.

6.0 PROSPECT OF WOODCARVING IN URBAN HOUSING

The vernacular value of woodcarving could be applied to modern urban dwellings in Peninsular Malaysia. There are more than 800,000 units of urban houses that were built in Malaysian cities and towns during the Seventh Malaysia Plan 1996-2000 and the number is expected to increase during the Eighth Malaysia Plan 2001-2004. More than 80% of the houses are row or terrace units and therefore their cross ventilation is lower than the traditional houses. Thus by introducing carved fenestration panels such as perforated top-hung on doors and windows as well as gables would improve the air circulation in the building (Ismail Said, 1999). This action would eventually bring better thermal comfort to the urban housing community living in the tropical hot and humid environment.

Apart from improving the cross-ventilation system, relief woodcarvings can be introduced to doorleaves. The intricacy of foliated motif or simplicity of geometric motif would give character and identity to a living unit. The carved doorleaf would signify a Malay house over other ethnic groups' dwelling units living in a multi-ethnic community. Furthermore, the carving would create varieties to the monotonous house architecture that is built in mass using similar design. It will also break the monotony of the terrace house elevation by adding vernacular value to the architecture.

7.0 CONCLUSION

The Malay woodcarvings in traditional houses in Peninsular Malaysia is an art which is based on four principal forms, seven standard shapes, quality of incisions and perforations, types of motif and its design is regulated by three principles of visual composition. These vernacular craftsmanship values are learned and practiced by the craftsmen in the states of Kelantan, Terengganu, Perak and Negeri Sembilan for the construction of timber architecture and its components. The form of the house and its carved components signified the architecture language and identity of timber buildings. This identity could be transferred to modern housing architecture particularly on the fenestration components such as ventilation panels of wall and top-hung of doors and windows as well as gables. The revival of woodcarving can be further enhanced by the introduction of carved doorleaves that would add beauty to the house and

identifies the ethnicity of the Malay residents. This revival would create demand for the carvings and thus revitalize the craft and support the livelihood of Malay craftsmen in the country. Hence, understanding the physical and visual qualities of Malay wood-carvings is necessary for architects and craftsmen to propagate the intrinsic values of the craft to the new generation.

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