Factors Impacting Woodcarving Influences in Traditional Malay Houses of Negeri Sembilan, Malaysia: Understanding the Technology of Architectural Heritage

Nurgiyana Zainal Abidin, Raja Nafida Raja Shahminan and Fawazul Khair Ibrahim
Department of Architecture, Faculty of Built Environment, Universiti Teknologi Malaysia, Johor Bahra, Malaysia

Abstract: Traditional Malay houses varies architecturally from one state to another with specific elements that are identifiable to each different state in Malaysia. Many similarities and differences can be found in the architecture and ornamentations of traditional malay houses. Woodcarvings are unique form of ornamentation and elaborate decorative components of traditional architecture of the Malays and they can be found throughout Malaysia including in Negeri Sembilan. Negeri Sembilan is a democratic, multi-cultural, multi-racial and multi-religion state which uniquely practices the matrilineal social system of Adat Perpatih and has a strong connection to it’s history and heritage particularly its distinctive vernacular architecture. The purpose of this paper is to investigate the factors impacting woodcarvings influence in traditional malay houses in Negeri Sembilan, Malaysia. The research methodologies undertaken were case studies of fifteen Negeri Sembilan traditional houses from the archives of measured drawings in Center of Built Environment in the Malay World (KALAM), Universiti Teknologi Malaysia (UTM) and through precedent studies of selected buildings in Negeri Sembilan. Based on the analysis and synthesis of woodcarvings in selected buildings, many issues were identified in relation to the identification of influences on the woodcarvings. The outcome of this research indicated several factors influencing the woodcarvings of Traditional malay houses in Negeri Sembilan which included influences of woodcarver’s works and also the applications of the woodcarvings such as religious factors, cultural factors and political factors.

Key words: Influences, traditional, Malay houses, woodcarvings, cultural

INTRODUCTION

According to the Malay language, the word woodcarving which is translated into the Malay word ukiran literally means ‘drawings/painting’s which are chiselled/carved onto decorative objects. Woodcarvings are also an expression of oneself which is simple, direct and have been the same in many past civilizations. This shows that woodcarvings are a form of decorative element which are done to beautify an object (Iman, 2006). Woodcarvings in traditional Malay houses are therefore used as a decorative element to decorate the exterior and interior elements of the timber houses. Woodcarving in the Malay world is known as a form of art and craft which is enjoyed and appreciated by the community (Abdul, 1987). The action of carving into timber allows art to be injected into timber houses and expresses the intentions of the owners of the houses in doing so. Woodcarvings are a form of art which transcends culture, belief and social customs of the Malays. Woodcarving is not just mere decorations as it is also a form of art which interprets the carver’s intentions in the design and form of the woodcarving intended (Oughton, 1969). Thus, the woodcarver employed could convey what he feels, his intentions and his hopes to achieve in his woodcarving. This is then projected onto the timber houses of the Malays which can then be appreciated by residents and guests. The design elements used by the carvers are concepts which are derived from his surroundings such as that of nature and the environment, his religious beliefs and cultural influences. Therefore, the act of carving can be seen as a manifestation of the carver’s intentions which are influenced by his surroundings or came from inspirations through his experiences and beliefs (Ismail and Ahmad, 2001).

Woodcarvings can be found throughout the whole world in heritage buildings and as stand-alone works of art (monuments). Woodcarvings are unique decorative elements in vernacular houses of South-East Asia and this includes Malaysia. Negeri Sembilan in particular is a

Corresponding Author: Nurdiyana Zainal Abidin, Department of Architecture, Faculty of Built Environment, Universiti Teknologi Malaysia, Johor Bahra, Malaysia
state in Malaysia which has many unique attributes that includes matrilineal social system and many different cultural customary influences in the society and one of which is the Adat Perpatih (Abdul, 1987). Architecture in Negeri Sembilan especially the traditional Malay houses are identifiable through their uniquely large curved gabled roofs which are different from other states in Malaysia (Izhar, 2006; Sherwin, 1981). The arrival and migration of people from different places in and around the country have brought many influences in the architecture of Negeri Sembilan and thus affects the art of woodcarvings implemented.

**Aim of research:** The aim of this research is to investigate influences on the designs of woodcarvings in the traditional Negeri Sembilan Malay houses.

**Objectives of research:** The objectives of this research are as follows:

- To locate the placements of woodcarvings used in traditional Malay houses of Negeri Sembilan
- To determine the typologies of woodcarvings found in traditional Malay houses of Negeri Sembilan
- To find out and document the different types of design influences on the woodcarvings of Malay traditional houses in Negeri Sembilan

**Research gap:** The research gap for this thesis is based on an assessment of current and past researches done on woodcarving. The researches studies are then analyzed and compiled into their respective field of focuses to find out what are currently being studied, what has been studied and what should be studied in the future (what has not been covered). The research gap is the focus of study for this research which is on the influences on woodcarvings of traditional Malay houses in Negeri Sembilan. Woodcarving researches that have been done previously are categorized into six topics which are studies on timber species, acoustic designs and categories of woodcarvings, typologies of woodcarvings, woodcarving techniques and woodcarving patterns. The topics can be further elaborated into sub-topics according to each category as illustrated in Fig. 1.

For the first topic, commonly used timber species in woodcarvings were studied such as cengal (Balanocarpus Heimii), sentol (Sândoricum indicum) and kapur. The second topic studied was on timber acoustics in buildings which applied the usage of woodcarvings. The researches focused on the sound absorption of woodcarvings and also timber reverberations in buildings with woodcarvings.

The third topic focuses on categories of woodcarvings which studied the applications of woodcarvings in a timber house. The categories of woodcarvings are then divided into sub-topics which consist of woodcarvings as structural elements, ornamentations, elements of designs and bands/liner elements (Ismail and Ahmad, 2001).

The fourth topic that has been studied is on the typologies of woodcarvings which can be divided into flora, fauna, cosmic, geometrical, calligraphy and mystical. These typologies become the concept of designs for the woodcarvers and allowed them to carve elaborate designs.

The fifth area studied is on woodcarving techniques which included direct piercing, emboss-relief piercing, sculpturesque and undercutting. The techniques used will determined the type and placement of woodcarving in the timber houses.

The sixth area of research is on woodcarving patterns such as single pattern, frame pattern, complete pattern and finite pattern. The patterns used are based on the types of woodcarvings in different parts of the Malay house.

**Scope and limitations:** The scope of the study is only limited to Malay traditional houses in Negeri Sembilan of measured drawings in the collection of Center for the Study of the Built Environment in the Malay World (KALAM), UTM.

**Significance:** The significances of this research are as follows:

- The documentation of the design influences on woodcarvings of traditional Malay houses in Negeri Sembilan. This will help in identifying the local Negeri Sembilan woodcarving designs with similarities or differences from other states of Malaysia.
- The research will help expand the current understanding on the evolution of Negeri Sembilan woodcarvings through the influences.
- The research will continue the current researches done on woodcarvings and help determine the relations between the external influences and the changes that occurred in the local Negeri Sembilan woodcarving designs.

**Expected research outcome:** This research is expected to be a recorded and documented list of the different influences on woodcarvings of traditional Malay houses.
The current studies on woodcarvings of Traditional Malay Houses (TMH) in Malaysia varies from different states are usually more prominent in the East Coast of Malaysia, namely the states of Kelantan and Terengganu. Researches in other states of Malaysia can be found in states such as Perak, Pulau Pinang, Johor and Melaka with some studies done on Negeri Sembilan, Kedah and Pahang. These studies include topics on woodcarving typologies (MHDC, 2009), placements of woodcarvings in timber houses (Zulkifli, 2000), symbolism and ideologies of Malay woodcarvings (Abdul, 1987) and timber typologies in Malay woodcarvings (Ismail and Ahmad, 2001) to name a few. The current usage of woodcarvings in Malaysia is found mostly in traditional Malay houses but the country has taken some initiatives to adopt the national heritage into modern buildings as a way of adapting history into the present era. Even so, the injections of woodcarving motifs on buildings are limited to simple concrete elements, engravings of sandblasts or mere paintings. Woodcarvings have been used in some administrative buildings and residential houses for the aesthetics reason of doing so. Some of the carvings as have been mentioned by Moser, goes as far as using concrete to further ‘preserve’ the woodcarving identity but lacks the essence of the woodcarving. To better
Fig. 2: Functions of woodcarvings

understand the application of woodcarvings in modern times, studies of the history and origins of woodcarvings are needed (Oughton, 1969).

The application of woodcarvings in Traditional Malay Houses (TMH) can be found across the country and majority of woodcarvings are found in TMH of people with influences in their community or the leaders of a certain society (MHDC, 2009). This shows the importance that these people had over their community and how much influence they had on the society. Even so, commoners who could afford to hire carvers also had the opportunity to decorate their houses with ornate woodcarvings. Woodcarvings were a form of art which transcends culture, belief and social customs of the Malays and as such, were a symbol of importance. Woodcarvings became a symbol of status and influence among people who could afford it and outside influences on the designs of the woodcarvings showed the connections that the owner had with the outside world (Farish and Khoo, 2003). Woodcarvings became not only a form of art and decoration but were also a status symbol of the owners of the houses (MHDC, 2009).

Traditional Malay woodcarvings can be categorized into three parts which are as structural elements, ornamentations (decorations) and elements of designs (Ilham et al., 1997). Furthermore, traditional timber carvings can also be further categorized into sculptural designs and linear (bands) designs. This categorization of woodcarvings shows that timber is a flexible form of material which can be carved into many different kinds of woodcarving styles. Woodcarving designs and motifs comprise of local flora and fauna motifs, cosmological, geometrical islamic calligraphy, folklore and geometrical designs (Ismail and Ahmad, 2001; Mohd, 2007). The designs and motifs are based on experiences and expertise of local craftsmen and also craftsmen that were brought into Malaysia from other countries (Mohd, 2009). The carvers interpret what he wants to carve onto his canvas which is timber and thus creating his own inspiration and concepts (Oughton, 2007). Hence, difference carvers with different background, beliefs and experiences will carve different types of woodcarving designs. These influences are what this research is trying to prove which is to determine the design influences on local Negeri Sembilan woodcarving designs.

Woodcarvings in traditional Malay houses of Negeri Sembilan: The functions of woodcarvings used in Traditional Malay houses of Negeri Sembilan consists of four functions which caters to privacy as aesthetics, functions as safety features and provide climatic designs (Zulkifli, 2000). Woodcarvings are not only aesthetically pleasing but are also functioning elements in a Traditional Malay House (Sheppard, 1969). Woodcarvings which are used as safety elements in a house are usually located at areas where there are openings such as windows and doors and are therefore used as handrails or safety gates (Ismail and Ahmad, 2001). Woodcarvings designed as climatic designs are located at areas which are commonly exposed to the environment such as places with direct sunlight or small openings such as ventilation panels (Mohd, 2007). Woodcarvings used as privacy features are specifically found only in Negeri Sembilan which relates to the gender segregation in Islam, hence the need for tiny openings or peepholes only for female family members and hidden from male guests. Figure 2 illustrates the
functions of woodcarvings in relation the traditional (Table 1 and 2) Malay Houses of Negeri Sembilan. Woodcarving placements also play a major role in the selection of woodcarvings used as certain woodcarvings can be found in selected places only. This can be seen in most of the woodcarvings Traditional Malay houses of Negeri Sembilan where woodcarving placements can be identified through the division of the house into three parts which are the roof area, body area and leg area (Farish and Kho, 2003). The roof section consists of the areas of the roof between the ceiling and the highest tip of the roof ridge, the body area consists of the areas between the floor and the ceiling whilst the leg area consists of the areas between the ground and the floor. Between these three sections, the woodcarvings used differ and have different functions. A unique feature in Negeri Sembilan Traditional Malay house is woodcarving placements in the roof section of the house where structural members of the house are curved. These woodcarvings cannot be seen from the outside or by guests and are only for the owner’s visuals. Hence, many hidden woodcarvings can be found in places that cannot be seen by the public unlike woodcarvings in the North-East coastal areas of Malaysia. Another unique feature of woodcarvings in Negeri Sembilan is the emphasis on Islamic teachings which were implemented into the architecture of their Traditional Malay houses (Yaakub, 1996). One such element is the segregation of sleeping areas or lounging areas for male and female family members and guests. The design of Negeri Sembilan Traditional Malay houses have taken into consideration the spatial planning of sleeping areas and included ‘attics’ into the design of the houses. These attics become the sleeping areas for female family members and also private room for female family members when male guests come to visit. Even so, special woodcarvings have been designed in Negeri Sembilan traditional Malay houses to include ventilation holes (peep holes) to allow the female family members to see outside but still not being able to be seen by outsiders. Figure 3 and 4 illustrate the placements of woodcarvings.
Table 1: House owners and locations of selected case studies

<table>
<thead>
<tr>
<th>House owners</th>
<th>Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dato Undang Kamat</td>
<td>Johor</td>
</tr>
<tr>
<td>Dato’ Gempa Maharanja Haji Mohd Zakaria</td>
<td>Chengkau, Rembau</td>
</tr>
<tr>
<td>Dato’ Muda Haji Omar bin Lajim</td>
<td>No 2, Bukit Gombang Lama, Batu Kikir</td>
</tr>
<tr>
<td>Dato’ Sidin</td>
<td>No 16, Kampung Tanjung Ipoh</td>
</tr>
<tr>
<td>Dato’ Perba Meon</td>
<td>No 7, Kampung Park Seberang, Mukim Ampang Tinggi</td>
</tr>
<tr>
<td>Dato’ Kelana Putera Makmur</td>
<td>Bt 34, Kampung Pantai, Seremban</td>
</tr>
<tr>
<td>Tok Lak Salleh</td>
<td>Kampung Gunung Pasir, Kuala Pilah</td>
</tr>
<tr>
<td>Tukang Kahar</td>
<td>No 21, Kampung Tengah, Tanjung Ipoh</td>
</tr>
<tr>
<td>Hajah Maharan</td>
<td>Kuala Pilah</td>
</tr>
<tr>
<td>Hajah Kepah</td>
<td>Kuala Pilah</td>
</tr>
<tr>
<td>Uwan Sinub</td>
<td>Kuala Pilah</td>
</tr>
<tr>
<td>Hajah Selipah</td>
<td>No 377, Jalan Tampin</td>
</tr>
<tr>
<td>Zuhairah Tahib</td>
<td>Kuala Pilah</td>
</tr>
<tr>
<td>Kalsom binti Sohor</td>
<td>Kampung Batu Hampar, Sri Menanti</td>
</tr>
<tr>
<td>Haji Duran bin Haji Ibrahim</td>
<td>No 32, Kampung Tanjung Beringin, Seri Menanti</td>
</tr>
</tbody>
</table>

Table 2: Illustrations of front elevations of selected case studies

<table>
<thead>
<tr>
<th>House owners</th>
<th>Front elevations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dato’ Undang Kamat</td>
<td>![Dato' Undang Kamat illustration]</td>
</tr>
<tr>
<td>Dato’ Gempa Maharanja Haji Mohd Zakaria</td>
<td>![Dato’ Gempa Maharanja Haji Mohd Zakaria illustration]</td>
</tr>
<tr>
<td>Dato’ Muda Haji Omar bin Lajim</td>
<td>![Dato’ Muda Haji Omar bin Lajim illustration]</td>
</tr>
<tr>
<td>Dato’ Sidin</td>
<td>![Dato’ Sidin illustration]</td>
</tr>
<tr>
<td>Dato’ Perba Meon</td>
<td>![Dato’ Perba Meon illustration]</td>
</tr>
<tr>
<td>Dato’ Kelana Putera Makmur</td>
<td>![Dato’ Kelana Putera Makmur illustration]</td>
</tr>
<tr>
<td>Tok Lak Salleh</td>
<td>![Tok Lak Salleh illustration]</td>
</tr>
<tr>
<td>Tukang Kahar</td>
<td>![Tukang Kahar illustration]</td>
</tr>
<tr>
<td>Hajah Maharan</td>
<td>![Hajah Maharan illustration]</td>
</tr>
</tbody>
</table>
in the external and internal areas of the house as example taken from the measured drawings of the house belonging to Dato’ Gempa Haji Mohd Zakaria (Ilham et al., 1997).

**MATERIALS AND METHODS**

**Case studies:** The case studies of the traditional Malay houses were from archives of measured drawings in Center of Built Environment in the Malay World (KALAM), Universiti Teknologi Malaysia (UTM). The 15 houses were selected based on several criteria which were:

- Number of woodcarvings available
- Statuses of owners (wealthy/leaders or commoners)
- Locations (near or around Seri Menanti)

Based on these parameters, the selected buildings were analyzed and the locations of the buildings were identified to be near and around the royal district of Seri Menanti, Negeri Sembilan. This was because Traditional Malay Houses near the palace in Seri Menanti have greater numbers of woodcarvings than those on the outskirts of Negeri Sembilan. Since, woodcarvings have been found to be social status symbols, people with influences or wealth will therefore have woodcarvings in their homes (Zulkifli, 2000). This is another factor for the availability of the woodcarvings in the selected buildings that were studied; the proximity of the houses with Istana Lama Seri Menanti (Seri Menanti Old Palace). Due to the influences of the royals on their subjects, the society began emulating the decorative elements that were seen on palaces in their houses.

Even so, the ornamentations and woodcarvings in palaces cannot be duplicated exactly as they are the sole patent of the royals. Furthermore, commoners were not prone to having woodcarvings in their houses unless they were of some importance within their community and are wealthy or influential people. This is why the location of the buildings will also indicate the availability of woodcarvings found in both wealthy leader’s houses and commoner’s houses. The map shows the Malaysian state of Negeri Sembilan in Fig. 5 illustrates the location of Negeri Sembilan in Malaysia and Fig. 6 is a diagram of the locations of the selected case studies.

These houses were selected based on the statuses of the owners and the number of woodcarvings found in the houses. Hence, the houses were categorized into houses that belonged to wealthy leaders and commoners in Negeri Sembilan and they were influential people within their communities. Due to the nature of woodcarvings being depicted as social status symbols, these owners had embellished their timber houses with woodcarvings with different motifs, designs and placements. illustrate the 15 houses that were selected, the owner’s information and locations of the buildings.
RESULTS AND DISCUSSION

Woodcarving influences: The woodcarving influences in traditional Malay houses of Negeri Sembilan can be identified through the different motifs used and the placements of woodcarvings. Historically, the Hindu culture was very prominent in the architecture and culture of pre-Islamic Malays and thus many Hindu influences can be found in woodcarvings of traditional Malay houses (MIIDC, 2009). These influences are categorized as ‘religious influence’s which encompasses not only Hinduism but also Buddhism and Islam. After the arrival of Hinduism in Malaysia, the nearby civilization of
Langkasuka was flourishing as a large and powerful nation during the 6th century. Langkasuka was believed to have covered countries throughout South-East Asia which includes Thailand and most of the northern part of Malaysia (Farish and Khoo, 2003). Thus a clear influence from this civilization can be seen in the woodcarvings of the Traditional Malay Houses. The arrival of Islam during the 14th century influenced greatly the woodcarvings used and many motifs depicting humans and animals were replaced by floral and cosmic motifs (Ismail and Ahmad, 2001). Figure 6 shows the historical timeline of influences in Malaysia and how these influences managed to infiltrate the country through trading, religions and migration.

The migrations of different people from different countries into Negeri Sembilan have also played an important part in influencing the woodcarvings used. For example, the more prominent migrators into Negeri Sembilan are the Minangkabau from West Sumatera, Indonesia during the 16th century and they brought along not only their customs and culture but also their prominent Minangkabau architecture (Yaakub, 1996), (Sheppard, 1969). Their cultural activities and social customs of Adat Perpatih were assimilated into the Negeri Sembilan local culture and traditions because their cultural similarities (Yaakub, 1996). Hence, the findings for the term ‘cultural influences’ on the woodcarving of traditional Malay houses in Negeri Sembilan was formed. The invasions of several Western and European armies into Malaysia brought many changes to the social and cultural structure of the locals and this includes colonial architecture being introduced. The Portuguese (during the year 1511), Dutch (during the year 1641) and British colonialization (from 1786) have been identified as ‘political influences’ on the woodcarvings on traditional Malay houses (Nurdiyana, 2014). Figure 7 and 8 illustrates the influences on the woodcarvings in Traditional Malay Houses of Negeri Sembilan.
CONCLUSION

The woodcarving influences in Negeri Sembilan have assimilated seamlessly into the local culture and social norm and especially into the local architecture through time. The findings concluded that there were four influences that can be derived from this study which were political influences, religious influences, cultural influences and influences from civilizations. These influences on woodcarvings of traditional Malay houses in Negeri Sembilan can be identified clearly in the woodcarvings especially on the motifs found in the houses that were studied. These influences identified concluded that local indigenous architecture and ornaments had merged together with outside influences to produce unique woodcarvings in Negeri Sembilan. Even so, the identity of Negeri Sembilan woodcarving is unique and different from those found in other Malaysian states. These influences have undeniably shaped and molded the woodcarvings found in traditional Malay houses of Negeri Sembilan hence they are important architectural heritage element that should be properly identified and studied to better preserve the ever deteriorating timber gems.

For researchers wanting to further this field of research, more in-depth studies could be done to expand the knowledge of woodcarvings in terms of influences of the woodcarving motifs and even the effects of influences on the placements of woodcarvings motifs and designs.

REFERENCES