VISUAL FORMS OF CARVED COMPONENTS IN TRADITIONAL TIMBER HOUSES OF KELANTAN AND TERENGGANU

By

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Introduction

• Malay traditional timber 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.

• Woodcarving is considered as an integral component to the vernacular Malay houses in the northeastern states of Peninsular Malaysia, namely Kelantan and Terengganu.

• Woodcarving as carved ornamentation embellished the timber houses of Kelantan and Terengganu existed in 1850s to late 1940s.

• 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.
Aims

• To present an analytical study (visual descriptive and interpretive analysis) of the visual forms of woodcarvings and its placement in the prominent timber houses of Kelantan and Terengganu which reflects its significant attributes and uses.
Research questions

1. What are the visual attributes of woodcarving placed in the timber houses of Kelantan and Terengganu?

2. What are the pattern of regularity of carving motifs and visual forms developed in the woodcarvings?
Methods of research

The required information was gathered from the following three 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). House plans, black and white plan view drawings, elevations of the houses and detail drawings were referred for detail, visual descriptive analysis.

(2) Personal interviews with two woodcarvers on art and crafts of woodcarving. The information gathered from the craftsmen was needed for analytical studies apart from the author’s opinions and inferences.

(3) Personal interview with a prominent architect
Methods of research

Pictorial Images and textual information from reports of Measured Drawings

Main Data

Supportive Data

Narration/interpretation from Woodcarvers/Craftsmen

Interpretation from an architect

Figure 1: Sources of data in triangulation

Basis for initial results and findings
The Kelantan and Terengganu timber houses selected for the analytical study

<table>
<thead>
<tr>
<th>No</th>
<th>Type of House</th>
<th>Year Built</th>
<th>Owner</th>
<th>Location of House</th>
<th>Carved Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rumah bumbung perabung lima</td>
<td>1920's</td>
<td>Encik Hassan Mohd Amin</td>
<td>Jalan Pengkalan Chepa, Kota Bharu, Kelantan</td>
<td>Ventilation panels of door and window, ventilation panel of wall, roof eave panels</td>
</tr>
<tr>
<td>2</td>
<td>Rumah Bujang Berserambi Dua Beradik</td>
<td>1850's</td>
<td>Tuan Mohamad Dobah (Tuan Mohamad Abdullah)</td>
<td>Jln. Post Office Lama, Kota Bharu, Kelantan</td>
<td>Ventilation panels of walls</td>
</tr>
<tr>
<td>3</td>
<td>Rumah Bujang Berserambi Dua Beradik</td>
<td>1800's</td>
<td>Wan Aisyah</td>
<td>Jalan Sultanah Zanab, Kota Bharu, Kelantan</td>
<td>Ventilation panels of walls, bracket panels</td>
</tr>
<tr>
<td>4</td>
<td>Rumah bumbung perabung lima</td>
<td>1920's</td>
<td>Wan Ahmad Abdullah</td>
<td>Jalan Post Office Lama, Kota Bharu, Kelantan</td>
<td>Ventilation panels of doors, ventilation panel of wall</td>
</tr>
<tr>
<td>5</td>
<td>Rumah bumbung perabung lima</td>
<td>1930's</td>
<td>Yaakub Mohammad</td>
<td>Kampung Sireh, Kota Bharu, Kelantan</td>
<td>Ventilation panels of doors, ventilation panel of wall, decorative panel of door</td>
</tr>
<tr>
<td>6</td>
<td>Rumah bumbung perabung lima</td>
<td>1937</td>
<td>Wan Hussain Wan Abdul Rahman</td>
<td>Kampung Sireh, Kota Bharu, Kelantan</td>
<td>Ventilation panels of doors, ventilation panel of wall, stringers</td>
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<tr>
<td>7</td>
<td>Rumah bumbung perabung lima</td>
<td>1933</td>
<td>Hassan Yusof</td>
<td>Lorong Tukang Perak, Kampung Sireh, Kota Bharu, Kelantan</td>
<td>Ventilation panels of doors, ventilation panel of wall, stringers</td>
</tr>
<tr>
<td>8</td>
<td>Twelve-pillared house/ Long-roofed house</td>
<td>1800's</td>
<td>Tok Yakub</td>
<td>Kampung Belongan, Bachok, Kelantan</td>
<td>Ventilation panels of doors, ventilation panel of wall, wall panel</td>
</tr>
</tbody>
</table>
The Kelantan and Terengganu timber houses selected for the analytical study (continued)

<table>
<thead>
<tr>
<th>No</th>
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<th>Owner</th>
<th>Location of House</th>
<th>Carved Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Rumah bujang berserambi dua beradik</td>
<td>1920's</td>
<td>Wan Sulong</td>
<td>Jalan Sultanah Zanab, Kota Bharu, Kelantan</td>
<td>Ventilation panels of doors and windows, ventilation panel of wall, wall panel, gable end panels</td>
</tr>
<tr>
<td>10</td>
<td>Rumah Bujang Berkembar Dua Beradik</td>
<td>188?</td>
<td>Mariam Mat</td>
<td>Kampung Hiliran Masjid, Kuala Terengganu, Terengganu</td>
<td>Ventilation panels of doors, ventilation panel of wall, railing panels, stringers, decorative carving of roof beam</td>
</tr>
<tr>
<td>11</td>
<td>Rumah bujang berselasar</td>
<td>1850's</td>
<td>Awang</td>
<td>Kampung Losong Haji, Su, Kuala Terengganu, Terengganu</td>
<td>Ventilation panel of wall,</td>
</tr>
<tr>
<td>12</td>
<td>Rumah bumbung limas</td>
<td>1914</td>
<td>Dato' Biji Sura (Nik Mohamad bin Hitam)</td>
<td>Duyong Kecil, Kota Duyong, Kuala Terengganu, Terengganu</td>
<td>Ventilation panels of doors and windows, Railing panels, gate leaves, door leaves, wall panel</td>
</tr>
<tr>
<td>13</td>
<td>Rumah bujang berserambi dua beradik</td>
<td>1800's</td>
<td>Tok Ku Paloh 1</td>
<td>Paloh Makam Tok Ku, Cabang Tiga, Kuala Terengganu, Terengganu</td>
<td>Ventilation panels of wall, stringers</td>
</tr>
</tbody>
</table>
Location of the timber houses selected for the analytical study

Figure 2: Location of the traditional houses in Peninsular Malaysia
The Analysis

- The measured drawings were analyzed in four attributes of carving: (1) Motifs, and (2) perforation and incision, (3) Shapes and layout and (4) Style of depiction.

- 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 attributes of carving.

**Figure 3:** Research tactics involves in review of documents from KALAM archives
Diagrammatic Analysis of Layout of Carved Components in the Mohamad Dobah’s House (No. 2)

Figure 4: Placement of carved components at Mohamad Dobah’s house
Figure 5: Placement of carved components at Hassan’s house
The panel in Figure 5 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.

The central motif is not symmetry. 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.

Vertical axis for the outer part that encircles the diamond lozenge is the line on which the repetition of motif on left and right of the centre suggest a sense of balance and symmetry. The central pattern with diamond lozenge shape have a sense of asymmetrical balance.

The perforated panel with relief motifs in triple overlaps offers visual complexity. It is a suggestive indication of craftsman’s skillfulness and artistry.

The coiling folded leaves flow within the triangular perimeter that provides structural integrity in this horizontal rectangular panel.

An abstracted leaf form known as daun Sayap probably represents Makara is repeated several times in different sizes and orientation creates rhythm.

Horizontal axis is the line on which the repetition of motif on top and bottom of the centre suggest a sense of balance and symmetry. The central motif is not symmetry. The carving presents embedding asymmetry pattern in a symmetry one. This quality suggests the craftsman’s skillfulness, creativity and wisdom.

The central flower motif possibly bunga Tanjung as a focal point and dominant element surrounded by leaves as complementary elements in an integrated and harmonious composition.

The central diamond lozenge and the two diagonal lines subdivide the panel into five domains. They are frames to hold the arabesque motifs. These domains seem to be the outlines of the structural layers or underlying framework.

Figure 6: Carved ventilation panel (PWVP1)
The panel in Figure 6 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 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.

Vertical axis is the line on which the repetition of motif on left and right of the centre suggest a sense of balance and symmetry. On this axial line the left motif is a mirror reflection of the right motif.

The central flower motif possibly Bunga pecah empat is depicted as a single element encircled by geometric motif is probably borrowed from the shape of pohon budi as complementary elements in a balance composition is repeated within the linear pattern.

The perforated panel with non-relief motifs and intricacy and complexity of carvings is suggestive indication of craftsman’s skillfulness, creativity and artistry.

Horizontal axis is the line on which the repetition of motif on top and bottom of the centre suggest a sense of balance and symmetry. Having two axes, vertical and horizontal, signifies the creativity and skillfulness of the craftsman. The balance order signifies unity.

The complementary of two geometric motifs are repeated rhythmically extending to infinity. The overlapping and interconnected geometries provide structural integrity and enrich the frame pattern of this panel. This carving quality creates certain level of carving complexity and intricacy resulting in visual interest. It is suggestive indication of craftsman’s skillfulness, artistry, creativity and logical thinking.

The use of this stylised plant motif in half-shaped form encircled by the half-shaped motif of pohon budi signifies the infinitive movement within the frame pattern and linear border. It is a suggestive indication of the concept of infinity and absence of focal point or centrality. This idea is commonly seen in organic arabesque patterns.

**Figure 7: Perforated wall ventilation panel (PWVP1)**
The analysis revealed that a collection of 72 different forms of woodcarvings with specific features were found in the timber houses of Kelantan and Terengganu. Thirteen different types of architectural carved components with distinctive visual forms were identified from the analysis.

Perforated wall ventilation panels were found in most timber houses.

Most of carved components were fabricated with its appropriate carving forms and attributes according to their distributions and significant uses in house setting.

Several carving attributes serve as defining physical form of the carved components including: (1) types of motifs, (2) types of incision and perforation, (3) shapes, sizes and layouts of components, and (4) styles of depiction.

Compositions of the carving motifs on the specific panels were according to specific layouts and regulated by the specific ordering principles.
## Types of Carved Components Found in the Timber houses

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of house</th>
<th>Types of Carved Components found in the Timber Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>Hassan Mohd Amin</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Mohamad Dobah</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Wan Aisyah</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Wan Ahmad Abdullah</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Yaakub Mohammad</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Wan Hussain</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>Hassan Yusof</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>Tok Yakub</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>MariamMat</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>Kampong Lososng</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>Dato’ Biji Sura</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>Wan Sulong</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Tok Ku Paloh</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Legend:
1. Window ventilation panel
2. Door ventilation panel
3. Wall ventilation panel
4. Window railing
5. Railing at *serambi*
6. Railing at staircase
7. Wall panel
8. Door leaf
9. Stringer
10. Gate leaf
11. Roof eave
12. Bracket
13. Gable end

72 Different forms
Types of Carved Components Found in the Timber Houses (Window and Door Ventilation Panels)

Figure 8: Widow (1) and door (2) ventilation panels at Rumah Dato’ Biji Sura
Visual pattern analysis of a door ventilation panel

Flower Petal 3 side view as main flower motif
A flower bud and stems sprout at the tip of the branches
Vase source as a starting point of floral growth

Meandering tendrils character of Sulur Kacang Laut
Branches growth out from the main flower
Semi circle frame consist a single pattern

Groups of point 4
Groups of point 1
Groups of point 2
Groups of point 3

Upper Part
Below Part
Types of Carved Components Found in the Timber Houses (Wall Ventilation Panels)

Figure 9: Perforated wall ventilation panels (PWVP) in different layout

PWVP at Wan Sulong’s house

PWVP at Awang’s house

PWVP at Mohamad Dobah’s house
Placement and layout of the wall ventilation panels

Figure 10: Front elevation of Wan Aisyah’s house with the placement of carved ventilation panels
Placement and layout of the wall ventilation panels

Figure 11: Carved ventilation panels fitted above the bedroom’s door of Hassan Yusof house
Figure 12: 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
Types of Carved Components Found in the Timber Houses (Railing Panel)

Figure 13: Railing panels fitted to *serambi* and window at Biji Sura’s house
Types of Carved Components Found in the Timber Houses (Railing panels)

Figure 14: Railing panels fitted to staircase and verandah at Biji Sura’s house
Types of Carved Components Found in the Timber Houses (Wall Panel)

Figure 15: Wall panels fitted to front wall at Tok Yaakub’s house
Types of Carved Components Found in the Timber Houses (Door Panel)

Figure 16: Carved panels fitted to main bedroom’s door at Biji Sura’s house
The two carved stringers are crafted in exactly alike with similar types of carvings. The top end of the panel comprises perforated carving to represent kepala tangga (the head of the stairs).

Figure 17: Carved stringers at front stairs of Yakub’s house
Types of Carved Components Found in the Timber Houses (Gate Leaf and Roof Eave Panels)

Figure 18: Gate leaf (10) and roof eave (11) panels found at Biji Sura’s and Hassan’s houses, respectively.
Types of Carved Components Found in the Timber Houses (Bracket and Gable End Panels)

Figure 19: Bracket and gable end panels found at Wan Aisyah’s and Wan Sulong’s houses, respectively.
Discussion

- 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.

- The visual attributes and the ordering principles that governed the physical forms of the carved components are suggestive indications of Malay craftsman’s knowledge and skill in portraying visual composition including: (1) mastery of skillfulness, (2) intuition, (3) ingenuity and creativity, (4) logical thinking and (5) wisdom.
Conclusion

• The visual forms of the components from Kelantan and Terengganu timber houses were skillfully crafted and formatted by the woodcarvers to be used primarily in domestic setting and synchronized with the pattern of its distribution.

• 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 woodcarvings were not objects crafted in a simple way but inextricably bound up with designated function, artistic qualities and skillfulness possessed by the traditional craftsmen.