Typological Study of Traditional Mosque Ornamentation in Malaysia – Prospect of Traditional Ornament in Urban Mosque


Abstract—Since the admission of Islam onto the Malay World in 16th century, the Malay culture began to grow in line with the teachings of Islam as a guide of life. Mosque become a symbol of Muslim communities, as well as the cultural values that have been adapted represent the maturity and readiness of Malay Muslim in manifest a lifestyle tradition into the community. Refinement of ornament that used to take from Hindu-Buddhist beliefs before were adopted and refined to the Islamic values based on the teachings of al-Quran and as-Sunnah delivered a certain message to convey a meaning to the observer. The main purpose of this paper is to analyze the typology and classification of ornaments in Malaysia’s traditional mosque as a channel to the community towards understanding of the identity and also the framework of design thinking in ornaments particularly to the urban mosques in Malaysia.

Keywords—Aesthetic, Malay Traditional Mosque, Ornamentation, Symbolism

I. INTRODUCTION

In the 20th century, the world faced with modernism and new technology thus a cultural district which were a main key of the creation of Islamic art has been flagged and also received a lot of reformation that are temporal. Islamic elements were gradually been abandoned [1].

A direct ornamental approach that are straightly been taken reflect a lack of knowledge about the ideas, concepts and aesthetical values about Islamic ornamentation itself. In an effort of creating a Malaysian ornament identity, this paper will identify and analyze the typology, ideas and concepts specifically to the Islamic ornamentation framework in Malaysia. Our country are lacking of the uses and discussions on ornamentation elements in the national architecture [2]. Each element on the building such as ornaments and decorations has an answer of why it was made into that because that elements carried a definition or medium of communication that are closely related with the lives of its inhabitants along with natural surroundings. Each ornament on the building varies in term of the use of materials and motifs used to describe the historical background of general area, yet it still have the same characteristics as language or dialect of the area that gives a different sound but still carried the same meaning [3].

For a country that has a majority Muslim population, most architects in Malaysia trying to adopt Islamic architecture in a certain buildings to show the symbol of Islam and remember his heyday in the Middle East, Europe and India. Among the modern buildings in Malaysia with the same features as built in the heyday of classical Islam is the mosque such as domes. Problems that often arise in this approach lies in creating an identity for the building produced a chronic identity crisis, as adapted from the design to local conditions as it usually the country where the style was taken with the event incorporated the style is very different and how the adjustment between the building elements where some buildings will look very strange and often seem forced [4].

Decorations found in most of the walls of the building mosques in Malaysia are also copied from mosques built there in the golden age of Islam. For example, decoration of the dome inside of the Putrajaya Mosque is taken from the Mosque Lutfullah (1600M) and the Mosque of Imam Shah (1611M) at the time of the Safavid empire in Iran. Engineer who manages the construction of Putrajaya Mosque also applies the use of geometric star-shaped decorations on the walls of the gate of the mosque. This decoration is in the construction Qal’ah-i Bust in Afghanistan in the 12th century.

Wilayah Mosque and Putra Mosque are the latest symbol of construction of the eclectic revivalism with applying architectural elements from the Middle East which characterized only to the pride and conscious of the great monuments. This ideology may severely influence to not only mosque in Malaysia but also other Islamic countries. [5].

Fig. 1 (from left) Wilayah Mosque, Kuala Lumpur and Putra Mosque, Putrajaya


The study of the built environment and its architecture must be preceded with the specific study of the culture and practices of its intended users. In other word sufficient study must be undertaken from not only the physical but also the metaphysical aspects of the creative works with man as the principal focus. Accordingly the word culture is always an expression of belief either in the form of spoken words of daily practices that results from the soul or roh of the locals that may or may not exist in the eye of the people as a form of manifesting their internal beliefs into the reality of everyday lives.

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II. THE TYPOLOGY STUDY OF TRADITIONAL MOSQUE ORNAMENTATION: AN ANALYSIS OF MOSQUE ELEMENTS

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 and 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 woodcarvings, the Malay architecture would be not completed; it is part and parcel of the language of Malay architecture[6].

By looking at the development of mosques in Malaysia, we can see the development of Islamic culture itself, especially the background history and different timeline. Art is the emission of civilization. The great civilization achievement is reflected through their artistic excellence, in terms of physical heritage or in form of thought [1].

The scope of study refers to the nine elements within a particular traditional mosque which are:

A. Buah Buton
B. Tutup Perabung (Sulur Bayung)
C. Tumpu Kasau
D. Wall
E. Main Pillar (Tiang Seri)
F. Window
G. Mimbar

A. Buah Buton

Other names of buah buton are tunjuk langit, buah guntung, buah babun, tajuk ranah, semelbayang, sulay bayung, tanduk buang, silang guntung, mahkota atap, mustika, mustoko, keting belalang, puncak coppo', julang ngapak, gonjong.

In the architectural terminology of the Malay traditional, buton² is a wood measuring about 60 cm to 100 cm mounted on the rooftop. Buton is a bagde or symbol of a construction formwork, just like a gravestone on the tomb. Buton implies a sign of a building that if the buton fall or struck by lightning, it indicates that disaster will happen to the occupant.

The typology of buah buton in general can be further divided into four types according to its shape and design which are:

1) Rounded Type (Jenis bulat)
This type is commonly used in Kelantan and Terengganu on bumbung limas or perabung lima (hip) or pyramidal type of roofing called tumpang that is positioned in the middle and top of the roof. Commonly called buah buton in Kelantan and buah guntung in Terengganu.

![Fig. 2 Rounded buah buton shape of Kampung Laut Mosque (left) and rounded buah buton shape of Kampung Tuan Mosque (right).](image)

2) Floral Type (Jenis bunga)
This type can be seen in old mosque around Melaka, Negeri Sembilan in Malaysia and also on the island of Java. Other names for the type are mahkota atap; in Indonesia it is also called mustika or mustoko or mustoka. Historical findings indicate this type of tunjuk langit has its root from the mainland China²; hence, some examples have been found to use the local lotus flower (Nelumbo Nucifera) which also adorns the top of the pagodas. This statement is further supported by Abdullah Bin Mohamed (1978) [11]. in his discussion on the domes of mosques in Melaka where he reiterated that the dome is originally thought of as a flower bud that is later adapted and shaped into various permutations.

![Fig. 3 Three variations of the floral buah buton (from left : Kampung Hulu Mosque, Kampung Keling Mosque, Dato’ Undang Kamat Mosque)](image)

3) Rod Type (Jenis batang)
This type of buah butong are formed using a piece of timber in an upright position at the tip of the gable end; commonly used in houses and palaces in Peninsular Malaysia especially to the architecture of Malay houses in the state of Perak (bumbung limas) or bumbung limas potong belanda. In general this type can be further categorised into two basic types; i. hujung tajam (pointed tip), ii. hujung bulat (round tip).

² Kampung Hulu Mosque, Melaka is one of the oldest mosque built by Chinese Muslim as they migrated from China to Melaka, famous during its time as an anchorage point for merchants during 15th and 16th century. See Traditional Muslim Architecture in Malaysia, Monograph KALAM, UTM. pp.11.
4) Cross Type (Jenis silang)

Another type of *tunjuk langit* is called the *jenis silang* (scissors cross – fig. 6) often used on *bumbung panjang* type of the Malay house. This type of *tunjuk langit* is commonly seen as an extension of the *papan layang* (fascia board) in a diagonal manner on the gable end of the roof tip.

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**Fig. 5** Scissor crosses type of *buah buton* in Langgar Mosque, Kelantan

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**Fig. 6** Design variations of the *tunjuk langit jenis silang* (cross type) commonly found in South East Asia.

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**B. Tutup Perabung (Sulur Bayung)

Other names are *sulur bayung*, *sayap layang-layang*, *sayap layangan*, *ekor Itik*, *anjong balla*, *som*. *Tutup perabung* or *sulur bayung* refers to a decorative element on the roof.

Abdullah Mohamed (1978) [11]. suggested, this type of decoration in the traditional Malay architecture, takes the image of the dragon (*naga*).

Though with the coming of Islam and until recently this form of decoration has taken a less than obvious shape; but the evolution from the imagery shape of the naga can still be seen on many architectural elements of the Malay culture.

On mosques in Kelantan, Melaka and Java *sisik naga* and *sulur bayung* adorning the four corners of the roof are called *som*. He further reiterates that the *som* on the Kampung Laut mosque in Melaka has the simplest design identified as *ekor itik* (ducks tail) compare to *som* on other buildings elsewhere.

The figurative type of *sulur bayung* often takes the form of the head of the mythical dragon (*kepala naga* or *makara*) clearly indicates influence of China and Hindu-Buddha. It is believed that such figurative symbols act as guardians against the evil forces and create fear on the enemies. Abdullah Mohamed (1978) added that the signs of the mythical dragon or *naga* as a powerful being also function as a prevention against the act of arrogance (*tukabbur*) of the builders by the constant reminder of its presence [11].

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**Fig. 7** Five designs of the *som* as seen on mosques (masjid); from left - Masjid Kampung Laut, Masjid Besar Serkam Tengah, Masjid Peringgit, Masjid Besar Tengkera dan Masjid Pengkala Rama.

Source: Abdullah Mohamed

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**Fig. 8** Three variations of the *tutup perabung* in Dato’ Undang Kamat Mosque using the floral motifs

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**Fig. 9** (left to right) *Sulur bayung jenis figur* and *melenit* respectively as used on Masjid Tengkera Melaka; *jenis melingkar* (*ekor itik*) duck tails used on a Langgar Mosque, Kelantan.

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**C. Tumpu Kasau

Other names *tumpu kasau* are *papan meleh*, *papan pator*, *papan cucuran atap*, *papan kaki atap*, *kening*, *ande-ande*, *papan cantik*. *Tumpu kasau* is the horizontal decorative timber roof eaves covering the timber rafters (*kayu kasau*). There are at least two types of *tumpu kasau* which are the *jenis sekeping* (single piece type) with carvings on a single long timber piece and *jenis kepingan papan bersusun* (multiple pieces) with carvings on multiple timber pieces arranged side by side.
Fig. 10 Five various design of tumpu kasau jenis papan sekeping (single piece type) from top; Kampung Hulu Mosque, Kampung Keling Mosque, Tinggi Mosque, Papan Mosque and Ikhsaniah Iskandariah Mosque

Fig. 11 Tumpu kasau jenis papan bersusun (multiple pieces) at Kampung Keling Mosque

D. Wall
There are two types of wall ornamentation; carving (jenis ukiran) and weaving (jenis kelarai).

Fig. 12 Janda baik wall ornamentation with ukiran jenis kumai on Langgar Mosque

Fig. 13 Wall carving with different types of motifs on prayer space at Kampung Bayas Mosque (from left); calligraphy motif, floral motifs and (below) geometrical motifs

Fig. 14 Kelarai (weaving) wall types at Ikhsaniah Iskandariah Mosque, Perak

E. Main Pillar (Tiang Seri)
In the construction of a Malay traditional house, there is a main pillar of the necessity to set up first (called as a central pillar or tiang seri). But in the construction of traditional mosque, there are four main pillars which also regarded as the backbone of the building.

There are two types of tiang seri ornamentation. Mosques in Melaka have a kind of Corinthian looks at the central pillar, while they were refined into geometrical and floral pattern. On the other hand, Malay wood carving were used to embellish the tiang seri with floral, geometrical and calligraphy motifs.

Fig. 15 Two types of Malay wood carving with floral pattern ‘awan larat’ that were basically influenced from Javanese at Kampung Laut Mosque. There are 10 different patterns of tetupai (additional structure to support pillar) at this mosque
Fig. 16 There are four various design on each tiang seri of Tanjung Beringin Mosque, Seri Menanti, Negeri Sembilan. Every tiang seri carving was given to different ethnic at Negeri Sembilan shows the unity of Islamic thoughts.

Fig. 17 The colonial influence to the traditional mosque ornamentation (from left); tiang seri Kampung Keling Mosque, Corinthian pillar of Kampung Keling Mosque, Lebuh Acheh Mosque, Pulau Pinang using stucco floral pattern and tiang seri Kampung Hulu Mosque, Melaka.

F. Window
As like traditional house, most traditional mosque windows have a wooden lattice at the top or bottom of the window to give optimum air circulation in and out with the work of carvings that rich of floral and geometrical patterns. There are three types of windows ornament which are floral pattern, geometrical pattern and combination of floral and geometry.

Fig. 18 Four various floral patterns of windows with ukiran tebuk timbul (from left); Kampung Keling Mosque, Melaka; Kampung Teluk Medan Mosque; Kubang Rotan Old Mosque; Ikhsaniah Iskandariah Mosque.

Fig. 19 Sample of geometrical patterns (from left); Kampung Hulu Mosque; kisi-kisi Kampung Hulu Mosque; (below) Kampung Tuan Mosque; and Tinggi Mosque.

Fig. 20 Combination between floral and geometrical patterns (from left); Melayu Lama Mosque, Kampung Hulu Mosque, Tengkera Mosque and Ikhsaniah Iskandariah Mosque (with symbol of Perak state).

G. Mimbar
Each mosque usually has a mimbar which is a place where imam will deliver a speech or khutbah. Mimbar ornament in most traditional mosque have full of embellishment with calligraphy and floral pattern gives a meaning of Islamic thought also carried a message through it.
Fig. 21 Various types of mimbar ornamentation that is usually full of embellishment and decorations especially carving. From left; mimbar of Kampung Laut Mosque (the mimbar crown was influenced by Javanese maidens’ crown); as well as mimbar Langgar Mosque; Ikhsaniah Iskandariah Mosque with full of calligraphy and floral pattern with the symbol of Perak royal; Kampung Hulu Mosque with full embellishment of floral patterns

III. TYPES OF MOTIFS

Hindu-Buddhist culture started to began over Malay culture in the first century to the fourteenth century, and give an impact of two cultures, whereby Hindu-Buddhist has been successfully penetrated the Malay culture practiced by the local community and thus being adapted to every single aspects such as language, religion, customs, architecture and many. Motifs such cosmos, animals and spiritual can be seen in the Malay carving but early period of Hindu-Buddhist that still remains were hardly be found. The Malay wood carving was once again to accept change when Islam came to Malay Peninsula on 14th century as recorded on inscribe stone of Kuala Terengganu, founded at Tersat River, Kuala Berang, Terengganu. It approved that Islam came into the Malay community in the early 14th century. Some elements that were not accepted in the new religion practices began to cut off from their creation such as human figure, spiritual and animal form [7].

However, the unacceptable elements were not fully be cut off, but were refined so that it is not clearly be seen directly but may have the inside meaning of the usage. Islamic calligraphy were also being introduce to the region, gave an inspiration to the craftsmen to create a new carving using those Arabic writings. Sometimes it combines with other motifs such as geometric, cosmos and flora. These types of motifs can be clearly seen on the religious buildings such as mosque, musolla and traditional palace.

Thus, it can be concluded that there are five types of motifs use in the traditional Malay mosque; flora, fauna, calligraphy, geometric and cosmos. Flora motifs can be seen dominated the scene of Malay woodcarving may because of the abundance of plant species and forest surrounding has inspired the craftsmen to manifest them into craft. The parts of plant that are manifested include the fruit, stem, tendril, leaf and more conspicuously the flower [6]. 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 [6]. 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 dragon’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. As example, sulur bayung on Tengkera Mosque takes a figurative of dragon’s head as a symbol of guardians against the evil forces. Calligraphy is also applied as motif on walls and ventilation panels in Kelantan, Terengganu and Negeri Sembilan mosques. 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 mosque in Kampung Buki Bayas, Kuala Terengganu where a Quranic verse is carved in perforated form and laid symmetrically on an axis (Fig. 13).

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 woodcarving. 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. 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 shop houses and temples in Peninsular Malaysia are rich is such motifs particularly the symbols of sun, clouds and waves (Hindu-Buddhist influence). The depiction of this motif in Malay carving illustrates the influence of Chinese craftsmanship and pluralism of cultural value in the vernacular architecture.

IV. THOUGHTS INTO THE MALAY ORNAMENTATION:
REFINEMENT OF MALAY WOOD CARVING

Carving, decoration, sculpture and symbolism were initiation to the original idea of Hindu-Buddhist beliefs, but it later been translated into the local vocabulary of motifs by using a natural resources and environment as well as animals, imaginary creatures and human sculptures [3].
However, after the advent of Islam into Malaya, the motives of animal and imaginary creatures have been marginalized or slightly been using but with different interpretations (example: buah butong, tutup perabung). Wood carving flourished with the transformation of motives that have given a new meaning as well as deepen the use of natural elements such as plants and also the introduction to geometrical patterns and verse from the Al-Quran which is the ideas brought from the Middle East. Malay wood carving produced trough observation and appreciation of natural resources and were enhanced with the understanding of Allah’s creation. The decoration and symbolism of ancient Malay culture were laden with philosophy, thoughts, beliefs and values of its society. It is also carried a message to convey in the ornamental and Malay representation.

V. PROSPECT OF TRADITIONAL ORNAMENT IN URBAN MOSQUE

The development of Islamic architecture in Malaya has its own history. Islamic architecture is emerging in line with the development of Islam in Malaya in 12th century. An Islamic element of architecture was developed by immigrant groups to spread missionary serving in Malaya. The construction that was developed shows the cultural of their origins.

Architectural design of traditional mosques varies from one place to another due to climate, topography, environment and lifestyle of local communities. In the past, a mosque built near the king's castles or areas of economic activities, such as rice fields or near the trade center. The latter mosques with onion-shaped domes were constructed. However, this domes design is different from the traditional mosque design. Domes of this type came after the country colonized by the British, which is not reflected the regional mosque as can be seen on the traditional mosque. This building style was inspired by the architecture of the Middle East and India. Construction of structures such as domes, pedevtive and many influence from Middle East design only appear in Malaya in the 20th century and still continue to be applied in the construction of new mosques in Malaysia up until now. Form of mosque architecture in Malaysia has always evolved over time. Currently, there are spectacular style in terms of construction materials, techniques, and processes. But still, with the use of the new technology, urban mosque design should be away from the influence of Middle East and India because we should develop our own mosque style that reflect our culture and lifestyles of our local communities, which also combines of Malay, Chinese, Indian and other ethnic Muslims to have our own identity. The use of vernacular value of woodcarving also can be applied to modern urban mosque in Malaysia. Most of mosque in Malaysia still copied the ornament from outside by ignoring and unaware that we also have our own ornament. Just like when the Malays started practices a new religion, how they refined the woodcarving to the belief aspect, which is how latter we should to comply. Apart from improving ornament identity of urban mosque, the use of traditional ornament also would eventually bring better thermal comfort to the urban mosque by introducing carved fenestration panels such as perforated tophungs on doors and windows would improve the air circulation in the building [6].

Furthermore, the intricacy of traditional ornament of foliated motif or simplicity of geometric motif would also give character and identity to a mosque. The characteristic of every traditional element would signify a multiethnic community in Malaysia. The culture may be plentiful, the ethnic may be varies, but the religion is one. Thus, the ornament of the urban mosque in Malaysia would be lavish and lively along with the multiethnic and community in Malaysia.

VI. CONCLUSION

This analysis on the typological of traditional mosque establish by the use and positioning of the various elements and images are in accordance with the findings of Centre of Study of Built Environment in the Malay World (KALAM), Abdul Halim Nasir [8], Dr. Othman Mohd Yatim [1], Professor Mohd Tajuddin [9], Mastor Surat [3]; relating to the traditional mosque and Malay ornamentation. It has also been found that the Malay beliefs started with animism, Hindu-Buddhist and later Islam. The growth of beliefs were not changed the overall culture of Malay, but it has been refined and absorbed to the teachings presented.

![image](image.png)

**Fig. 22** The picture was draw by Wan Mustafa bin Wan Su, a well-known carver from Terengganu. He said: “Picture 22a shows the actual form of leaves, the source of carving motifs, the making of carving would not be in the original form, but the carver will modify to more beautiful, soften and refine soul as the eccentric (see 22b), but still does not eliminate the actual characteristic”

The modern and post-modern discourse has been poorly understood in this region to the point that blind imitation of forms has led the way to our separating the traditional heritage into an architectural limbo [9]. Islam does not differentiate the values of the spiritual and material, in fact this is a guide that were established in Muslim soul. It approves trough the art, where ornament own an identity itself according to the purity and honesty emerged in the patron [10].

The question of Islamic architecture is hovering around the nature of human relationships and human relationships with the great creator God. In fact, Islamic architecture is actually non-existent in the early birth of Islam. But it is an aspect of Islamic art because of the characteristics found in the architecture of that pattern symbolize the value of Tawheed and Islamic spirituality and support the development of Islamic arts such as calligraphy, the art of voice (taranum) and others.
Islamic architecture is developed in line with the development of civilization. In addition, cultural values, Muslims from Arabia, continental China, and India and Sumatra were also reflected at the architecture. It then became an icon to most architecture in Malaysia at present.

Thus, ornament should carry a symbolic meaning, which means the culture and way of life that are very much relates with the soul of the locals. Manifestation of art and Islamic region should be well adapted with our identity, not just merely an imitation. This study proves that the manifestation of traditional ornamentation do play an important role not only in disseminating the symbolic meaning but also representing the history, beliefs and background of the local Malays.

REFERENCES