CHAPTER 1: INTRODUCTION

1.1 BACKGROUND OF THE RESEARCH

Mosque is the most frequent and familiar monument in Islamic architecture of the world. Any observation pertaining to Islamic art and architecture will touch on the art and architecture of mosque; because a single mosque could tell a lot about the history of Islamic architecture and hence it is sometimes referred to as the architecture of Muslims. Therefore, with all its components externally and internally, mosque should be studied in great details as they (mosque and its components) contain vast information on cultural, social and religious needs of Muslims all over the world.

The spatial composition and quality of mosque architecture should assist in encouraging the believers to adore being in the mosque and within its compound. Whence performing a prayer, the believers must reach the state of *khusyu*\(^1\), as mentioned in the Al-Quran;

> “Successful indeed are the believers. Those who offer their prayer with *al-Khusyu*”

Al-Quran, Surah Al-Mukminun 23: verses 1-2

One way to reach the state of *khusyu*, is the believers should ‘want to’ be in the mosque on their own voluntary will and capacity. The glory and success of a mosque relies mainly on the devotion and submission of the believers. Therefore, in satisfying the needs of the growing community of devotees with dynamic nature of usage, design and planning of mosque is given some element of flexibility (Iskandar, 2005; p: 77).

Mosque is where prostrations of the Muslims take place either in congregation or alone. Qibla wall is one of mosque’s important components as it determines the line of *Ka’aba* direction where the Muslims should face when performing prayers. Hillenbrand (1994; p: 31) once quoted that a building cannot be called a mosque without the wall which is correctly oriented towards the Qibla. The Qibla wall which contains the

\(^1\) To perform prayers with focus, concentration and humbleness towards Allah the Almighty.
Mihrab (that is understood not only by scholars but also Muslims in general as an indication of the direction towards Mecca), holds many roles according to Hadiths and Islamic way of life.

Mihrab and Qibla wall are the two elements that exist in any mosque design as an orientation of prayers and prostration activity which are very significant. All aspects in designing the form of Mihrab on the Qibla wall should be taken into consideration so that the functions will not be misapprehended. These designs and styles will also show the interior beauty of mosque.

Islam is a religion that stresses beauty in all aspects. Al Ghazzali’s interprets that all creation in Islam must have the reflections of Allah’s beauty and majesty as to support the Hadith, “Allah is beautiful and He loves beauty” (Wijdan, 2001). Al-Ghazzali also mentioned that;

“The beauty of each object lies just in its characteristic perfection. When all possible traits of perfection appear in an object, it represents the highest stage of beauty… The beautiful work of an author, the beautiful poem of a poet, the beautiful painting of a painter or the building of an architect reveal also the inner beauty of these men”.

Al-Ghazzali (Ettinghausen, 1948)

Then Gonzalez (2001; p: 22-24) looks through the principle of ‘beauty’ from Ibn Haytham thoughts as the closest to the aesthetic philosophy to the Islamic Middle Age;

“Position, (wad) produces beauty and many things that look beautiful do so only because of order and position. Beautiful writing also is regarded as such because of order alone. For the beauty of writing is due only to the soundness of the shapes of letters and their composition among themselves, so that when the composition and order is not regular and proportionate, the writing will not be beautiful, even though the shapes of individual letters may be correct and sound. Indeed writing is considered beautiful when of regular composition, even though the letters in it are not quite sound. Similarly many forms of visible objects are felt to be beautiful and appealing only because of the composition and order of their parts among themselves”.

Ibn Haytham (Gonzalez’s, 2001; p: 22-24)

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2 Abu Hamid Muhammad al-Ghazali (1058-1111) was one of the foremost intellects of medieval Islam. His personal discontent with scholastic orthodoxy led him to mysticism and the writing of a monumental work which harmonized the tendencies of both orthodoxy and mysticism within Islam (as translated by W. Montgomery Watt on al-Ghazali’s autobiography, The Faith and Practice of al-Ghazali (1953).
In order for the creation to be perfect, Robert Grosseteste (1253) as quoted by Gonzalez (2001), Geometry is the answer to gain perfection in nature. The principles of geometry are present in every part of the universe. Natural phenomenon lies within the lines, angles and figures. Without geometrical means, it is rather impossible to reach ‘proper quid’ in nature. Taking all these thoughts (Al-Ghazzali, Ibn Haytham and Robert Grosseteste) into consideration, the writer concludes that beauty and perfection of mosque art and architecture is vital to encourage the faithful Muslim to perform their prayers in the mosques prayer halls.

Building a mosque is not something that can be done with mere superficial knowledge on Islam only but deep thoughts and consideration must be put into, especially in positioning the order of the mosque components. Some geometrical alignments and ornamentation may be employed and added to the design of mosque to gain perfection. The ornamentation added should be carefully positioned in order to avoid confusion in the mosque components especially on the Qibla wall. Qibla wall with its Mihrab is the focus of the believers upon entering a mosque. Making the Qibla wall different from other walls will guide the users on the Ka’aba direction, despite the complicated floor plan of the mosque.

1.2 RESEARCH GAP

Research on mosque architecture in Malaysia is carried out extensively by Malaysian scholars. Ghafar (1999) came up with a classification of mosque architecture in Malaysia. He made a distinguished research on classifying the mosques of Malaysia through the physical appearance and construction methods. According to Ghafar, the architectural styles of mosques in Malaysia are classified into three categories:

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3 The principles of geometry hold true within the entire universe and within every part of it: it is through its lines, angles and figures represent all the causes of natural phenomena. Those are the true property of nature.

4 The small, cubed building known as the Ka’aba is the building towards which Muslims face five times a day, everyday, in prayer. This has been the case since the time of Prophet Mohammad.
Vernacular, Colonial and Modern styles. Ghafar (1999) concluded that the architectural styles of mosque in Malaysia are governed under five main factors namely ethnic culture, climatic conditions, colonialism, technology utilisation and the political environment. These factors determine mosque designs, forms, shapes sizes and locations. Classification made by Ghafar (1999) is mostly on the physical or external looks of the mosques which does not concern spatial arrangements of the interior and also the mosque’s interior components.

Indigenous artistic creation of Muslim in South East Asia is materialized by Zakaria (1994) encompassing ornamentation on mosques, tombstones, coins and other tangible materials between the 9th and the 16th century. Zakaria covered the historical mosques of South East Asia quite substantively and Mihrab ornamentation is part of Islamic Art in South East Asia. He added that, mosques in the medieval South East Asia were considered to be the centre of power, where every ruler (a Sultan or a King) wanted to be associated with a mosque. Mosques during the medieval Islamic period were products of indigenous handwork from planning to the completion stage; from woodcutters, carpenters, bricklayers to stone carvers; all these skill workers would respond to their local condition such as providing air space within the tiered roofs and the usage of verandah (serambi). Zakaria mentioned that the existence of ornamentation in mosques in medieval period was brought in by the Buddhist converts. Among the earliest is turtle ornament in the Mihrab of Demak Mosque (Figure 1.1; p: 5). His book can be categorized as historical containing descriptions on the existing features and ornaments on the mosques. His research covered a wide scope however not much has been discussed in detail on Malaysian mosques and ornamentation.

Halim (2004) made a distinction by capturing mosque architecture in Malaysia and Indonesia with detailed explanation on each mosque. Most of the mosques under his study are similar to the ones covered by Zakaria (1994). In general his research works
together with the collection of invaluable photographs and sketches do help in getting the general idea on the history of mosque architecture in Malaysia and the *Nusantara* (Malay Archipelago). Looking through the photographs and sketches, it is obvious that most of the traditional and vernacular mosques in *Nusantara* branch out from the same origin of design. Thus, further explanation on the technical sides such as the evolution of *Nusantara* mosques design and layout would give perfection to his book.

![Figure 1.1: Turtle Ornament on Masjid Demak Mihrab Wall](image)

Further investigations should be made to trace the various changes made to the interior spatial arrangement of mosques in Malaysia as part of Islamic world architecture. The spatial analysis of mosques has been conducted earlier by Bandyopadhay and Sibley (2003). Their study was quite successful pertaining to differences in the mosques built by the Ibadis of Central Omani in comparison with the ones built by *Sunni/Wahabbi* in Saudi Arabia. The invaluable finding established that the interesting exchanges in mosques form and organization of Central Omani are actually a result of different tribal migration patterns and sectarian incursions in Northern Oman and United Arab Emirates (Bandyopadhay and Sibley, 2003). This finding supports the notion of different cultures affecting the architecture and design of mosques.

Prior to those scholars, Notkin (1989) did a study of interior spatial organization on mosques and civil buildings in Central Asia. He said such a study is important to prove the correlation between structural-genetic determination of spatial structure which is

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5 Retrieved from [www.eastjava.com/books/walisongo/html](http://www.eastjava.com/books/walisongo/html) on 28th December 2010
unfolding over a period of time and its functional implementation will be determined. As described by Bandyopadhy and Sibley (2003) the classification of spatial structure will give definite answers to the origin of the shapes.

The former and latter scholars support the notion of how different cultural needs affect the architecture and design of mosques. The three scholars centered their studies on mosque buildings in the Muslim world of Central Asia. Only then could it be shown whether these adoptions and adaptations are actually needed in forming the mosques design for Malaysia.

Utaberta, (2009; p: 35-38) did a typological study of mosques based on the external look of selected Malaysian mosques. Most of the mosques in Malaysia contemporarily are said to be facing a ‘Revivalism Crisis’. Earlier, this notion has been taken by Tajuddin (1998), saying that mosque architecture in Malaysia is facing an ‘inferiority complex’. Both scholars centered their research works mostly on the external look of Malaysian mosques that features on the Ottoman and Safavids monumental styles. Tajuddin, (1998) worked on a very descriptive study on proving the benefits of having mosque as a community development centre. He believes that by doing so, mosques can be occupied and glorified similar to the one built by the Prophet Muhammad’s. Mosques should be the center to hold all activities encouraging unity and brotherhood among Muslims. Tajuddin’s (1998) effort in rejuvenating the Prophet Muhammad’s mosque is much appreciated, but the present community is different from during the early years of Islam and surely their needs are also ways apart and this explains why there are additional components found in mosques built after the Prophet Muhammad’s era.

Mosque architecture is similar to residential architecture and both of them are categorized under socially inspired type that cannot be studied based only on physical factors. According to Tice (1993), this type of architecture should give the feeling of
comfort through spatial arrangement that satisfies the psychological tranquility to the users in different cultural needs. Spatial arrangement of a mosque relates to the placement and condition of the components internally.

Hasan-uddin (2002), analyses the physical form of mosque throughout the world by means of plans, elevations and photographs. This study too owes detailed explanation and conclusion on the typological result of mosque especially in South East Asia.

Mosque or masjid or also referred to as the house of God, is a building where Muslims go for worship (Collins Dictionary 2003). Clarifying on the word ‘worship’ is a very subjective matter. Wherever the worship is performed, alone or in a congregation, total submission or full attention and concentration towards the prayer is mandatory. Going to the mosque must primarily be on voluntarily basis (ikhlas) and not because of secondary ritualistic purpose (El Gohary 1984).

Additional programmes held in mosque could be a motivation factor of going, but these programmes should not be the primary purpose for ‘wanting to be’ (iqtikaf) within the boundaries of the mosque compound. Prophet Muhammad’s mosque (Figure 1.2 and 1.3), in Medina and most of the mosques built during the medieval period brought forward the principle of directionality from the entrance to face towards the Qibla.

![Figure 1.2: The Prophet's mosque after Creswel](image)

![Figure 1.3: The Prophet's mosque diagram (author's own)](image)

On making sacred places Brown (1997) said that the direction towards the Qibla serves as one real goal or centre of devotion indicated by its prayer niche (Mihrab). The Qibla
wall would orientate the faithful in togetherness all over the globe towards a single center that was commanded by Allah the Almighty through his Prophet Muhammad ﷺ.

Rafique (1982) stated that being humans, Muslims have been reevaluating their tradition to answer the call of ever changing circumstances. New adaptation will then be done to face modernization. This results in the alteration which is in line with the needs of the believers while maintaining the fundamentals of the Islamic way of life.

1.3 RESEARCH QUESTIONS

The evolution of contemporary mosque designs makes one wonder on the real focus of intention in having this religious purpose building which leads to more questions regarding the existence of mosque components and their importance in terms of social, culture, political and historical values. It is hoped that this research will disclose the answers for the queries regarding:

1. Mihrab Existence

According to Botsworth (1994), Mihrab did not exist on the Qibla wall of the Prophet Muhammad’s earliest mosque. So how did the Mihrab get to be so important in mosque architecture?

2. Influences of Malaysian Mosques Design

During the 15th Century, Malacca or Melaka (a state in Malaysia) was one of the busiest port in this region. Traders came from the East and West and brought with them goods as well as their social, cultural and architectural influences. This study will look into the influences that were brought in by the traders on the design of mosque in Malaysia particularly in the treatment of the Mihrab and the Qibla wall?

3. Mihrab Design in Malaysia
The states in Malaysia received Islam at different time frames and from different agents. For example, Melaka received Islam through the Chinese, Indian and Middle-East traders during its glorious period as a busy port. The stone inscribed with Islamic rules in Malay Language was found to be at a different period in Terengganu (East Coast of Malaysia). Penang, located at the North of Malaysia, received Islam through Arab and Indian traders at a later date. The states of Malaysia appear to have range of period to embrace Islam and acquire Islamic civilization. Is there any style or influence on different ways of designing a mosque and its components (including the Mihrab) in each of these states?

4. **Mosque Internal Components in Malaysia**

Many studies found out that contemporary mosques in Malaysia are said to be copy-cats of the Middle-East mosques. This notion is obviously stated based on the physical look of the monumental and gigantic modern mosques. Will this conception be different if the mosques are studied through their internal components and layouts?

1.4 **RESEARCH AIM AND OBJECTIVES**

Muslim should observe focus and total attention continuously during prostration to Allah the Almighty. Out of all the components of mosque, Qibla wall with its Mihrab is the most appropriate to act as the main focus of the whole mosque interior. This focus of attention could be enhanced through ornamenting the Mihrab with aesthetical Islamic arts. This research analyses the importance of the Mihrab and Qibla wall to be designed in detail with full consideration and not as mere components in mosque.
The main aim of this thesis is to synthesise the Mihrab through the analysis of its various designs and ornamentation from the selected historical and contemporary mosques in Malaysia. In order to achieve the aim, the objectives listed below are taken:

1. To study on the historical origin, first existence of Mihrab and Islamic standpoint towards Mihrab existence on Qibla Wall in order to determine the majority of Mihrab form and design in Medieval mosques.

2. To classify the types of Mosque design in Malaysia with respect to the built years to overview the possible influences gained by the Mihrabs.

3. To examine the level of Mihrab visibility from the entrance points in order to measure the existence of liturgical axis that provides ultimate focus to visitors.

4. To analyse various styles of ornamentation on selected Mihrabs including calligraphy, two dimensional and three dimensional geometrical patterns in order to generate typological table showing motifs, ornamentation, their origins and influences.

5. To identify types of Mihrabs used in Malaysian mosques in order to generate typological analysis to the shapes and forms including their origins.

1.5 THESIS STRUCTURE

Chapter One is basically on the introduction of this study. It shows the background of this research and its research gaps, research questions, research aims and objectives. It also introduces the bases of research structure where the overall representation of this thesis is simplified into a flow chart. The 23 mosques are divided into three categories according to the built years that also respond to the historical time chart of Malaysia. The said categories are:

- Historical mosques built from 1700 to 1956 are divided into 2 categories;
1. Traditional/Vernacular Mosques
2. Colonial Mosques

- After Independence mosques built from 1957 to 2005

Chapter Two is mainly on the historical literature such as the existence of Mihrab on the Qibla wall of the Prophet Muhammad’s mosque. Mihrab and Qibla wall is then proven to be the most important elements in a mosque. The overall scenario of mosques in Malaysia is also revealed in this chapter. A historical time chart of Malaysia marks important events in Malaysian history is done in a simplified table that helps the research in tracing possible influences gained by mosque architecture in Malaysia. Islamic point of view in the aesthetics creation in mosque as Mihrab and Qibla wall are among the elements that are mostly elaborated with motifs and ornamentation is also explained thoroughly.

Chapter Three looks into Mihrab found in mosques built during the medieval period. Ten mosques were chosen throughout the Islamic Dynasties. In order to list their characteristics, these mosques are analysed by looking at:

1. The overall floor plan of the mosque especially main prayer hall; Visibility of the Mihrab and Qibla wall from the entrance/entrances point is examined. If the level of visibility is high, then there should be a liturgical axis that gives focus of attention to believers towards the Qibla wall.

2. The form and design of Mihrab; Various forms and designs of the Mihrab used in these medieval mosques are identified and distinct typologies are tabulated.

3. The motif and ornamentation. Various motifs and ornamentation styles of the Mihrab used in these medieval mosques are identified. Distinct typologies and their origins are tabulated.

Chapter Four is where detail explanation on the Research Methodology used to carry out the case study research, samplings and visits made to selected mosques of Malaysia are elaborated. The first sample of 179 mosques is then screened down to 23 in three
different stages. This screening process is explained in the Research Methodology chapter.

Chapter Five provides the extracted Research Findings from the visits and detail observation of the 23 mosques which has been selected to be Case Studies for this thesis. Should further explanation and elaboration needed whilst going through the findings in this chapter, then Chapter Six and Seven shall be referred.

Chapter Six and Seven are the elaboration and detailed analysis of the 23 case studies. This chapter contains all the information recorded by several means (photographs, informal interviews, onsite observations and recorded data) during the site visit. Focus of the findings and observations is based on the characteristics seen in the medieval mosques (Chapter Three).

Chapter Eight elaborates the analysis of findings obtained in Chapter Five. The analysis is again studied in three sections:

1. Relationship between mosques’ built dates and mosque floor plan analysis. This will show how Mihrab visibility and safs formation were taken into consideration by previous builders over a certain period of time.

2. Evolution of Mihrab niche form throughout the years. This will give a general idea on the types of Mihrab found in mosques built in Malaysia.

3. Study on the calligraphy works and motifs used for ornamentation on Qibla wall and Mihrab. Common verses, styles of calligraphy, motifs and geometrical patterns are studied. These motifs and geometrical patterns may be vernacular or adapted from other countries or Islamic dynasties.

Chapter Nine elaborates the conclusion of the overall thesis where the contributions to knowledge are defined. Limitations of study and proposals for future undertakings are also listed in this chapter.