



EVALUATION OF ARCHITECTURAL PUBLICNESS DESIGN ELEMENTS ON SEREMBAN STATE MOSQUE OF NEGERI SEMBILAN

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Nangkula Utaberta

School of Architecture and Built Environment,
Faculty of Engineering, Technology and Built Environment,
UCSI University, Cheras,
Kuala Lumpur, Malaysia

Corresponding Author:

Nangkula@ucsiuniversity.edu.my

Mohd Tajuddin Mohd Rasdi

School of Architecture and Built Environment,
Faculty of Engineering, Technology and Built Environment,
UCSI University, Cheras,
Kuala Lumpur, Malaysia

Teoh Chee Keong

School of Architecture and Built Environment,
Faculty of Engineering, Technology and Built Environment,
UCSI University, Cheras,
Kuala Lumpur, Malaysia

Lee Yun Sheng

School of Architecture and Built Environment,
Faculty of Engineering, Technology and Built Environment,
UCSI University, Cheras,
Kuala Lumpur, Malaysia

ABSTRACT

This research paper aims to examine the architectural design and the publicness of a state mosque in Malaysia while taking into consideration the social inclusiveness and national identity among religious buildings within the compound and beyond the framework of religion. The research objective is to evaluate the architectural design elements in a mosque on publicness. The methodology used in this research is by reviewing literature and evaluating the Negeri Sembilan State Mosque; Seremban Mosque, as a case study of its social publicness. The finding from the research concludes that the state mosque can do more to achieve inclusivity and friendliness through architectural design elements such as perception, permeability, and territoriality of the building in relation to its context and religious adherents, as well as the larger Malaysian population. Furthermore, the significance of the finding identified that religion and religious buildings play a crucial role in sustaining unity and harmony among all ethnicity in a community with such a diverse society in order to promote further the manifestation of social inclusiveness and national unity among religious buildings and diminish the conflict in race and religion.

KEYWORDS:

State Mosque; Publicness; Architectural Design; Social Inclusion

INTRODUCTION

The main intention of this research paper is to evaluate the architectural design elements of the Negeri Sembilan State Mosque; Seremban Mosque, as a case study to justify its overall language of design that speaks of either a friendly or non-friendly message. The research paper will also discuss the influence of state mosque architectural design and how it reflects the atmosphere in which it was built. This paper is divided into six sections: research on architectural design, literature review on mosque architecture, objective and methodology, research findings, the implication of finding on mosque publicness, and lastly, the conclusion.

STATE MOSQUE AS A PUBLIC BUILDING IN MALAYSIA

Following Malaysia's independence from the British on August 31st, 1957, the government quickly prepared how to build and introduce the country to the rest of the world. Architects were tasked with designing public things, including the state mosque, that reflect the national identity and the culture of the region. During the post-independence era, state mosque was built all over the country. State mosques

incorporate the latest technology and distinguishing features, such as a large-scale dome and tall minarets, to ensure that it becomes a landmark capable of symbolizing and projecting the Islamic religion's trademark to the general public. As a result, the government has completely financed the state mosque and put it under the control of the state government [1].

Earlier in the 20th century, most government buildings in Malaysia, including the state mosque, had prominent design features that included modern design values, structural expression, and a touch of Malayan traditional architectural characteristics mixed with Islamic elements. The National Mosque in Kuala Lumpur is an excellent example of how regionalism and modernism coexist. The concept of architectural modernism, which projects the abstraction of forms and expressive structural elements as an aesthetical impression devoid of rendered decorative elements, resulted in the creation of a style known as modernistic structuralism in the local built environment, especially in mosque architecture [2] [3].

Islam is the official state religion in contemporary Malaysia, while article 11 of the Malaysian Consultation assures freedom of religious worship. It means that

Islam's previous standing overshadows all other government-recognized religions. For the Malays, they are Muslims after birth. Most Chinese are Buddhists and Taoists in Malaysia, but there is a growing number of Christians and only a handful of Muslims among the Chinese. Most Indians are Hindus, but other than that are just a small number of Christians, Muslims, and Sikhs [4], [5].

Religious buildings, including mosques, churches, and temples, have always been integral to an urban layout [4]. A nation's capital is commonly the center of its religion, such as in the case of Kuala Lumpur, as evidenced by the presence of the National Mosque, which plays a significant role regionally and nationally. The government has ensured that as Islam is the official state religion, Kuala Lumpur's status in this regard will go on. The government is also committing to spend a lot of taxpayer money to ensure sufficient mosques and surau to serve the Muslim population nationwide. But they are not distributed evenly in accordance with the distribution of the Muslim population. The religious facility requirements for vision 2020 state that 309 new mosques and surau have to be constructed to fulfill the need of the growing population in Kuala Lumpur alone (Kuala Lumpur Structure Plan 2020) [6]. The issue of the state funding just one religion in such a multi-religious country raises questions of fairness and treatment among other religious groups. This issue can also be seen in the master planning of a new township where mosques have always been properly prioritized and located at strategic locations with substantial government support. As for the rest of the religious groups, they have to establish their own churches or temples with their own non-governmental fundraising. It led to budget constraints in building new churches or temples without the formality that the mosques have [7][8]. Most can only afford to convert buildings not meant for religious purposes, such as residential houses, shophouses, or industrial warehouses. These phenomena are common and easily found in many parts of the country.

MOSQUE ARCHITECTURE

The importance of the concept of a "style" compared to the more fundamentalist approach of vernacular revivalism or the extreme approach to understanding the Prophet Muhammad's Sunnah is one of the major issues in the discourse of Islamic architecture. First and foremost, it is important to define Muslim architecture rather than Islamic architecture, as the former may be the latter but not always. In architectural theory and history, the latter must be developed before the former can be deduced. Architectural theory is built on the foundations of historical definition and classification. In architecture, theory refers to a design approach rather than a hypothesis that must be proved, as in other sciences [9].

Between 1795 and 1957, the British governed Malaysia, and several mosques were built. Some of the mosques were designed and supervised by British

architects and engineers from the Public Works Departments, while others were designed and managed by local architects and designers. In terms of scale and proportion, shape, features, and building materials, most mosques constructed during the colonial era vary architecturally from vernacular mosques. The colonial mosques have domes (either onion-shaped or top-shaped), turrets, classical columns, pilasters, pointed arches, keystones, pediments, and plastered renderings on cornices and capitals. At the turn of the century, British architects effectively merged Moorish influence and classical designs to project as Islamic images into mosques. For example, the Sultan Abu Bakar Mosque in Johor Bahru has four wings, each with its own set of minarets, pinnacles, and domes, as well as classical elements.

Another notable example is the Jamek Mosque in Muar, Johor, which combines classical Baroque style with Moorish influences. Instead of a mosque, the structure portrays a public structure typical in 17th and 18th century Europe, with a complex of forms and decorative elements. Many colonial mosques were constructed to appeal to Malay societies, particularly Malay rulers. Some mosques were built near royal palaces and were named after the sultans who built them. For example, the Ubudiah Mosque in Kuala Kangsar, Perak, was constructed near the Bukit Chandan Palace. At the same time, the Abidin Mosque in Kuala Terengganu is named after the late Sultan Zainal Abidin II, Terengganu's ruler.

When Malaysia became independent, many local architects were active in constructing new mosques. The architectural styles of modern mosques have evolved in response to technological advancements, building techniques, contemporary mosque designs, and increased local interest in Islamic architecture. Modern mosques are being built on a larger scale to accommodate the growing number of Friday congregations and also with the help of advancements in science and technology. Modern mosques usually have concrete, bricks, steel, stone, and marble. Modern mosques often feature onion-shaped or top-shaped domes, tall minarets, and high ceilings. Plants, water features, patterned pavements, garden lighting, and signage are common in modern mosques [10]

The modern mosque's architectural styles can be divided into two classes. Modern styles are the first group, emphasizing advancements in construction technology and engineering. For example, the National Mosque in Kuala Lumpur has a 245-foot-high minaret and an umbrella-like roof. The mosque is made of reinforced concrete and covered in Italian marble. Its main prayer hall can house over 3,000 people at a time, and its surrounding galleries, which are topped with several small domes, can hold an additional 5,000 people. Other than that, the National Mosque of Malaysia, the state mosque of Negeri Sembilan, is another good example of one of the earliest modern mosque designs in the region. It is located in Seremban town, and the mosque has been serving as the official mosque in the state of Negeri Sembilan since 1967 [11].

The objective of the research is to evaluate the architectural design elements in a state mosque on the issue of publicness and national identity among religious buildings. In Malaysia, religious buildings tend to overlook the terminology of inclusivity and friendliness for the Malaysian population and only focus on the user experience of their own religious followers. In reality, every religious building should manifest a distinct sense of inclusive and friendly architectural language to encourage the notion of broader social inclusiveness.

METHODOLOGY

The methodology used in this research is by reviewing literature regarding the publicness of public buildings in Malaysia and evaluating a mosque case study of its social inclusivity. In this research, the State Mosque of Negeri Sembilan, Seremban Mosque, is chosen to be studied and presented with an empirical research report on the aspects of its inclusivity and friendliness to the public. The study comprises two sections. The first part concerns the rationale of the architectural design elements, languages, spatial quality, and impression. The second section is an analytical overview of the mosque's architecture with its inclusive and friendly aspects. The parameters are observed and documented based on the architectural elements. Finally, in order to provide comparative results, the analysis is presented in writings and photographs of the mosque.

RESULT AND DISCUSSION

HISTORY, ARCHITECTURE, AND ORGANIZATION OF THE BUILDING



Figure 1. State Mosque of Negeri Sembilan (Author)

The Negeri Sembilan State Mosque was built in 1965 and completed in 1967. The design was considered a brave move as it departed from the usual dome and horseshoe arches. The designers were using the most advanced design and technology at that time. The architecture was a hybrid of modernist and Minangkabau styles. The roof is supported by nine pillars representing the nine districts (Negeri Sembilan) that originally constituted the state. There is a minaret with a dome built between 1982-1984, located

relatively far from the main mosque building.

The Federation of Malayan Society of Architects organized a mosque competition on behalf of the state government. The competition requirement was to design a new mosque that could fill up to 1500 worshippers. The response was good, 11 entries were submitted, and all the proposals were presented in a public exhibition at Seremban. Malayan Architects Co-Partnership won the competition made up of architects Lim Chong Keat (the late), Chen Voon Fee, William SW Lim, and Dato AR HJ Baharuddin Abu Kassim. At the start of the post-Independence time in Malaya, MAC started its operations (now Malaysia). During this time, housing and infrastructure development made considerable progress. Singapore was in a similar position at the time, as it was going through rapid social and political changes. Public buildings, homes, institutions, and roads were rapidly built to meet the demands of a new country. As a result of large-scale urban migration, demand for goods and affordable housing increased. Malaya has adopted the globalization of architectural ideas at the same time. Many new buildings built by expatriate or local architects who had earned their education in the West reflected this trend[12]–[14].

MAC was influenced to use modern architectural ideas by the International Style, which was common at the time all over the world. MAC, on the other hand, was skilled at adapting the ideas to the local climate and building materials. The partnership was awarded first place for its architecture scheme for the Negeri Sembilan State Mosque, regarded as a technical and design feat at the time. The design adheres to traditional architectural ideals while still being innovative in construction and material use.



Figure 2. Photo uploaded by Dato Seri Lim Chong Keat

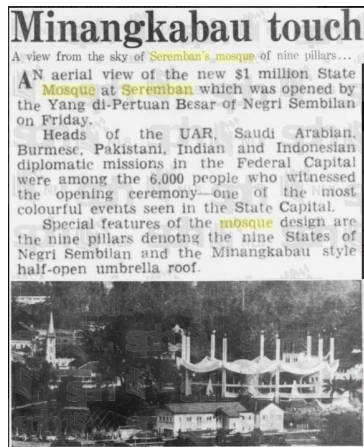


Figure 3.- The Straits Times, 27 November 1967, Page 6

An old construction site photo (Figure 2) from a web forum uploaded by Dato Seri Lim Chong Keat is priceless (Figure 3).

DESCRIPTION OF THE SITE

The mosque is strategically located on a hilly site with lot no. 7560, overlooking the green landscape of the Seremban lake garden, a short distance from the city center. The site was a piece of state land which is approximately 5 acres. The mosque was built between the old state assembly hall and the post office. The five-acre site is connected via Jalan Dato' Hamzah from Seremban town. Most neighboring buildings with colonial architecture are the tourism hot spot because the public transport stations are not more than 600m away.



Figure 4. Perspective view of Seremban Mosque (Google Earth 2020)

THE INTERIOR

The most engaging element of the mosque would be the open floor plan and its wide and high-volume interior space, allowing for sufficient daylight to enter from every corner of the nine surfaces. The natural lighting comes through the curtain window wall, partially modulated by carved timber screens. The stark contrast between the present interior and the exterior allowed the modern expression to complement the whole mosque's design expectations after completion.

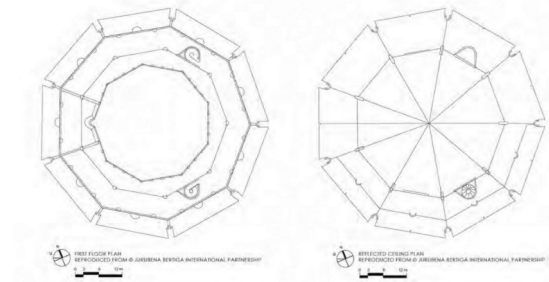


Figure 5 -Floor Plan Layout of Seremban Mosque (Mohd Nizam Mohd Zam, ATSA Architect)

At the double-volume prayer hall (Figure 6), there is a beautiful roof structure on top, the curve lines of the concrete perfectly moving upward to a point, and it represents the unity of the people in the nine districts and upholding the values of religions and traditions. The double-volume prayer hall has a ring slab on the first-floor terraces supported by nine buttresses from the ground level. Outside the prayer halls, there are cantilevered balcony-like platforms that can reach out to the sun, bringing light to the interior space [9].



Figure 6. Double Volume Prayer Hall

RESEARCH FINDING

This section of research discusses the inclusivity and friendliness of the Negeri Sembilan State Mosque; Seremban Mosque in relation to its context to the public in six criteria; perception of iconic historical imagery, perception of scale and massing, perception of similarity of building finish material, visibility of gates and fences, visual permeability of level of visual access and territoriality of furniture and landscape with modern or traditional language.

PERCEPTION OF ICONIC HISTORICAL IMAGERY

Negeri Sembilan is the only state in Malaysia uniquely influenced by the Minangkabau clan, which originated in the Minang state of Sumatera, Indonesia. A significant number of overseas Minangkabau settlers had migrated to Negeri Sembilan and had lived there for hundreds of years. The mosque is built around a nine-sided polygon open floor plan with a parasol roof shape. The nine sides reflect the nine districts of the state as well as the root of the state's name. The main prayer hall, which includes a

female prayer gallery, meeting rooms, dining halls, toilet, ablution facilities, and the mosque's office, are all located inside the mosque. The mosque's most distinctive feature is the parasol roof, a hyperbolic concave concrete shell backed by nine towers. Secondary minarets, which are distinct from the main detached minaret and were constructed separately, are decorated with star-crescent finials. The domed roof is supported by nine conical buttresses rising from the ground level that anchor the main prayer hall floor level. The mosque, therefore, does not employ any iconic historical imagery.

PERCEPTION OF SCALE AND MASSING

The mosque visually acts as a dominant structure in its contextual setting and also compared to the surrounding buildings. The umbrella-like widespan roof is formed by assembling together with nine sections which are 100' from left to right. The mosque building's height is 16 m from the ground to the top of the columns. Without any doubt, the building was built from contemporary materials with the most possible way and the latest technology available at that time. At the same time, it has become a landmark as people can identify it as a place for worship from a far distance. The building was built without any buildings in the surroundings, and the architect chose to remain as green at the site as possible, which is a kind of respect for the site. Due to the current context, it is blocked by many taller buildings, and the visibility has decreased. The mosque has a single mass and is monumental in scale within its surroundings, but it does not overpower the larger cityscape like the Shah Alam Mosque.

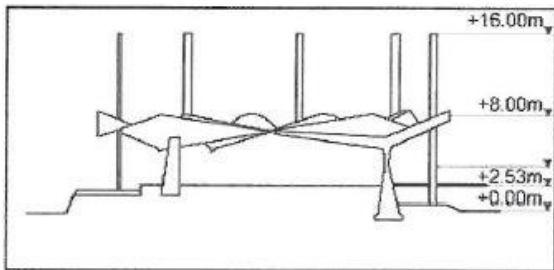


Figure 7. Building Height [15]

PERCEPTION OF SIMILARITY OF BUILDING FINISH MATERIAL



Figure 8. Exterior of Seremban Mosque (Mohd Nizam Mohd Zam, ATSA Architect)

The mosque building was built of reinforced concrete, considered the latest technology at that time. The mosque was designed to have only two storeys, and the prayer hall with double volume in height. Its windows are of a curved shape and modulated with wooden panels. Originally, the concrete was not painted in white (Figure 8), showing that the current building is painted in white. The Mihrab wall and the Mimbar had been changed to some kind of craft timber, which is not very sure why they did this when the original one is better in terms of the architectural design language.



Figure 9. Mihrab Wall and Mimbar (Mohd Nizam Mohd Zam, ATSA Architect)

VISIBILITY OF GATES AND FENCES

The visibility of the mosque from the road is very low due to the different contour levels. It is also affected by the unpleasant gates and fences that give the impression of unfriendliness towards outsiders (Figure 10). They don't have any signage that can inform outsiders that the building can be entered at any time or about the rules and regulations that must follow. Luckily the design of the fences still allows people to see through, at least for the exterior facade of the mosque, but not the activities inside the building.



Figure 10. The gates and fences of the Seremban Mosque (Google Earth 2020)

VISUAL PERMEABILITY OF LEVEL OF VISUAL ACCESS



Figure 11. The building's front entrance of Seremban Mosque (Source: Author)

The state mosque has one main entrance at the east side (front) and another secondary one at the back. Most worshipers and visitors will access the building by the main entrance because it is connected with the vehicle parking while the other can only be accessed via the landscaped garden. The entrance does not have any monumental or formal gateway to define the entrance. It is also not promoting any overpowering view at the front of the building. The vehicle parking sits at the front of the building, and there is a landscape between it. The worshipers and visitors need to walk a short distance on the pedestrian, which will directly lead to the main entrance.

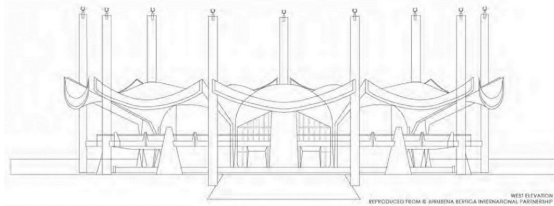


Figure 12. West Elevation (Mohd Nizam Mohd Zam, ATSA Architect)

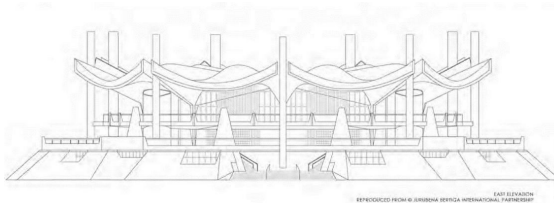


Figure 13. East Elevation (Mohd Nizam Mohd Zam, ATSA Architect)

TERRITORIALITY OF FURNITURE AND LANDSCAPE WITH MODERN OR TRADITIONAL LANGUAGE

The mosque has more disadvantages than advantages in terms of the concept of territoriality. Figure 14 shows one of the disadvantages of the territoriality concept when approaching the building, as there is a lack of public furniture in the green landscape at the entrance, and there is only four concrete sitting with tile finishes provided in the lobby. Moreover, even after passing through the unfriendly gates and fences, they don't have any sitting and shelter, providing the users to have any outdoor activities, as the front area of the mosque is designed for vehicular circulation and parking, and the ground surface is mostly covered by pavement.



Figure 14 -Overall perspective view of Seremban Mosque (Google Earth 2020)

IMPLICATIONS OF FINDINGS ON SOCIAL INCLUSIVITY



Figure 15. Front Entrance Gate (Google Earth 2020)

The language of the mosque and its use of concrete as its main construction material display it as not an ostentatious structure. The scale of the mosque in its single mass does not provide the megalomaniacal monumentality usually seen in state mosques. However, the lack of landscape furniture around the mosque and its restricted access via the fences do not add to the inclusive nature of the other two elements of image and scale. The permeability is good, as one can see through the architect's opening of the building as a glass-walled shelter. In all, the mosque has strong, inclusive quality but falls short in its access and design of outdoor landscaped features.



Figure 16. Directory Sign Board (Google Earth 2020)

CONCLUSION

For centuries, the relationship between art and religion has been intimate, as both have remarkable influence over the architecture of religious buildings, such as mosques, churches, and temples. Architecture demonstrates that religion has an astounding effect on art, exalts the spirits of human and religious buildings, and finds spiritual peace in it. Religious buildings should be designed to embody the inclusive and tolerant teachings of religion in mind rather than just stubbornly representing the religious identity. Religious buildings should also be crafted to respond to each surrounding community context to promote broader public inclusivity and friendliness. Through its form, shape, scale, spatial quality, material, and finishes, and drawing inspiration from the structure of the past, to recreate the ambiance of self-reflection and awe without the necessity of religion and redefining a new typology for religious buildings, one that benefits the society in this day and age. The State Mosque, as a public building, should be a welcoming place for people of all backgrounds. It is the location of most socio-cultural activities and may encourage people to mingle with others, walk around, sit alone or in groups, and observe other groups. This research can hopefully inspire and push architects and religious building operators to design public religious buildings in the future with the issue of social inclusiveness and national identity among religious buildings in mind to build a nation into a multicultural pluralistic population truly.

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