PRINCIPAL ORDERS IN THE COMPOSITION OF WOODCARVINGS AND ITS LAYOUTS IN KELANTAN AND TERENGGANU TRADITIONAL HOUSES

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ABSTRACT: Woodcarving in Malay traditional houses of Kelantan and Terengganu, Malaysia, embraced distinctive visual composition and attributes in its unifying coexistence with several architectural components. This paper discusses certain ordering principles of visual composition prevalent in the various features of woodcarving and its layouts and configurations in the interior and exterior facades of the houses. An analytical study was conducted on nine Kelantan houses and seven Terengganu houses which were obtained from the Centre for the Study of Built Environment in the Malay World at the Department of Architecture in the Universiti Teknologi Malaysia. The study involved visual descriptive and interpretative analyses on sixteen sets of carving measured drawings of the houses and this method was triangulated and validated with interpretations from five prominent woodcarvers on art and crafts of woodcarving, and supported by literatures of Malay woodcarving. The analysis revealed that there was an inherent order in the composition of carving elements which consist of motifs, patterns and design forms as manifested in several carved components including wall, door and window ventilation panels as well as roof, gate and railing panels. The compositional principles, namely symmetry, rhythm and repetition, variety, contrast, unity, focality were considered as regulating factors that determine the visual beauty of carving forms and its harmonious layouts that correspond to the vernacular values of the house architecture. These principles serve as indicative suggestion of skillfulness, logical thinking, ingenuity and wisdom in the traditional craftsmanship of woodcarving within a house fabrication.

Keywords: Woodcarving, traditional house, vernacular architecture, compositional principles and craftsmanship

1. INTRODUCTION

Woodcarving is an architectural ornamentation which is formed as an integral component to the vernacular buildings in the north-eastern states of Peninsular Malaysia including the houses of Kelantan and Terengganu. Its ornamental features including motifs, carving techniques and shapes of panels are attributed to the identity of timber architecture from this region. Woodcarving is an art work formed according to a specific pattern within a specific composition of motif coordinated by specified organizational principles and usually produced for beauty (Norhaiza, 2005). Wallischlaeger and Busic-Snyder (1992) posit that the visual organizational principles are used to construct the relationship among the visual elements of form, the compositional elements, and the intended meaning. This explains why woodcarving is a type of beautiful ornament that is shaped and identified by specific patterns. And, its motifs serve as compositional elements which are visually regulated by specific
ordering principles. According to Syed Ahmad Jamal (1994) technical skill and design principles are factors that influence and determine the level of artistry and creativity, style and identity of Malay craftsmanship. There are four fundamental principles that regulate the composition of carvings found in the Malay vernacular houses which include symmetry and balance, repetition and harmony (Ismail, 2002). These principles are attributed to visual quality of Malay woodcarving. Hence, the physical form of the woodcarving is characterized by the pattern of ordering principles apart from the distinctive shape of pattern, composition of motif, and type of perforation and incision in a wooden panel. Thus, detailed analysis of the application of these principles on the carving pattern and form could lead to a comprehensive understanding of its visual composition and significant meaning.

A few published literatures with general references to the concept of composition were reviewed. The review included the application of principle orders in Malay visual art. Rosnawati (2005) posits that six basic rules that guide woodcarving form are: (1) radiating from a source, (2) the natural rhythmic growth of lines, (3) decoration follows nature, (4) harmony in contrast, (5) decoration as an integral part of construction, and (6) balanced distribution of surface decoration. For instance, in flora motif, radiating from a source means tendrils, shoots and leaves originated from a centre (e.g. a full-bloomed flower) of a carved component. Syed Zulflida (2004) highlights six basic principles of Malay aesthetic to describe, analyze and evaluate the craft products produced by Malay artisans. The principles are: (1) affinity to nature, (2) utility of craft, (3) unity, (4) contrast, (5) symbolism, and (6) harmony and balance. Affinity to nature is clearly reflected on the application of flora and cosmic motifs in various forms of Malay arts and crafts.

Furthermore, Zakaria (1989) postulates six principles that constitute the Malay concept of beauty: (1) the principle of refinement refers to the sense of refined sensitivity with artistic sensibility and skillfulness, (2) the principle of functionality stresses on practical function of the artifact besides its beauty for visual attraction, (3) the principle of unity seeks to integrate the various elements within a framework and turned into an ideal composition with orderly structure, (4) the principle of contrast refers to the existence of two or more different surfaces in opposite characters resulting in a dynamic composition, (5) the principle of symbolism relates to the use of symbolic object to connote certain meaning and (6) the principle of meaningfulness in expression means effectively conveying an idea which communicates hidden meaning based on religio-spiritual perception of ultimate reality. For example, carvings that represent Quranic verses are works of art that convey the meaning of ultimate reality. These principles stress that several art works were not apparently designed only for specific functions or decoration but also respecting the concepts and the set of rules that govern Malay creativity and craftsmanship that defines actual beauty. They are fundamental principles normally used by Malay craftsmen or artisans in their approach to art and craft making for structural guidelines and orderly treatments of visual elements such as carvings. It is how this craft and other forms of Malay arts were transformed and undergone the making processes with technical skill, creativity and design principles.

This paper presents a descriptive and interpretive study of the visual composition and attributes of the carvings in traditional timber houses of Kelantan and Terengganu. The study interprets the ordering principles prevalent in woodcarving as
well as and its layouts and configurations in the interior and exterior facades of the houses. The finding is presented as an explorative investigation of how the basic principles were manifested in the carved components and its placement in the houses. The two major research questions for this study are: (1) what are the types of compositional principles and how they were applied in the carved components? and (2) what are the significances of the compositional principles?

The inherent beauty of the carved components placed in timber houses is a manifestation of the Malay craftsmen’s understandings of the vernacular tradition of this particular region. Apart from this, the beauty also reflects on the craftsmen’s knowledge in the application of ordering principles for visual composition of woodcarvings. The beauty in the arrangement of compositional elements in the woodcarvings does not happen in arbitrary but its existence is dictated and regulated by the specific idiom of compositional principles (Rosnawati, 2005). Hence in order to appreciate the art of carving placed as house components it should be understood in relation to the application of these principles. Its application can be examined within the smallest carved component like roof eave panels to the largest one like the perforated ventilation in form of continuous horizontal panel on a wall. Thus it is the focus of this study to look at those aspects on a collection of carved panels of the houses built in the years of 1850s to 1930s. This research could contribute to a range of design concepts of traditional carvings through visual interpretation of this material culture especially when the notions of tradition in the art making is on the edge of disappearance.

2. METHODS
2.1. Analytical review on measured drawings and interview with woodcarvers

Sixteen prominent Malay timber houses were selected for the study as shown in Table 1. Nine houses were located in Kelantan and the other seven houses were located in Terengganu. These houses were equipped with excellent carvings which are regional and distinctive in character. These carved components, in a variety of forms, are appropriate for visual analysis purpose. The carved components and its modes of application were reviewed and analyzed by interpreting a set of measured drawings of the 16 houses obtained from KALAM. These comprehensive documents serve as principal and pictorial data for this research. The visual and interpretive analyses examined 79 individual panels pertaining to the application of ordering principles within its individual layout and overall distributions within the houses.

Table 1: Timber houses of Kelantan and Terengganu used for the analysis

<table>
<thead>
<tr>
<th>No</th>
<th>Name of house/owner</th>
<th>Year Built</th>
<th>Location of House</th>
<th>Type of House</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tuan Mohamad Dobah</td>
<td>1850s</td>
<td>Jalan Post Office Lama, Kota Bharu</td>
<td>Combination of twelve-pillared and five-ridged roof house</td>
</tr>
<tr>
<td>2</td>
<td>Wan Mek</td>
<td>1800s</td>
<td>Tumpat, Kelantan</td>
<td>Twelve-pillared house</td>
</tr>
<tr>
<td>3</td>
<td>Tok Yakub</td>
<td>1800s</td>
<td>Kampung Belongan, Bachok, Kelantan</td>
<td>Twelve-pillared house</td>
</tr>
<tr>
<td>4</td>
<td>Mariam Mat</td>
<td>1880s</td>
<td>Kampung Hiliran Masjid, Kuala Terengganu</td>
<td>Twelve-pillared house</td>
</tr>
<tr>
<td>5</td>
<td>Nik Salleh Wan Ahmad</td>
<td>1880s</td>
<td>Kampung Pulau Panjang, Kota Bharu, Kelantan</td>
<td>Combination of twelve-pillared and five-ridged roof house</td>
</tr>
<tr>
<td>6</td>
<td>Wan Embong Wan Awang</td>
<td>1890s</td>
<td>Pulau Duyung Besar, Kuala Terengganu, Terengganu</td>
<td>Twelve-pillared house</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Years</td>
<td>Address</td>
<td>House Type</td>
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</tr>
<tr>
<td>7</td>
<td>Lebai Ali Abdullah</td>
<td>1900s</td>
<td>Jalan Pantai Irama, Bachok, Kelantan</td>
<td>Five-ridged roof house</td>
</tr>
<tr>
<td>8</td>
<td>Abdul Rahim Endut</td>
<td>1900s</td>
<td>Tanjong, Kuala Terengganu</td>
<td>Twelve-pillared house</td>
</tr>
<tr>
<td>9</td>
<td>Dato’ Biji Sura (Kota Duyong)</td>
<td>1914</td>
<td>Duyong Kecil, Kuala Terengganu</td>
<td>Five-ridged roof house</td>
</tr>
<tr>
<td>10</td>
<td>Wan Sulong</td>
<td>1920s</td>
<td>Jalan Sultanah Zanab, Kota Bharu, Kelantan</td>
<td>Twelve-pillared house</td>
</tr>
<tr>
<td>11</td>
<td>Hassan Mohd Amin</td>
<td>1920s</td>
<td>Jalan Pengkalan Chepa, Kota Bharu, Kelantan</td>
<td>Five-ridged roof house</td>
</tr>
<tr>
<td>12</td>
<td>Hassan Yusof</td>
<td>1933</td>
<td>Kampung Sireh, Kota Bharu, Kelantan</td>
<td>Five-ridged roof house</td>
</tr>
<tr>
<td>13</td>
<td>Wan Hussain Bin Wan Abdul Rahman</td>
<td>1937</td>
<td>Kampung Sireh, Kota Bharu</td>
<td>Five-ridged roof house</td>
</tr>
<tr>
<td>14</td>
<td>Tok Ku Paloh</td>
<td>1800s</td>
<td>Kuala Terengganu, Terengganu</td>
<td>Bachelor house with verandah</td>
</tr>
<tr>
<td>15</td>
<td>Dato’ Biji Sura</td>
<td>1934</td>
<td>Kampung Ladang, Kuala Terengganu</td>
<td>Combination of twelve-pillared and five-ridged roof house</td>
</tr>
<tr>
<td>16</td>
<td>Su Mohammed Salleh</td>
<td>1890s</td>
<td>Kuala Terengganu, Terengganu</td>
<td>Combination of twelve-pillared and five-ridged roof house</td>
</tr>
</tbody>
</table>

Five prominent woodcarvers were selected for open-ended interviews to verify the findings from the analytical review method. Two of the woodcarvers were from Besut, Terengganu and the other three were from Kota Bahru, Kelantan. Their verifications on the application of the ordering principles in the carved components and its layouts was sought to improve the validity of the measurement obtained from the measured drawings. The triangulation of several measurements is in the search for a degree of validity unattainable by a single method of research (Patton, 2003).

3. FINDINGS AND DISCUSSION

The analysis revealed that there was an inherent order in the layout and composition of carving elements which consist of motifs, patterns and design forms as manifested in several carved components including wall, door and window ventilation panels as well as roof, gate, railing and ceiling panels. Most of these carved components were crafted in balance composition suggesting an employment of ordering principles namely, symmetry, rhythm and repetition, variety, focality, contrast, harmony and unity. These compositional principles were considered as regulating factors that determined the harmonious layouts in carvings. The application of the principles corresponded to the configuration of the house components resulting in visual beauty of carving forms and its overall composition in the house fabric. It was found that the placement of the carved components in interior as well as exterior facades of the houses relate well with the architectural form. The relationship indicates that the carvings are inherent visual elements formed with specific principles of composition.

3.1. Modes of composition and its visual orders

From the analysis, the compositional principles exist in two modes of composition: (1) in a piece of panel—micro-scale, and (2) in the placement of several components on the building façade—macro-scale. There were vivid applications of the principles in the two modes of compositions. The findings suggest that craftsmen used specific organizing principles as a mean of achieving beauty in visual orders for both forms of compositions.
3.1.1 Micro-scale composition

As an individual piece, a woodcarving is a type of carved panel that depicts several elements in a harmonious composition. 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). Thus composition of specific carving elements are organized by the regulated ordering principles with specific meanings as appeared in various carved panels found in the Kelantan and Terengganu houses. Combinations of symmetry, centrality and focality were the central theme employed in many carved panels that mainly consist of foliated patterns. These principles were combined to regulate the form of carvings in complete pattern that flows within vertical and horizontal rectangular panels. For example, the window ventilation panel fitted to the wall of Nik Salleh’s house (Figure 1) exhibits an application of the principles within a single piece of carving bounded by a rectangular perimeter. This perforated panel in relief carving is equipped with various plant elements including a central flower which is portrayed as a focal point and symmetrically positioned at the vertical axis. Focality (visual emphasis) is one of organizing principles that characterizes visual unity (Wallschaeger and Busic-Snyder, 1992). The visual unity reflects on the arrangement of the various plant elements in complete harmony governed by a symmetrical line.

The focal flower serves as an origin or a source from which other plant elements including stems, flowers, flower buds, leaves and shoots grow in upward and regulated movements. Carving with a central motif represents the unending growth and movement of life in a natural plant (Farish and Eddin, 2003; Rosnawati, 2005). The traditional concept of *awan larat* (meandering pattern) was based on orders in the growth of natural plant (Wan Mustapha, Norhaiza, Latif, Abas and abdul Raman, 2009). The flow of the growth in plant follows the specific orders which govern the harmonious relationship between the compositional elements. The movement of the elements does not only reflect the orders in growth but also the principles of composition. This is the foremost principles observed and should be recognized by the woodcarvers in the fabrication of the carved components (Wan Mustapha, Norhaiza, Latif, Abas and Abdul Raman, 2009). This explains that the flow of outward movements of plant with its various elements in a specific order of arrangements and is regulated by the compositional principles is perhaps an important identifying feature that characterized the Malay *awan larat*. From the analysis this meandering pattern with a concept of plant growth was frequently found in ventilation panels fitted on walls and above windows and doors.

![Figure 1: The carved component with principles of centrality, symmetry and focality](image-url)
Various plant elements were represented in the carved panels giving a sense of variety with harmony and visual unity. The plants were commonly grown in the house yards including *ketumbit, ketam guri, bayam peraksi* (all are weeds) and *kekacang* (climbing legume). They were depicted as primary motifs and a full-bloomed flower generally becomes a focal or central object. Apart from a flower, other focal elements including a flower vase and a root or seed were depicted as growing sources from which other flora elements emerged. The various applications of central object are samples of works from the Malay woodcarvers of the past generations that demonstrate the fabrication of carvings were bounded within a language of traditional conception. As verified by the woodcarvers, Wan Mustapha, Norhaiza, Latif, Abas and Abdul Raman (2009), that the Malay awan larat usually depicts a growing plant that emerges either from a flower, a flower vase, a plant seed or root. Apparently, the fabrication of the carving with the distinct characters of a plant as central elements within a symmetry, centrality, focality and variety in composition was probably a defining feature for this type of complete pattern.

Apart from focality, pattern of infinity was also used in the carved components found in the houses especially on the perforated continuous horizontal panels fitted on top of walls as shown in Figure 2. This panel which was found at Wan Sulong’s house portrays uniformity in repetition of geometrical and floral motifs with absence of focality. According to al-Faruki (1992) infinitive pattern constitutes repetitive elements in a single fashion with no ending or beginning and absence of assertive element in overall composition. The element of infinity results in an atmosphere of calmness which can be found in Islamic art. This is in consistent with Norhaiza, Wan Mustafa and Latif (2009) who affirmed that the repetitive pattern creates a sense of visual harmony. This character is perhaps an important identifying feature for this particular type of a ventilation panel in a continuous horizontal layout with a repetitive pattern.

A peculiar carving such as the perforated wall panel found at Wan Mek’s house shown in Figure 3 demonstrates an application of asymmetrical arrangement of the carving elements within a balance composition. Careful attention to the juxtaposition of tendrils, leaves, buds and flowers within the rectangular panel creates an interesting visual form. This type of composition shows the interplay of the principle of variety in the use of different types of plant motifs with interlocking movements in an asymmetrical balance. This marks its distinctiveness in character. Asymmetrical arrangement of elements in carving denotes creative thinking of traditional craftsmen (Wan Mustapha, Norhaiza, Latif, Abas and Abdul Raman, 2009). As noted by Gandy and Little (2005), asymmetrical design is less formal and it gives a wider opportunity for individual expression and creativity.
Within a panel there is a balance composition in the distribution of solid (non-perforated section) and void (perforated section) as apparent in the ventilation panels (Figures 1, 2 and 3). Most of the carved components found in the houses depict motifs with perforated and relief or non-relief carvings. The firmness of the compositional structure in these components was based on the balance of distribution between solids and voids where the solids are linking one part with another either in relief or non-relief form. This structure of negative-positive relationship gives a sense of contrast. The principle of contrast is one of basic rules that guide Malay art design for a dynamic composition (Zakaria, 1989; Syed Zulflida, 2004; Rosnawati, 2005). Wan Mustafa (2009) and Norhaiza (2009) noted that contrast in carving composition gives a sense of visual interest. The contrast relationship built within the defined domain of carving existed in a unifying form and interwoven into an evenly balanced structure thus creating a sense of visual harmony and unity.

Composition of carving in a circular-based form also exhibits various distinctive characters that are usually regulated by radial symmetry with multiple axes. One of the panels with multiple axes is found in the decorative panel fitted to the ceiling of rumah ibu of Dato Biji Sura’s house in Kampung Ladang, Terengganu (Figure 4). Visual intricacy in this carved panel was achieved by the complex arrangement of a floral pattern in multiple folds that consists of different layers of arrangement. It is recognized that there are one-fold, two-fold, four-fold and eight-fold the circle corresponding to the number of axis or axes. All of the five woodcarvers agreed that most of the carved components with multiple folds reflect a high degree of consistency and uniformity in the repetition of motifs suggesting intricacy and complexity in fabricating them. They verified that the more the divisions and number of axes the more intricate and complex the carving is. Ismail (2002) has noted that there is a higher degree of difficulty in carvings with four axes than those with a single axis which exemplify the craftsmen’s skillfulness. This explains that the intricacy and complexity of carvings suggest a certain degree of skillfulness and ingenuity of the traditional craftsmen in the fabrication of the carved components.
A well conceived interlacements and balance combination between geometries of various shapes and plant elements were also evident in various panels (e.g. Figures 2 and 4). The Malay woodcarvers who drew the layouts of pattern for both panels did not retain the underlying structures either in forms of square or circle which had guided the design and within which the intended floral patterns had been traced out in a repetitive order. For the craftsmen who had decorated the surfaces of carvings with geometrical interlacements in harmonious proportions were indeed the genius decoders. Their works were doubtless representing the intellectually pleasing form. Many types of the carved panels found in the prominent houses depicted floral design with this language of orders.

In sum, the visual attributes of Malay carving are defined by types of motifs, shapes of components, carving patterns, types of perforation, and the principles of composition. The significance of the carved components was attributed with the qualities of these visual attributes. Various parts of a plant were depicted in a harmonious and symmetrical composition which appeared in the various types of perforated carved ventilation panels with a sense of focality, variety and unity. The applications of plant motifs into the carved panels reflect a manifestation of craftsman’s perception of the beauty in nature into the art form. Indeed, beauty in the visual order in the carving forms also refers to the order or visual organization which the craftsmen relate to the natural environment.

3.1.2 Macro-scale composition

Application of compositional principles on a macro scale is reflected on the arrangement of several carved components on specific facades of the Kelantan and Terengganu houses. At rumah bujang berseranbi (bachelor house with verandah), rumah tiang dua belas (twelve-pillared house) and rumah berselasar (a composite units of houses), a group of woodcarvings in homogeneous or various shapes are placed in specific orders as integral components to the primary walls of these houses known as dinding papan kembung (convexed wall). These components in vertical or horizontal layouts were positioned within a defined area of the wall and usually on the upper section. For example, a set of several carved components with similar shapes are juxtaposed on a wall of rumah ibu (core house) at Tok Ku Paloh’s house in harmonious configuration (Figure 5). Beauty in composition is perceived in this mode of groupings as rhythmic expression. Within this expression the components were arranged in 2-2-3-2-3-2-2 rhythm thus establishing an integral relationship with the wall elements and façade within vertical layouts. The 2-2-3-2-3-2-2 rhythm refers to a configuration of a group of sixteen carved panels with similar shapes which were organized as a series of recurring elements resulting in the harmonious repetitive pattern.
Another example of rhythmic composition is seen at the Mohamad Dobah’s house where a group of carved components in rectangular horizontal shapes were fitted at the upper center of the front façade of rumah ibu as shown in Figure 6. It appears that the central position of the six panels with 1-1-2-1-1 rhythm at the wall creates a sense of focal point. This sense of order is represented by a series of recurring elemental carvings which have similar layouts. They were organized in a rhythmic repetition, thus, forming the order of 1-1-2-1-1 in arrangement. The choice of this configuration for the wall is in harmonious relationship with the forms of the building facades thus creates a visual unity. It is apparent that the pattern of configuration of the components was determined by the house form which is known as rumah berselasar.

Beauty of the house façade is reinforced by the placements of carved ventilation panels in rhythmic composition. Because this is a dwelling structure, forms of carvings were relevant whether in horizontal, vertical or central layouts in terms of shapes and positions. This reflects an attempt made by the traditional craftsmen to accentuate the walls that serve as building envelope where viewers’ eyes are most attracted to. Malay craftsmen of the past generation had created great envelopments for the special household spaces such as rumah ibu as evident in Tok Ku Paloh’s and Mohamad Dobah’s houses. Both houses epitomized the perfect unification between beautifying elements with the house envelopes. Apparently, the modes of placement
for the two types of houses embraced the vivid contrast of configuration and composition. Rhythmic movement of panels in the two distinctive layouts was the most signifying feature that corresponds to the architectural form of the houses.

As seen in the two houses, the placements of the carved components within the principal facades were restrained within a defined composition. This explains that the organizing principles were used as the structural guidelines to create order on the wall components. Apparently, the modes of façade composition achieved balance and harmony through the use of ordering principles namely, symmetry, rhythm and repetition, variety, focality, contrast, harmony and unity. The embodiment of these ordering principles seems to create balance composition within the specified areas and sections of the identifying facades. It is a suggestive indication of the Malay craftsmen’s mastery of skillfulness, logical thinking, and wisdom in portraying the visual composition and identity of carvings and façade treatments for these particular types of dwelling architecture. The compositional principles are considered as integral components to the carvings of the Malay houses in Kelantan and Terengganu. This is verified by Wan Mustapha, Norhaiza, Latif, Abas and Abdul Rahman (2009) who stress that the use of organizing principles by the craftsmen are to ensure harmony in structure and composition.

The study recognized that the placement of ventilation panels on the upper sections of the primary walls was the most habitual manner in these types of houses. It was found likewise in other houses with similar forms like Wan Mek, Nik Salleh, Wan Sulong and Wan Embong which portrays the wall ventilation panels as predominant carved components. The placements of the carvings were not in a haphazard appearance. Its arrangements were premeditated with a sense of control and adjacent components were positioned in keeping the state of balance. Each mode of placement was restrained within the clearly prescribed position with absence of overcrowdings. Their presences were in complimentary with the convexed wall panels without a sense of domination but interrelated in a harmonious composition.

In short, one of the fundamental features of the traditional houses of Kelantan and Terengganu was associated with the distinct characteristics and configurations of the carvings fitted as house components. From the aspect of façade composition, the position of several carved components as focal point in rhythmic expression whether in a horizontal or vertical arrangement was to achieve visual harmony.

3.1.3 Layout of the wall components and its proportional relationship

A closer study on the placement of the carved components on the facades of the houses revealed a further rule of governing of its composition using proportional means. It was strongly reflected on the craftsmanship identity that originated from the northeastern states of Peninsula Malaysia. Proportion means the comparative between the parts of a whole or units as to size (Ching, 1979). For example, the placement of carvings on the front facade of rumah ibu at Wan Embong’s house are in proportional and harmonious relationship with the wall components (Figure 7). In this composition, the proportional construction was determined by using geometric means. It is merely an attempt to explore the relationship between parts of the wall and the whole structural proportion. The carved components were in paired position with a
repetitive configuration of (2-2-2-2-2) and their proportions were based on relative measurements. In this 2-2-2-2-2 rhythm, a pattern of harmonious repetition was formed by a series of ten carved panels which are perfectly identical in shapes and sizes. The harmony in repetition reflects on the harmonious recurrence of the carved panels which are grouped in five pairs that formed the overall pattern. The length of the paired components was one-fifth of the wall height and its width is one-seventh of the wall. A vertical axis was the line on which the repetition of the carved components on left and right of the centre suggest a sense of balance and symmetry. These components with vertical layout served as a focal point and their shapes and sizes were in consonance with the convolved wall panel that served as the main element of the facade. The different features of the components with perforated carving and floral motifs were in contrast with the wall panels. The existence of the two different surfaces in opposite characters created a sense of visual contrast which results in a dynamic composition (Zakaria, 1989). The quality of the overall layout was a suggestive indication of the craftsman’s skillfulness, logical thinking and wisdom.

Figure 7: The proportional layout of the carved components fitted on the wall of rumah ibu at Wan Embong’s house

3.2 Signification of repetition as a major compositional principle

The study found that traditional craftsmen used the principle of repetition in the making of the carved components and its placement in the houses. Repetition is defined as a recurrence of one or more compositional elements within the visual field or format (Wallschlaeger and Busic-Snyder, 1992). The application of repetition by the craftsmen reflects their perception of visual orders and it was manifested in their artistic expression. The main purposes of the application are: (1) to create balance in the composition of carving, and (2) to achieve visual harmony and unity in overall composition. From the analyses of certain types of carved components such as continuous wall ventilation panels, railings and roof eaves, they were formed by the
repetition of several units of individual panels with an identical character. For example, the motif of flora represented on panels of roof eave at Hassan’s house shown in Figure 8a is depicted as repetitive unit without a focal element flows within the horizontal layout of linear pattern. This repetitive arrangement of the several units of an identical panel created a balance in composition. Balance means the design or arrangement of parts in a whole grouping that creates a feeling of equilibrium or equality (Wallschlaeger and Busic-Snyder, 1992). Balance composition signifies unity and harmony in the overall features of a specific visual form of woodcarving. This suggests that the balance composition contributes to visual unity in the carving layout thus creating a sense of visual interest. Balance is a principle of beauty (Syed Zulfia, 2004). As verified by Wan Mustafa and Latif (2009), the use of repetition as organizing principle by the craftsmen is to create a sense of visual beauty.

Figure 8: Carved panels with the repetitive arrangement of identical elements fitted as (a) roof eave panels and (b) window railing panels

Repetition in carving pattern is perhaps the easiest way to achieve harmony and unity in composition. Repetition is for harmonious design as affirmed by Wan Mustafa, Latiff, Norhaiza, Abas and Abdul Rahman (2009). Ocvirk et al., (2002: 32) has noted that “harmony is the quality of relating the visual elements of a composition and it is achieved by the repetition of characteristics that are the same or similar thus creates pleasing interaction”. Perhaps it is easy to create a carving pattern with the use of repeated elements throughout the designated area in order to achieve a sense of consistency and uniformity as apparent in the layout of window railings at Biji Sura’s house (Figure 8b). This method was used by the craftsmen for organizing a number of similar elements in adjacent to one another within a simple and yet defined arrangement. Recurrent elements in a linear pattern signify the simplest form of repetition (Ching, 1979). This is probably a regulated formula that dictates the harmonious flow of the compositional elements that share a common characteristic within the railings. It seems that this type of carving arrangement was favored by many craftsmen especially for carved components fitted as railing, roof and continuous wall ventilation panels as appeared at many Kelantan and Terengganu timber houses. This signifies that the repetition of carvings in linear pattern was applied appropriately by the craftsmen on certain types of the house components which were in harmony and parallel to their functions and positions. Carvings as decoration should be placed as an integral part of construction whilst fulfilling its functions (Rosnawati, 2005).

As seen in most of the carving samples and as confirmed by the woodcarvers, the works of carving is a reflection of an employment of compositional orders to attain a
balance composition whilst allowing and enduring the fluidity in the movement of the foliated motifs within a harmonious arrangement. The linear pattern of floral or geometric motifs can be extended either in vertical, horizontal or diagonal arrangement thus offering a wide variety of choice for the craftsmen to express their creativity in the fabrication of the particular types of carved components according to their individual discretion.

4. CONCLUSION

Types of motifs, shapes, patterns and perforations were visual attributes that serve as defining features of the carved components fitted as the interior as well as exterior features of the timber houses of Kelantan and Terengganu. Besides these qualities, the meanings and significance of the carved components were attributed with the principles of composition in the specific layouts and configurations. Symmetry, repetition, focality and unity were the foremost and frequent use of ordering principles in the composition of the carved components and its placements within the houses. It was part and parcel to the design language of Malay woodcarving. Nevertheless many examples of carvings from the study testified the woodcarvers’ strong preference on the application of these principles in the house components through the early nineteenth into the middle of twentieth centuries. These organizing principles substantially regulated the arrangement of carving elements to achieve balance and unity in the overall composition. The existence of the specific orders in the placements of the carvings within the house fabric are a manifestation of the three complimentary factors including the skills, logical thinking and wisdom of the traditional craftsmen in projecting the language of compositional principles into the man-made forms.

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