

# ICRP 2019

## 4<sup>th</sup> International Conference on Rebuilding Place

### MOSQUE ARCHITECTURAL TIMELINE IN MALAYSIA: FROM VERNACULAR TO CONTEMPORARY

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#### *Abstract*

The scenario of mosque architecture in Malaysia has gone a lot of evolution and transformation, from the traditional era, colonial to the post-independence era. Many studies have focused on the architectural styles, classification, and typology on mosque architecture. The main purpose of this paper is to document an updated historical timeline and development of mosque architecture from vernacular to the contemporary era. Since the beginning of the twenty-first century, there is a new typology that has been introduced, as the urgency towards sustainable building. However, the present contemporary mosque was still regarded as a continuation of previous Islamic architecture. Numerous architectural influences were blended and became part of Malaysia's mosque identities. To comprehend the architectural styles of Malaysian mosque, it is important to return to time for a better understanding of the Islamic origin to the Malay Peninsula, the chronological and influences. A chronology method is adapted from a literature review to figure out when each stage of cultural, religion, and evolution took place. The study includes 134 iconic mosques in Malaysia that were divided into six eras which traditional, pre-colonial, colonial, modern, post-modern and global era for over 400 years. Every era has developed its style and influences that shape our mosque architecture identities and nomenclature. Therefore, this paper offers a clear historical timeline and development for clear knowledge and understanding in designing contemporary mosque to retain history and culture, religion, environment, and sustainability aspects.

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**Keywords:** Mosque, Islamic Architecture, history, classification, influences, sustainability.



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## **1. Introduction**

The mosque is the main religious building in Islam, a Muslim place of worshipping and provides many other functions for the Islamic community (Mizan & Anuar, 2005). The mosque is part of the ordinary scene in Malaysia and is as much as a cultural icon as a religious one (ITC, 2013). The number of a mosque in Malaysia has been increasing expeditiously by years. Malaysia currently has about 6244 mosques in Malaysia (JAKIM, 2018). More mosques would be added over the years with the increase of the Muslim population. It is estimated that up to 2050, 50 new mosques will be constructed annually (Aziz, 2016). Therefore, the main purpose of this paper is to document an updated historical timeline and development of mosque architecture from vernacular to the contemporary era. Many studies on mosque architecture have been undertaken such as the architectural styles, classification, and typology of mosque architecture. Mosque design was very diverse in the Malaysian context and had different typologies that were strongly influenced by socio-cultural factors. The mosque form was very basic in the early stages of Islamic advent, but as the number of mosques increased, patterns and design elements started to evolve (Mizan & Anuar, 2005). Since the 1980s, enormous domes and numerous minarets with Middle Eastern styles have been constructed as a growing Islamic county (Othman, 2012). Since the beginning of the twenty-first century, there is a new typology that has been introduced, as the urgency towards sustainable building. However, the present contemporary mosque was still regarded as a continuation of previous Islamic architecture. Numerous architectural influences were blended and became part of Malaysia's mosque identities (Aziz, 2016). Hence, to comprehend the architectural styles of the Malaysian mosque, it is important to return to time for a better understanding of the Islamic origin to the Malay Peninsula, the chronological and influences.

## **2. Problem Statement**

For over a century, most mosque architecture can be seen to have an imitation issue, that was bound with the previous architectural mosque elements and therefore became significant elements in any mosque development today. The present contemporary mosque was still regarded as a continuation of previous Islamic architecture with the mixture of local and foreign influences and became the identities of the mosque in Malaysia.

## **3. Research Questions**

The research questions of this study are:

- What is the historical timeline and development design of mosque architecture from vernacular to the contemporary era?
- What factors that influence the evolution of mosque architecture?
- Will the future mosque architecture transform according to time and factors?

#### **4. Purpose of the Study**

The main purpose of this paper is to document an updated historical timeline and development of mosque architecture from vernacular to the contemporary era and to identify factors influencing mosque architecture throughout the eras.

#### **5. Research Methods**

In conducting the study, a chronological method is adapted from a literature review to figure out when each stage of cultural, religion, and evolution took place. This paper focused on documenting mosque architecture by historical phases and development. The selection of mosque is made from a secondary source such as literature review, documentation from Centre of Built Environment in the Malay World (KALAM), Islamic Tourism Centre (ITC), National Archive (Arkib Negara), JAKIM, museum department, and other related resources. Then they were organized in a timeline-based to see the development by historical phases and years. A content analysis of literature review on mosque architecture, classification and development were conducted. Through a comprehensive analysis, the mosque architecture history, typologies and influences have been analysed. Ahmad (1999) classified mosque era into vernacular, colonial and modern styles. Yeang (1992) divided into 3 periods of Malaysian architecture which are pre-colonial, colonial and post-independence. While Ismail (2008) concluded 4 phases of mosque development; traditional era, pre-colonial era, colonial era and post-independence era (1957-2007). The post-independence era seems lack of period divisions, so this paper included 3 phases of post-independence era taken from Mursib and Tajuddin (2016) which were modern, post-modern and global era. Therefore, this study concluded into 6 phases of mosque development; i) traditional era, ii) pre-colonial era, iii) colonial era, iv) modern era, v) post-modern era and vi) global era.

#### **6. Findings**

Mosque architecture in Malaysia has undergone many phases of transformation since the Islamic advent to the Malay Peninsula until present (Nasir, 2004; Yeang, 1992; Ahmad, 1999; Rasdi, 2007; Ismail, 2008; Megat, Ezrin, & Nila, 2014). The mosque architecture phase in Malaysia was categorized into six eras based on the history of Malaysia architecture, influences, and styles:

##### **6.1. Traditional era (15<sup>th</sup> to 18<sup>th</sup>)**

According to Fatimi (1963), Islam was brought to the Malay Peninsula by the merchants that were also a religious scholar during the 8th to the 13th century. The religion was adopted peacefully, phase by phase by from the royal, nobility and people (Naquib, 1969). The development of Islam in the 15th century turns out the Malay Peninsula to be progressively unmistakable under the Malay Sultanate ruler in Malacca where Islam became the majority of the Malay people hold faith (Sandhu, 1983; Yahaya, 1998). Mosques were constructed in small settlements by religious scholars and the local people to satisfy their requirements. Therefore, the Islamic establishment was mainly local during this era (Ismail, 2008). The advent of Islam spreading within this region at that time did not lead to the introduction of a new form of Islamic architecture that was not indigenous to the region. Rather, it saw the appropriation of

existing architectural forms that were then reinterpreted to suit Islamic description and usage (Aziz, 2016). The early mosque has two types, namely the regional influence and the traditional influences. A pyramidal roof which is comparable to the old mosque in Indonesia can be categorized as the regional type while the traditional influences represent the Malay house form in term of the local climate, topography, environment and the Malay socio-culture adaptation (Ahmad, 1999; Nasir, 1995; Raalah, 2002; Ismail, 2008).

## **6.2. Pre-colonial era (16<sup>th</sup> to 18<sup>th</sup>)**

The Portuguese were the first who prevailed over Malacca in 1511, followed by the Dutch in 1641 as the Malacca developed into a famous trading port in South East Asia during the 16th century. During the Portuguese occupation of nearly 130 years, drastic changes took place in which all royal palaces and mosques were destroyed as they represent the Malays and Islam (Raalah, 2002). With the overthrow of the Portuguese by the Dutch who took over the Portuguese administration in 1641, the situation changed. During this time, the Dutch allowed the practice of Islam publicly and the construction of mosques. Therefore, many mosques were built to upgrade the existing timber mosque to masonry using Dutch technology (Ahmad, 1999). The typical mosque features began to change in the early 17th century from traditional elements to solid brick structures with arches that became dominant architectural features of the time. During this era, the migration of foreign traders and merchants to Malacca under the Dutch rule also change the local architectural scene in the Malay Peninsula. Most of the Muslim Chinese and Indian immigrants brought the Islamic religion and their culture. The conversion of these rich merchants and immigrant workers to Islam funded the building of mosques (Kohl, 1984; Ismail, 2008). Hence, mosques during this time were more refined which had infused local traditional architecture with some influences brought from the patron who is Chinese and Indian, upgrading to the Dutch technology. A new typology was named Sino-eclectic by Rasdi (2007), in which the phrase 'Sino' refers to a Chinese style and 'eclectic' that refers to a mixture of two or more architectural linguistic influences.

## **6.3. Colonial era (18<sup>th</sup> to 1956)**

The British colonial rule in this part of the world came much later, some 375 years later, and was said to have started during the annexation of Penang island by the British East India company in 1786 (Aziz, 2015). It was followed by the formation of Straits Settlements in 1874, the Federated Malay States in 1896, and the Unfederated Malay States in 1909. In 1946, within a year of the Second World War, British Malaya's loose administration was lastly consolidated with the establishment of the Malayan Union (Cheah, 1983). In the 19th century, the British administration brought a vast change in the local scene by incorporating current and brand new architectural styles and elements. New materials such as concrete and brickwork along with the recent construction technologies were introduced that transforms a mosque design entirely (Othman, 2012). The mosque style during this era represent primarily the Western architecture assimilated to a regional influence intended by the British colonist, namely the North Indian and the European classical styles (Rasdi, 2007). Ismail (2008) found that historians such as Rahman (1998) and Nasir (1995) suggest that the introduction of the North India style in Malaysia due to the influence of the British colonist who previously had an emplacement in India. Therefore, the British

adapted some of the building design elements to introduce a new approach of mosque architecture that is distinct from the existing mosque design. They also stated that the British wanted their power and influence to be projected. While the European classical style found on the royal mosque in the country was to satisfy the local Sultans and aristocrats' desire to project their ascendancy and status in society by emulating Western culture and modernity. There were also mosques constructed by prominent individuals from the local Malay Muslim community or immigrants and converts who settled in the state during this era. Generally, the form of mosque represented the traditional design typology. The Indian and Chinese Muslims traders also added the local scene of their architectural and cultural identity. The Indian Muslims designed a mosque that was similar to the Northern Indian design style in Muslim settlements (Rahman, 1998). Hence, mosques are the country's most important building, mostly built during the colonial occupation by or for local society (Ismail, 2008).

#### **6.4. Modern era (1957 to 1980's)**

When Malaysia became independent in 1957, Malaysia was free to design and construct its mosque style by participating their architects and builders (Othman, 2012). The legacy of modern architecture after independence represents a universal modern language, not racial and progressive aspirations symbolically liberating architecture from the colonialism (Mursib & Tajuddin, 2016). Hence, as a newly independent country, local architects were asked to design government structures including state mosques that depict national identities that can define the local culture and represent that Islam is the state religion (Yeang, 1992). Rasdi (2007) expresses the modernistic structuralism is the concept of projecting forms abstraction and expressing structural elements in the design. Most of the government structures including mosques during this era also imitated traditional Malay and Islamic historical elements that advocates modern contemporary architectural language into design features in the early 1970s (Ismail, 2008). Rasdi (2007) categorizes this as a modern vernacular style where the form reflects the uniformity of local material and method of construction of their architectural features.

#### **6.5. Postmodern era (1980 to present)**

From the 1980s until the year 2010, the trend of 'ReIslamisation' introduced revivalism to Islamic architecture using the elements of the previous mosque typology (Aziz, 2016). The idea of 'Islamisation' is to project Malaysia as a prosperous, modernized and progressive Muslim country as the center of Islamic civilization in the world. As a result, the influence of Middle Eastern design elements such as geometrical motifs, semi-circular arches, and others was implemented. As a consequence, this era saw a rapid increase in the construction of mosques, suggesting further adaptation and reinterpretation of Islamic elements and features from other Muslim countries (Ismail, 2008). According to Rasdi (2007), mosque design in this era that reminiscences the previous decorative elements can be classified into the historical revivalism approach.

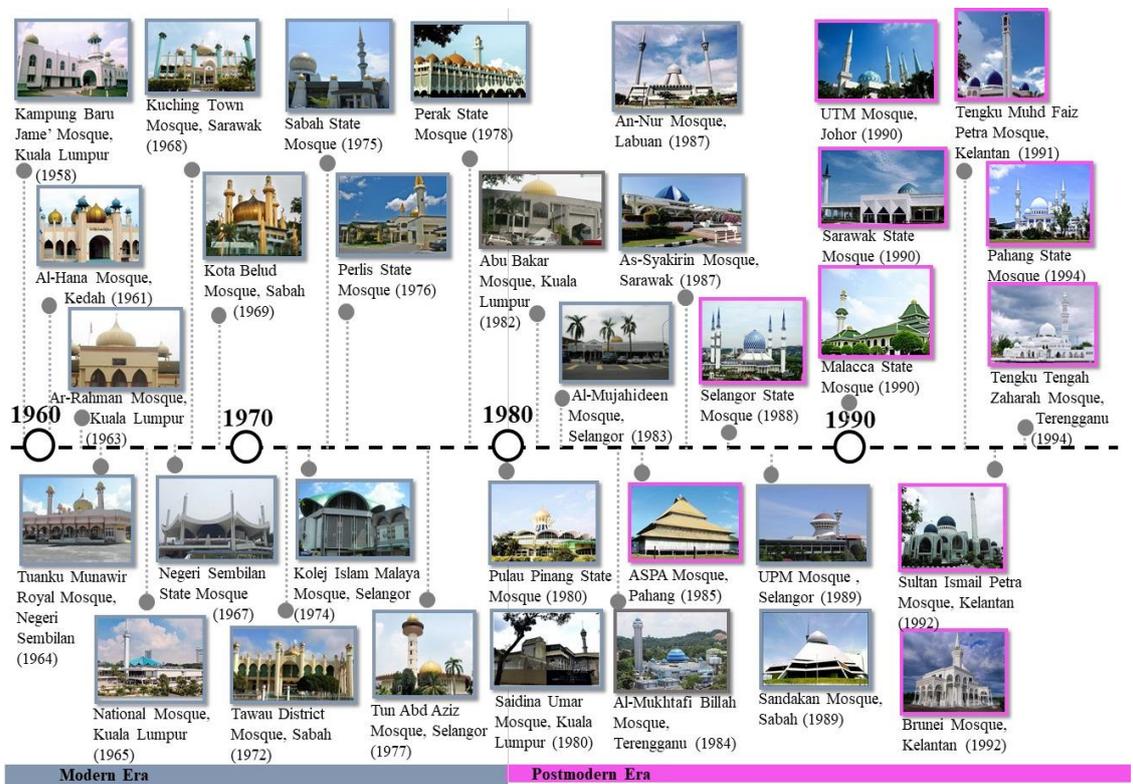
#### **6.6. Global era (2008 to present)**

A different but more palatable trend that has emerged since 2008 or slightly earlier had begun to allow architects to re-think the design of mosque not simply by imitating the use of previous designs





**Figure 02.** 37 selected before independence mosques from 1890 to 1950 (colonial), with the timeline and year of completion.



**Figure 03.** 33 selected post-independence mosques from 1957 (modern era) to 1994 (postmodern era), with the timeline and year of completion.



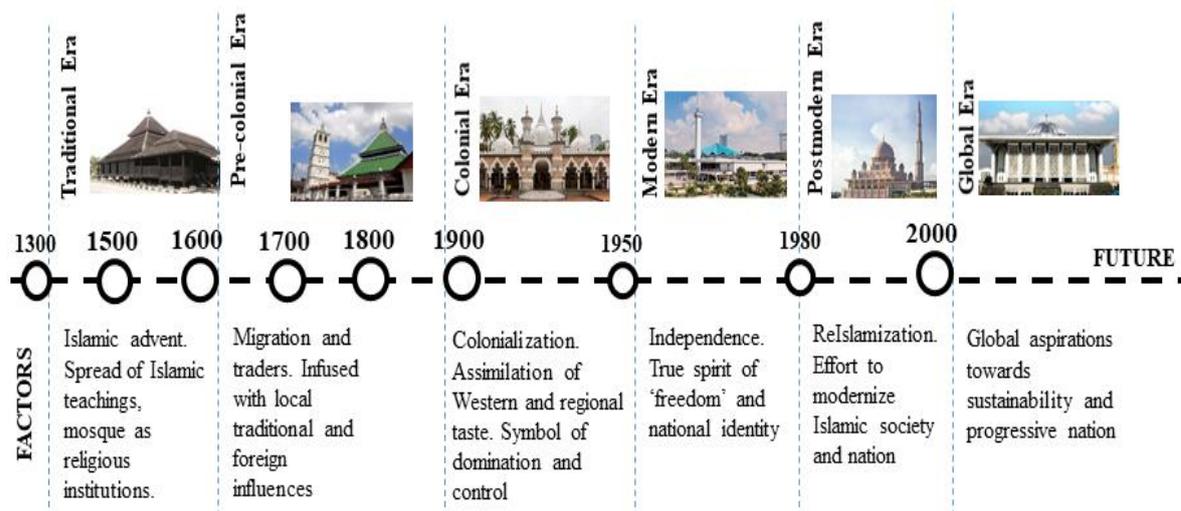
**Figure 04.** 35 selected post-independence mosques from 1995 (postmodern era) to 2008 (global era), with the timeline and year of completion.

### 6.8. Discussions

Historically, from time to time, mosque architecture is evolving. This manifests that the mosque has always been an important building that symbolizes Islam and represents the social culture of Muslims. The patron or ruler saw it as their religious duty in promoting and spreading Islamic doctrines to the world. There are no standards on mosque architecture and elements, nor a specific preference of the architectural styles, allowing the mosque architecture to evolve beyond its limits. Mosque during the traditional era was influenced by regional and traditional architecture. The use of a pyramidal roof or gable roof similar to Malay traditional house. The floor is raised and use of timber for the construction. While, the pre-colonial era also has the pyramidal roof shape but with added of Chinese influence, pagoda-like structure. The floor also built on the ground since the coming of new technology such as masonry possible for a floor to be built on the ground. While traditional and pre-colonial era were retaining a vernacular style of a mosque, during the colonial era a new language was presented. The development of Indian Muslim merchants class especially in Penang and Perak makes them build a mosque with the influence of their origin, a Mughal style starting 1800. Later on, during 1900 onwards, a mosque with neo-classical and North Indian styles was introduced by the British. As there were said that the British needed to project their domination and control, the British proposed the concept and idea of Islamic liberal against a radical movement at that time.

The post-independence modern architecture was short. Following Malaysia's independence in 1957, the liberation to express mosque design with modernistic structuralism style only lasted until about the early 1970s and was replaced by a modern vernacular style and the popular post-modern revivalism era which became a phenomenon major symbol of mosque architecture in Malaysia. The 1980s brought up the post-modern architecture that became a worldwide phenomenon. It became a trend up until now.

At the global era, the contemporary approach was introduced since the architect came to re-think the design of the mosque by not simply imitating the previous styles. However, this new typology was still scarce as the paradigm of people imagine that the mosque must have domes, minarets, and other Islamic elements such as arches, *iwan* and *muqarnas*. Thus, by documenting the architectural timeline of mosque architecture, the study presents the historical phases of mosque architecture in Malaysia and the evolutions. Which where 400 years of Islamic history in Malaysia, how the imperialism can change the mosque architecture by introducing uncommon features yet not related to Islamic styles, it is not possible to repeat the history by changing to the new approach which was more suitable with the contemporary world, national identity, history, and sustainable approach (Figure 05).



**Figure 05.** Scenario of mosque architecture from the earliest mosque to the contemporary

## 7. Conclusion

The timeline displays the evolution of mosque architecture and influences within a certain era of architecture. Factors of geography, imperialism, political and multicultural has shaped the influences and styles of our mosque. As time goes by, there might be an evolution of new and different typologies, as the mosque transformation will never end by the human needs, social, cultural and the environment that will always be developing. Other than this, the most important thing of mosque architecture is that it must function as a mosque, a congregation space for Muslim. Not only be built monumentally to symbolize power or wealth. The primary function of mosque must itself act as a Muslim community centre. Thus, whatever styles been adapted, the main function of a mosque must be present. Despite the differences in design and scale of mosques, it should be re-emphasized that the spiritual meaning, function, and

principle should remain unchanged. It is important to regard the history of Malaysia and Islam, spanning thousands of years back to how Islam came to Malaysia and became the symbol of unity of the country.

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