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# The 'sense of place' and the environmental context of Ar-Rahman Mosque architecture

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**Abstract.** This paper main factors are mosque architecture, the theoretical framework of the 'Sense of Place', the creation of 'Sacred Places', the architectural and cultural heritage of Masjid Ar-Rahman, Kelantan, Malaysia. These factors are based on the Islamic religious understanding, and they are interrelated. The mosque is a sacred important symbol in Islam. The Malay Mosque is medium scale architecture, a humble typology but demonstrates strong cultural and architectural heritage. However, the current mosque architecture is dominated by the monumental domes and towers, the two foreign elements that replace native parts and alter the archipelago official mosque appearances. Hence the lack of local 'Sense of Place' and connection to the environment. The conceptual framework capitalizes the research gap found in mosque architecture by further delving into the creation of 'Sacred Places' through the 'Sense of Place'. The Masjid Ar-Rahman of Pulau Gajah, constructed in 2016, demonstrates simplicity both in its traditional image and architectural scale with the Hindu-Buddhist syncretism. It is the value of hybrid assimilation and tolerance and coined as the Nusantara hybridised Malay and Javanese architectural styles and cultural heritage. This research employs qualitative methods of phenomenological and case study propositions supported by architectural evidence in emphasizing the symbolic and semiotic aesthetics aspects in constructing the 'Sacred Spaces' through the 'Sense of Place'. The findings demonstrated that the 'Sense of Place' of Masjid Ar-Rahman is created by the simplicity of the mosque design reflected by the Sufistic beliefs and its connection to the environment.

#### 1. Introduction

In creating the 'Sacred Places' in mosque architecture, it requires the understanding of Islam to produce the structure. The information for the architecture to house activities is well informed in the Quran and hadiths. The Bayt Allah and God (Allah) is the sole owner of this house; the mosque familiar term, or *Baitullah*, the house of God; is a 'space' that brings the idea of religion and worship. The concept of *Baitullah* was further demonstrated by the first two global contributions in Islamic architecture of the Ka'abah, the Haram Mosque in Mecca and the Al-Aqsa Mosque in Jerusalem [1]. The *qiblah* (prayers towards Ka'abah's direction) that lasted more than 1500 years became the *tauhid* (belief of the Oneness of Allah) for Muslims around the world. It encompasses and overcomes the whole world of life and the hereafter [2] as a universal concept. Praying towards the Ka'abah is one of the nuances of Sufism done in the form of prayers in ritualistically purifying themselves . These

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include prayers, *zakat* (alms), recitation of the Koran, *zikir* (chants in the name of Allah with rhythmic repetition), and Tawaf (circumambulations of the Ka'abah). All these practices are tied to *Nubuwwah's* (exemplary person) historical notion. These rituals include performing Umrah (the non-mandatory pilgrimage) and the fifth pillar of Islam, the Hajj (the required Muslim pilgrimage). In reference to the Ka'abah architecture, it has the advantage that contains the question of absoluteness, the value of truth and the conception of *tasawwuf* (spiritual ideals and realising ethical process). It goes beyond boundaries of rationality and awareness. The 'Sense of Place' in the Ka'abah's context is created by the activities in a space that is spiritually strong yet simple. It is characterised by the religious activities rather than the architecture and a sacred place that is created by the people's beliefs rather than architecture itself.

#### 1.1. Problem statement

All sacred places required the understanding of the 'Sense of Place'. Based on Le Lefebrye's triad theory of a place of 'Conceived', 'Perceived' and 'Lived' spaces, it can be established that the 'Sense of Place' in mosque architecture in Malaysia can be constructed thus the creation of the 'Sacred Spaces'. The known Malay Mosque architecture is of medium scale, a simple architectural typology but demonstrates strong cultural and architectural heritage. However, the current mosque architecture in Malaysia is dominated by the monumental domes and towers, the two non-local elements that replace local parts and alter the archipelago official mosque expressions. Hence the current mosque architecture lacks the local 'Sense of Place' and connection to the environment. The cultural and architectural heritage embedded in the mosque strengthen the creation of the 'Sacred Spaces' based on the local tradition and mosque architecture. This can be further enhanced through the mosque architectural components. The investigation fills up all the research gaps that are not examined in depth. It creates a conceptual framework to be combined with the theoretical framework of the 'Sense of Place'. The Masjid Ar-Rahman reflects a very simple mosque architecture. It was chosen for the investigation for this is the first mosque in Malaysia that has five main pillars in the centre of the prayer hall to symbolise the five pillars of Islam. Moreover, it was designed with the hybrid contention of the archipelago Kelantanese and Javanese architectural design styles.

# 1.2. Research objectives

The paper aims to examine the architectural components of the mosque architecture of Masjid Ar-Rahman that contribute to the construction of the 'Sense of Place' based on 'Space Triad'; to analyse the mosque architecture of Masjid Ar-Rahman in relation with the understanding of the 'Space Triad' and 'Sacred Spaces'; and to construct the 'Sense of Place' of the mosque architecture of Masjid Ar-Rahman based on the Sufistic beliefs and the creation of the 'Sacred Places' based on the 'Space Triad'.

### 1.3. Mosque architecture

In architecture, theory is a process to approach a design. One of the major problems in the discourse of Islamic architecture is the relevance of the idea of a 'style'. This is a different approach compared to vernacular revivalism known as the radical approach. It is geared to fundamentalist approach of interpreting the Sunnah of the Prophet Muhammad (PBUH). In the context of the field of architectural theory and history, one must establish the latter to derive ideas of the former. Historical description and classification are the building blocks of architectural theory. Most important of all, the mosque architecture embodies the teaching of Islam and simultaneously producing the 'Sense of Place'. This will be further enhanced by the 'Sacred Places' to compliment all the religious activities that take place within the mosque vicinity. Before the Hijrah year, at the beginning of the life of the Prophet (PBUH), the mosque was not a special building or a specific architectural structure. Sahih Muslim narrated a hadith stating that: "Jabir Abdullah Al-Ansary reported that the Prophet had mentioned that the earth has been made sacred and pure and a mosque for me, so whenever the time of prayer comes for any one of you, he should pray wherever he is."

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The Masjid Nabawi (Prophet's Mosque) (Figure 1) early building was a simple rectangular building. It was of mud brick construction. A material that was readily available from the surroundings. The mosque had four walls and three protected areas. The palm tree trunks posts supported the roofs. The wall facing the qiblah was protected by the roof first part over the major space. To the left of the main hall, to protect the house of the Prophet Muhammad (PBUH) and his wives was the second closed part. The Sufis (Al-suffah) stayed their nights in this building at the other side of the roof in the mosque front. The Sufis were immigrants, poor but educated. They studied from Prophet Muhammad (PBUH) and served him at the same time.

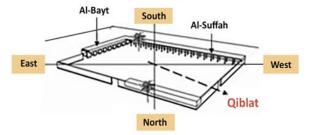


Figure 1. Masjid Nabawi Complex, Madinah [3]

## 1.4. The 'sense of place'

'Sense of Place' is a subjective perception based on the physical characteristics of a place and involves cognitive and perceptual factors in a sense of time [4][5][6]. Through the time, sacredness of a place is developed, and it ties intimately to the sense of authenticity of that place [7][8]. Based on the theoretical perspective of 'space triad' the formation of sense of place is affected by the (i) 'perceived' space/spatial practices, (ii) 'conceived' space/representation of space, and (iii) 'lived' space/representational space [9]. In traditional building, perceived space is the physical characters of the buildings for constructing the sense of place by focusing on the historical forms, cultural characteristics, and its functional settings [10]. The architectural design, symbols, iconography, and artefacts are essential to a religion. As a subset to culture, religion affects the people's attachment to a sacred place, where space is purposely created to keep the basic concept of religions and as a mediator for experiencing faith [11]. The rich cultural values and meanings of a sacred place, particularly in a traditional architecture, brings the community to form the place identity. In the Masjid Ar-Rahman's case, the 'Sense of Place' provides a clear theoretical framework of connecting this structure to the real meaning of mosque architecture portrayed in Masjid Nabawi. The conceptual framework provided by the architectural components available in the Masjid Ar-Rahman fill the gaps required to the 'perceived', 'conceived' and 'lived' spaces. The spaces work in tandem to produce the 'Sense of Place' that Masjid Ar-Rahman can offer in the most authentic manner possible available in a locally based mosque architecture.

#### 1.5. 'Sacred places'

In the context of Islamic religion, the haptic experience is defined by the presence of the tactile elements of the 'sacred place', such as touching the ablution water and the praying mat. To fulfil the criteria, the tactile elements are susceptible to touch, and by touching they have participated in the transcendent and completed the experience of faith. The element of smell through the olfactory sense also contributes to experiencing sacred place. The characteristics of building materials have their own distinctive smell which characterise the place. In terms of sound, each sacred space has the different degree of silence and echo. It is believed that hearing creates a connection to the place as well as to the Supreme Being, as shown in the call to prayer/azan and Koran recitation. Another experiential aspect in Islamic sacred place is the visual elements. The design and décor of the sacred structures help to create sense of place as well as to bring the worshippers into religious ideals. Building ornaments, calligraphy, Qibla compass, images of Kaaba in Mecca and other sacred cities also functioned as the

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place artefact, which is a visual reminder and to solidify and to connect to a place via a tangible physical. Hence, it could be concluded that sacred place involves several dimensions of sensory experience that interact and fuse into each other to form sense of place [12]-[8]-[13].

# 2. Methodology

The research relied on the phenomenological method as part of the descriptive qualitative approaches, in obtaining accurate systematic facts. This is in view of the Masjid Ar-Rahman's characteristics and values mosque architecture and in the construction of the 'sense of place'. This study begins with comparing the mosque's evolution with the early documentation of typology. This is further expanded into the observation of the typology of this mosque and its 'sense of place' construction. According to Groat [14], qualitative methods can transcribe the meaning of symbols and forms. The observation also focussed on the mosque space overall composition, contained in the hybrid components of mosque architectural design styles. However, this study concentrated only on some of the dominant architectural components. The focus was on the appearance of the roof, the prayer room, the porch space, the ablution space, and the *adzan* (call for prayer) tower (Figure 4). There are a few surveys conducted of the architecture and the 'Sense of Place', architectural documentation and secondary sources from the authorities and the history based on the mosque philosophy.

### 3. Case study – Masjid Ar-Rahman

This mosque (Figure 2) was designed with local and the hybridised Malay Archipelago architectural identity in mind. Located on a small site of only 0.69 acre bounded by houses, this masjid was proposed to replace an existing old structure and to provide a larger prayer hall and facilities. In keeping the regional architectural heritage alive, Masjid Ar-Rahman was built with 90% solid timber for construction with *cengal* wood for the main columns, clay tiles for the roof and the rest of the materials were of concrete especially for the toilet and ablution areas (Figure 3).



**Figure 2.** Masjid Ar-Rahman Plan (Source: Author)

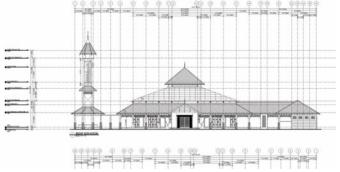
The perforated wall panels for natural ventilation were carved out with verses from the Koran and constructed of Indonesian teak wood (Figure 4). The two pillars of date tree trunks (Figure 5) in the mimbar area were imported from the Middle East and carved by the carver artisans of Jepara, Central Java. Uniquely, the ceiling was woven from bamboo in highlighting the sustainable of the local material (Figure 6). This is the first mosque in Malaysia that has five main pillars (Figure 7) in the centre of the prayer hall to symbolise the five pillars of Islam. The focus of the architecture features

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the tiang seri. This is an indication of the placement of tiang seri as seen in the Malay vernacular architecture as well as in *joglo*. The word *joglo* refers to the shape of the roof and is referring to a type of Javanese people traditional vernacular house (Javanese *omah*). The Javanese culture is highly hierarchical where the type of the house roof reflects the house owner's social and economic status and Javanese aristocrats are traditionally associated with the joglo houses. A dwelling (*omah*) or a pavilion *pendopo* can be constructed with *joglo* roof. Main other details of the architecture feature a lot of Malay Kelantanese architecture style especially of the main walls of stylised *janda berhias* arrangement (Figure 8). The ornamentation of the mosque was handcrafted with the combination of Malay and Javanese influences (Figure 9). The setting of the mosque, surrounded by rivers and greeneries, allows the emotional experience to be well immersed with the religious beliefs. This is marked by a minaret that was constructed of solid wood and concrete with Kufi calligraphy carving on all facades, to portray an iconic landmark within the surroundings.



**Figure 3.** Masjid Ar-Rahman Plan Source. Arkitek Punca Cipta [15]



**Figure 4.** Masjid Ar-Rahman Right Elevation Source. Arkitek Punca Cipta [15]



**Figure 5.** *Mimbar* Area Source: Author



**Figure 6.** Woven Bamboo Ceiling Source: Author



Figure 7. Tiang Seri Source: Author



**Figure 8.** *Janda Berhias* Walls (Source: Author)



**Figure 9.** Carved Lamp Shade (Source: Author)

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#### 3.1 The environment

The environment of the mosque offers the mosque a setting (Figure 10) that is conducive for the creation of the 'Sacred Places' through the establishment of the 'Sense of Place'. The magnificent timber masjid was built on an island in the lagoon of Pulau Gajah, Sabak, Pengkalan Chepa, Kelantan. The mosque is surrounded by the Sungai Pengkalan Datu (Figure 11) and mangrove trees that create a peaceful surrounding suitable for religious activities at the mosque.



**Figure 10.** The Environs of the Mosque Source: Arkitek Punca Cipta [15]



**Figure 11.** Sungai Pengkalan Datu Source: Arkitek Punca Cipta [15]

Practically, the surrounding verdant and near a body of water provide the mosque with cool air all the time. Furthermore, the open space plan of the mosque has already maximised the natural cross ventilation breeze for the interior of the mosque. These conditions further enhance the existence of the mosque that coexist. The sacred ambience created for the believers ensure the creation of the 'Sacred Places' for the mosque and to some extent many believers believe that the mosque uplifts their spiritual level to make their worshipping experience full of humility towards Allah. The strong connection between the 'Sacred Places' and the theoretical framework of the 'Sense of Place' of 'Perceived', 'Conceived' and 'Lived' spaces depict the narrative of the Masjid Ar-Rahman. Ultimately, the 'Lived' space is experienced with the condition of spirituality relating to the Islamic religious teachings and the performed rituals. All these space triad concepts come together in the creation of the 'Sacred Places'.

# 4. Findings and discussion

# 4.1 Findings

The mosque architecture has a space twofold conception: spiritual and physical and at times emotional, epistemological, and aesthetical [16] that creates originality and creativity. An architect has the responsibility to decipher this conception to compose form and structure as these are the basic areas of concern. The architect is required to become a mediator and a negotiator of knowledge, experiences, belief systems, and ways of life, in bringing on the design, the basics of building by-law or codes, local zoning policies, and socio-cultural principles. It is within this sanctuary, an area of the main assembly space (or *musolla*) where the believers gather to pray daily, read the Qur'an, and engage in weekly religious activities hence seen as a 'sacred place'. The 'Sense of Place' is all about the design conceptualisation of spirituality that brings on faith forward, and aesthetically pleasing appearances that can support the preservation of beliefs and cultural identity. The various forms of the architectural components constitute the elements of religious structure for the believers. The simplicity of these forms reflects Sufistic beliefs producing elements of the chosen connection between spiritual tranquillity, spatial impartiality, and aesthetical simplistic beauty. There is no artistic value to the aesthetics of a mosque but mainly appearing in affecting the worshippers mentally, emotionally, and

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spiritually. Thus, the 'Sacred Places' produced can be identified embarking from the Islamic teachings and in the Masjid Ar-Rahman's case, this a mosque architecture within a Sufistic realm.

#### 5. Conclusions

Mosque, as a sacred place, is not only functioning as a place of worship per se, but also a monumental display in the form of landmark to show the ruling authority in the conquered land. The architectural forms were diverse according to the tradition and characteristic of the region as well as the geographical locations. The non-confessional use of the place also a significant part of the local inhabitant's raison d'être [17]. Besides, as a religious institution, mosque is built for social bonding platform. Hence, the concept of communal mosque or *jamek* mosque has been evolving since the early era of the development of Islam. In other words, mosque is a prominent space for community socialising as well as for daily religious activities [18]-[19]. To the Muslim believers, mosque is an essential element in their life that created strong emotional ties based on the religious experiences and memories that built over time, in which the sense of place is formed. The 'Sense of Place' in mosque architecture based on Islamic teachings offer the worshippers the experience of the 'Sacred Places' through the architectural style and components and the cultural factors that house the mosque. This is further strengthened by Islamic teachings in terms of communities and environmental education as demostrated by the surroundings that situate the mosque. The Masjid Ar-Rahman is the epitome of the creation of 'Sacred Places' despite its modest appearance.

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