

**ANALYSIS OF THE CALLIGRAPHY DESIGN ON SELECTED QURANIC
PHRASES IN THE BLUE MOSQUE MALAYSIA**

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ABSTRACT

The Islamic world has developed many different types of arts since the advent of Islam. Calligraphy is one of the most prominent arts since that time, and it is considered to be parts and parcel of the Quran. Therefore, the Islamic Calligraphy is used to decorate mosques as well as other sacred places such as palaces, shrines, schools and other Islamic buildings. Calligraphy and other artistic elements used for decoration in mosques are meant for the appreciation, glorification and praising of sacredness of the mosques. Wonderful examples of Islamic calligraphy can be found in many mosques in Malaysia. However, in those mosques, calligraphy and other ornaments need to be documented to shed light on the styles implemented in the decoration process of their interior and exterior. Therefore, this research aims to study and analyze the aesthetic value of the Islamic calligraphy in a selected mosque known as the Blue Mosque (Sultan Salahuddin Abdul Aziz mosque) in Malaysia. The Blue Mosque has been selected in the present research due to the uniqueness in its decorations and architecture. Furthermore, it was chosen for the decorations of common Quranic verses written by different styles of Islamic calligraphy in the structure of the mosque. This study aims to show the necessity of studying the Islamic calligraphy used in the Blue Mosque and demonstrate the importance of using this calligraphy in the mosque. The study will also help to provide a new source of information that can be used by tour guides and the people who would like to understand and study the Islamic calligraphy applied on the Blue Mosque.

ABSTRAK

Dunia Islam telah menghasilkan pelbagai jenis seni sejak kedatangan agama Islam. Seni kaligrafi adalah salah satu seni yang paling menonjol sejak masa tersebut, dan ia telah dianggap sebagai komponen penting al-Quran. Oleh itu, kaligrafi Islam telah digunakan untuk menghiasi masjid dan juga tempat-tempat suci yang lain seperti istana, sekolah dan bangunan-bangunan Islam yang lain. Kaligrafi dan unsur-unsur seni yang digunakan untuk hiasan di masjid-masjid adalah bertujuan untuk menghargai, mengagungi dan memuji kesucian masjid-masjid tersebut. Terdapat banyak contoh-contoh kaligrafi Islam yang indah yang boleh dilihat di masjid-masjid di Malaysia. Walau bagaimanapun, kaligrafi dan perhiasan untuk masjid-masjid tersebut haruslah didokumenkan supaya cara perlaksanaan dalam perhiasan dalaman dan luarannya dapat diterangkan. Oleh itu, kajian ini bertujuan untuk mengkaji dan menganalisis nilai estetik kaligrafi Islam di masjid yang dipilih, iaitu Masjid Biru (Masjid Sultan Salahuddin Abdul Aziz) di Malaysia. Masjid Biru telah dipilih untuk kajian ini atas sebab keunikan dalam hiasan dan seni binanya. Tambahan pula, masjid tersebut juga dipilih disebabkan hiasan ayat-ayat al-Quran pada struktur masjid yang ditulis dalam gaya kaligrafi Islam yang berbeza-beza. Kajian ini bertujuan untuk menunjukkan keperluan pembelajaran kaligrafi Islam yang digunakan di Masjid Biru dan juga kepentingan menggunakan kaligrafi ini di masjid tersebut. Kajian ini juga akan membantu menyediakan sumber maklumat baharu yang boleh digunakan oleh pemandu-pemandu pelancong dan pihak-pihak yang ingin memahami dan mempelajari kaligrafi Islam yang telah digunakan di Masjid Biru.

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

Calligraphy “does not attempt to imitate the nature as the nature is not the measure of reality. Therefore, calligraphy just tries to understand transcendental essence of nature as a subject matter. The calligraphic call is not, admire the material world, but admire the Almighty God” (Teparic, M. (2013), p152).

From this quotation started the research about the calligraphy as one of the important arts in the Islamic world in order to explore the mystery behind the making of the Islamic calligraphy as one of important arts in Muslims life.

Mosques around the world have many different styles, where every country follows its unique styles. Generally, each style comes from the identity or from the culture of that country. Most mosques have the same noticeable structure; however, they differ from each other by the type of decoration presented on them. Hence, my research selected the Sultan Salahuddin Abdul Aziz mosque (Blue Mosque) for its unique style of art and calligraphy. The art of designing and construction architecture of the mosque has different styles of calligraphy.

The location of the Sultan Salahuddin Abdul Aziz mosque is in Shah Alam Selangor. His Highness of the late Sultan Salahuddin Abdul Aziz decided to build the mosque when he declared Shah Alam the capital state of Selangor on the 14th February 1974. It took fourteen years to complete the mosque. The Mosque was officially opened on March 1988.

Blue Mosque was designed with many decorations such as the geometric pattern and verses of Quran designed by the Islamic calligraphers. The design of mosque structure the color covered the dome and used in many other parts on the mosque. The traditional

and modern design of the Minber and the Mihrab Minarat carpet made by the Malaysian designers and the design of the Blue Mosque was by the Malaysian architect Datuk Baharuddin Abu Kassim of Jurubena Bertiga International, he designed the mosque with different approach of Malay culture its make the Blue Mosque unique through looking to the dome, most the domes and Minarts in Malaysia have the same design from different countries such as Egypt, Turkey, Iraq, Iran, and India. However, the distinction of the Blue Mosque lies on the design carries many details to show the Malaysian culture and Malaysian identity in traditional Islamic architecture.

According to Hamzah, A. R. (2012) in his book *Introduction to Islamic Calligraphy* (p 90); the Blue Mosque was “the tallest minaret and the biggest dome in the world. It is presently the largest in Southeast Asia, able to accommodate a maximum of 24,000 worshippers”. The Mosque in Malaysia is known by the local as the blue mosque because of its blue color dome.

In this study, the objects under consideration were the exterior the interior Islamic calligraphy in the Blue Mosque.

Finally, many potential topics can be reduced from the Blue Mosque, for instance studying the originality of the mosque’s calligraphy, the decoration of the mosque and at last but not least its structure.

1.2 Background of Study

The calligraphy of art was interpreted as “spiritual mathematics materialized and developed by application of calligraphic equipment” (Teparic, M 2013, p 150). Therefore, the Islamic calligraphy can be defined as: the artistic practice of handwriting that leads to the creation of an aesthetic value of the new shape of calligraphy based on both the Arabic alphabet and language used commonly within the lands that are influenced by the heritage of Islamic culture. Moreover, it is important to mention that,

the Islamic calligraphy was derived from the Quran, and Quran has played an important role of the development process of the Islamic calligraphy. Muslims need to record the Quran with beautiful shape and Islamic characters as it is the words of God. Therefore, many styles of Islamic calligraphy have been developed in the Islamic world, for instance Kufic, Naskhi, Thuluth, Riq'a, Diwani and ta'liq.

Initially, in the advent of the Islamic era, there are two types of calligraphy that used during that time, which are Kufic and Nashki. Each type was originated from different pattern of the Nabataean Alphabet. The Kufic script has a wonderful square and angular shape. "after the town of Kufa in Iraq, though it was in use well before the town was founded". The Kufic style was used to write the copies of Quran and for the decorating the mosques at the beginning of the Islamic empire era (Najda. 1994).

Another style of Islamic calligraphy called Naskhi. Naskhi was more cursive and round, and it was used to write documents and the letters. According to Najda "Naskhi, the rounded script, remained in use and from it most of the many later styles of Arabic calligraphy have been developed" (Najda. 1994, Pp 1-3).

Naskh script evolution during the Abbasids period, the vizier Ibn Muqla developed the Kufic script and layout the new rules of shape and proportion of the calligraphy. During that time, calligraphers followed his rules of the writing.

Most research of the Islamic calligraphy was about the history of the calligrapher special Ibn Muqla, Ibn al-Bawwab, and Yaqut al-Mustasimi. "These calligraphers are generally thought by most historians of the subject to be pivotal figures in a direct chain of transmission whose ultimate source was the prophet Muhammad" (Fu, S., Lowry, G. D. & Yonemura, A. 1986,p 103).

Figure 1.1 illustrates the development of Islamic calligraphy. As shown in the figure, Kufic calligraphy consider the source of all Arabic calligraphy in general. Three

calligraphy styles have derived from Kufic: Quranic, Secular and Monumental. Yet, Monumental has instinct, while Quranic; Secular style continued to produce new calligraphies. However, nowadays only a handful of these calligraphies still in use such as (Kufic, Naskhi, Thuluth, Riq'a, Diwani and ta'liq) while the rest have already extinct. It is worth to mentioned that some Arabic calligraphies has specific use for example Riq'a used in everyday writing, while calligraphy like Thuluth has been used in mosques decoration.

The topic of calligraphy analysis for the calligraphy used in the Blue Mosque and its effects on Islamic art is another medium of visual art that can be used to bring up cultural exchange and religious interaction as well as inter-civilizations dialogue.

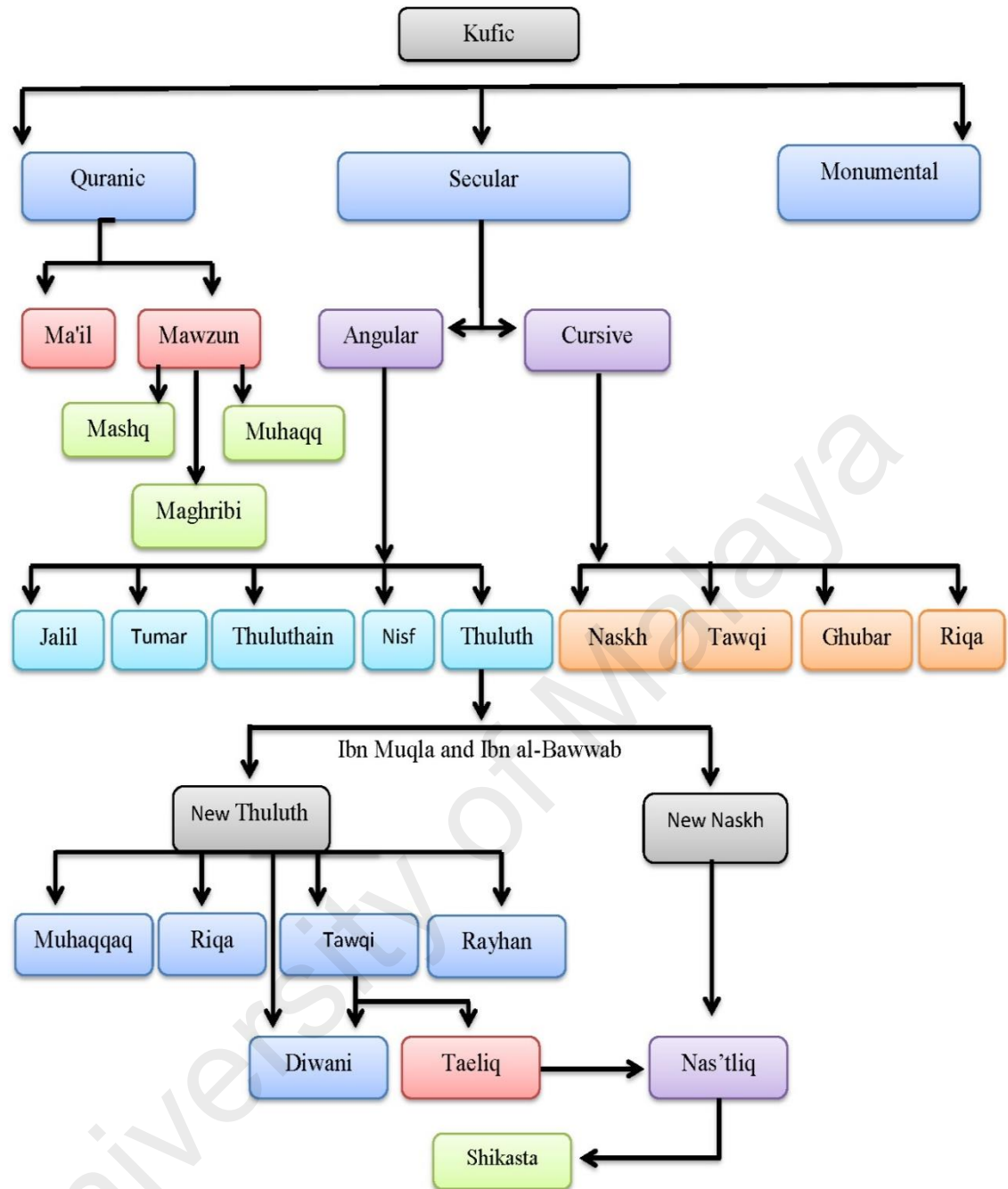


Figure 1.1: The Development of Arabic Islamic Calligraphic (Tabbaa, Yasser 1991.p119-148)

1.3 Problem Statement

In general, there is a lack of attention and awareness on the value of the Islamic calligraphy. For example, the documentation process of the calligraphy on the Blue Mosque structure has not been given any attention by other scholars. However, in Abd Rahman Hamzah's book *Introduction to Islamic Calligraphy and Islamic Inscription in Mosque the Forms and Meaning*, the study was limited to translating the verses on the

Blue Mosque from Arabic to English. Furthermore, the book has given more attention on the mosque architecture rather than the small details such as the style of the calligraphy on the mosque walls, especially on the Mihrab, minaret, Minber and dome. The historical aspect of the calligraphy applied on the mosque structure such as its Islamic background, form, and even dimensions have not been discussed in the earlier mentioned book. Therefore, the above highlights the need for a mathematical research based on detailed documentation process in order to preserve the Blue Mosque heritage.

The following are the research's problem statement:

The inadequacy of the previous study led many scholars to neglect the Islamic art of Malaysian mosques from different approaches, especially the mathematical analysis of the calligraphy. This study should include the aspects of language, history, religious and culture of art as well as the development of styles presented in the text.

The lack of information on the Blue Mosque has led to the lack of the explanations provided by the tour guide to the tourists visiting the mosque. Those tourists are looking for information on the magnificence of the unique architecture, the calligraphy and decoration applied on the structure.

Therefore, to study and analyze of the aesthetic value of the Islamic calligraphy, the Blue Mosque has been selected in the present research since it is one of the unique decorations and architectures built in Malaysia. This study is expected to share experiences and choices in calligraphy decorating the Blue Mosque which has its own uniqueness of decoration, structure and background. Questions on Islamic calligraphy that related to the mosque structures need to be discussed and explained. The form, content and meaning of the verses in general and describe the styles of the calligraphy have to be included which can contribute new information about Malaysian culture, beliefs, politic, etc.

1.4 Research Objectives

1. To analyse the presentation of the Islamic calligraphy on a selected Quranic verses in the Blue Mosque.
2. To determine the principles of the selected calligraphy in the Blue Mosque in comparison to Ibn Muqla proportion system.

1.5 Research Questions

The study aims to answer the following questions:

1. Which styles of calligraphy are applied on the Blue Mosque structure?
2. What are the content and meaning the Quranic verses of the Islamic calligraphy applied on the exterior and interior including the dome, Mihrab, and Minbar?
3. Why is the mathematical proportion of letters important for Islamic calligraphy?

1.6 Significance of the Research

The significance of this study stems from the importance of focusing on the effects of the calligraphy applied on the Blue Mosque and answering the question of which styles has the most influence on the architecture. Moreover, this study provides answers for some essential questions about the development of the calligraphy and the stages that this structure of the calligraphy went through during its development in Malaysia. In addition, it will provide valuable information to both the mosque's guides and the people who are interested in the calligraphy by providing more specific information on the magnificence of the unique calligraphy applied on the mosque. Finally, this study will have a significant impact on the preservation of the Islamic calligraphy in the Blue Mosque.

1.7 Scope of the Research

The scope of this research is on the Islamic calligraphy applied on the Blue Mosque in Shah Alam. Moreover, the focus is on the analysis of the structure of the calligraphy on the dome, Mihrab and Minber of the mosque. This study is to examine the form of the manuscript and the inscription of the calligraphy.

1.8 Definition of Terms

1.8.1 Definition of Islamic calligraphy

Calligraphy originated word from the Greek word “Kalios” it means beautiful and “Graphia” mean writing. It is an art of writing or elegant writing in any language (Rozniza,O. 2011).

Islamic calligraphy has many different styles some of them disappeared and some are still in existence, such as the as Kufic, Naskhi, Thuluth, Riq'a, Ta'liq and Diwani. Each style has its own history of name, meaning and structure of letters.

1.8.2 Definition of Kufic Calligraphy

Kufic is the oldest calligraphy form of the various Arabic scripts and consists of a modified form of the old Nabataean script. Kufic developed around the end of the seventh century in Kufa city of Iraq.

1.8.3 Definition of Naskh Calligraphy

Naskh one of the famous styles of Islamic calligraphy is a specific calligraphic style for writing in the Arabic alphabet, thought to have been invented by the calligrapher Ibn Muqla in the nine century in Baghdad. The root of this Arabic term Naskh means “to copy” because it is used widely to make copies of important books and manuscripts.

1.8.4 Definition of Thuluth Calligraphy

Thuluth mean in Arabic language “one-third” is a one of the elegant style of Islamic calligraphy invented by Ibn Muqla, which made its first appearance in the eleventh century. Thuluth style achieves the popularity as the most common script in mosques for its astonishing artistic beauty and the special characteristics (Hamzah, A. R. 2007).

1.9 Limitations of the Research

It will be based on:

- The lack of developing original sketch of manuscripts of the calligraphy in the Blue Mosque.
- The calligrapher who did the calligraphy for the Blue Mosque is Shaikh Abdul Munim Muhammad Ali al-Sharqawi, who is an Egyptian who lives in Egypt. Thus unfortunately it is difficult to interview him in order to investigate the perfect analysis for this research. However, interviewing local and foreigner calligraphers who live in Malaysia will be substituted.
- The height of calligraphy applied in the walls and dome of the Blue Mosque is one of the research limitations. Where it is not an easy task to reach those heights without special and expensive equipment.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Calligraphy taken from the Greek word, calligraphy means beautiful writing (Golombek, L., & Welch, A. (1979). Among certain cultures, however the concept of calligraphy goes far beyond this definition. For the Islamic world, the art of beautiful writing has always been of an extraordinary importance as it is related to Quran. Arabic is the language of the Holy Quran-Islam's sacred scripture, which was revealed to Prophet Muhammad (peace be upon him) by Allah S.W.T. It is the language of Muslims worship and the language that binds Muslims at all times and places in a single cohesive brotherhood. The art of calligraphy developed at the hands of the Arabs and Muslims into a fine art that stands in the forefront of Islamic arts. This is because of three important factors:

Firstly, the Religious motive of writing the Quran in Arabic script. Secondly, the Prohibition of depicting living creatures in the early ages of Islam. Finally, the Arabic letters are flexible to reshape that inspires the quality of abstraction and innovation (Muhammad, Z. 2002).

There are many calligraphy styles in cursive or angular developed from the early period of Islam. Some of these styles still exist such as Kufi, while some others are not popular anymore such as Tumar. Some of the styles are only familiar in certain places such as the Firamouz scrip As Quran obtained Muslims profound respect and love, the art of calligraphy had developed among them from the early times to a very high degree. The *Ummah* (nation) that created Islamic civilization could not live without using the pen and The Quran mentioned that several times of the importance of writing. In one of the earliest revealed Surahs, Surah 96, al-Alaq, verses 3-4, (Allah S.W.T.) is described as the Almighty Who "taught man by the pen". In Surah 68, al-Qalam, the oath begins: Tr: Nun: And by the Pen. The idea of writing is found everywhere in the Holy Book: The

Quran is pre-eternally written on the well-preserved tablet (Surah 85, al-Buruj, verses 21-22); two recording angels are ordained to write down man's deed (Surah 82, al-Infitar, verse 10), and at Doomsday man will be given the book of his deeds in his hand (Surah 17, al-Isra', verse 73; Surah 10, Yunus, verse 62; Surah 34, Saba', verse 4).

Writing was considered to be of Divine origin- every human fate is written since pre-eternity. Even today, the Muslim will call fate as *maktub* "written". It is therefore, perfectly natural that the Muslims had started writing the Quran in a way worthy to acknowledge its eternal beauty. The fact that everybody who embraced Islam had to learn Arabic at least to the extent of uttering correctly his or her prayers and to recite the Quran made the Arabic alphabet a distinctive feature of all Muslim people all over the world. Every Muslim feels attached to the letters of the Quran.

Though, in the course of time, slight regional differences came into existence, the essentials of the Arabic script have remained unchanged for almost fourteen centuries. Prophet Muhammad enhanced the importance of writing to his followers as there were only few of them in the beginning who could read and write and had committed to the Quran writing, including the four early caliphs. At the end of Prophet's life, he had about thirty thousand contemporaries who had heard and memorized the Quran in whole or in parts (Faruqi, I. & Lois L. 1986). Uthman, the third caliph, put the material into order which is still preserved today and Ali, the fourth caliph, contributed valuable touch in calligraphy as he was also considered by the later calligraphers, as the first master of calligraphy. (Schimmel, A. 1970)

2.2 The origin of Islamic calligraphy

The Arabic script that was developed from the Semitic alphabet which existed in the Arab Peninsula at the time Prophet Muhammad (peace be upon him) started preaching (Schimmel, A, 1970). Although in the past there had been many contentious views about the origins of the Arabic script and its relation to those in the Semitic group, all

serious scholars agree today that the North Arabic script, which eventually prevailed and became the script of the Quran, relates most substantially and directly to the Nabataean script, which was itself derived from the Aramaic script (Safadi, Y. H. 1987). The Nabataeans, who were semi-nomadic Arabs, inhabited an area extending from Sinai and North Arabia to Southern Syria, and established a kingdom centered around the main cities of Hijr and Petra from 150 BC until it was destroyed by the Romans in about 105AD. Their language and script continued to have a profound impact on the early development of Arabic writing. The inscriptions of Umm al-Jimal (about 250 AD), Namarah (328 AD), the Zabad (512 AD) and inscription from Harran (568 AD) are numerous inscriptions left by the Nabataeans which confirmed the derivation of the Arabic script from the Nabataean, and which was directed to the evolution of distinct Arabic forms (Mahmood, S.1981). The early Muslim calligraphy was divided into two folds; an angular script (Kufi) used for transcribing the Quran and certain other documents; and a rounded script (Naskh) meant for public and for more frequent use. It was developed based on the early writings of neo-Sinaitic and Nabataean. The angular script (Kufi) was imposing, stately, and monumental and had a hieratic flavor. It was the pre-eminent script for copying the Quran the earliest reference to Arabic script proper is with the name Jazm. The Jazm's stiff and angular characteristics and the equal proportions of its letters no doubt influenced the development of the famous Kufi script, which followed some time later, and in which these same qualities predominated. It continued to develop and gradually emerged as the script of all the Arabs. (Safadi, Y. H.1987).

As Islam spread to ever-wider horizons, gradually the rules were established for linking many of the Arabic letters. A concern developed that the revelation would be lost or distorted unless a standard text could be sent to each politico-religious center of the Islamic state. This process also brought new demands to improve the script and refine

its rendering. The system of diacritical marks, which was adopted from Syriac was introduced by Abu'l-Aswad al-Duali (Safadi, Y. H. 1987).

Pointing was added to distinguish between those letters that were rendered by a single shape. Further contributions in this direction were made by Nasr Ibn Asim and Yahya Ibn Yamur as they devised a method of differentiating the consonants with identical outlines by introducing dots above, below or within the letters (Faruqi, I. & Lois L. (1986). Al-Khalil Ibn Ahmad al-Farahidi (d. 169/786) then introduced eight new diacritical marks as he replaced the system of using colored dots to distinguish between the marks and the consonants previously. He introduced fathah for short 'a' sound, dammah for short 'u', and kasrah for short 'i'. (Faruqi, I. & Lois L. 1986). According to Hamzah, A. R. 2007, "The *fathah* (*Baris Atas* in Malay) and *kasrah* (*Baris Bawah*) marks are actually from a small slanting *alif* whilst the *dammah* (*Baris Depan*) mark is from a small *wau*. He also introduced *sukkun* (vowless or *Baris Mati* in Malay), *shaddah* (double consonant or *Sabdu* in Malay), *maddah* (*alif* long vowel or *Patas* in Malay), as well as the cutting and joining *Hamzah*. Many styles evolved from the basic angular and rounded scripts".

Some derivatives included features from both categories. Each new script was given a special name and precise rules for its execution. By the late ninth century, more than twenty cursive styles were in common use in addition to the styles of angular scripts.

Figure 2.1 below shows the dots written by Caliph Ali ibn Abi Talib and his son Al-Husain ibn Ali ibn Abi Talib.

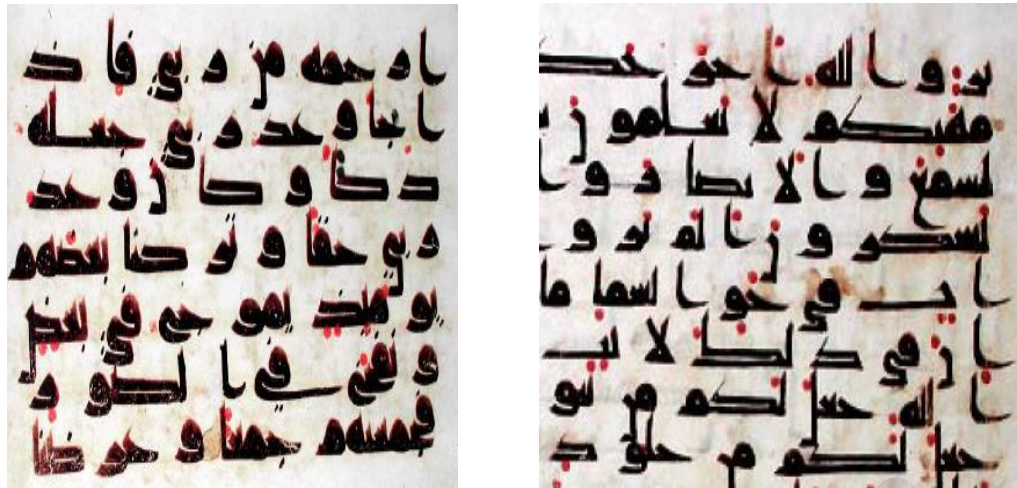


Figure 2.1: Two manuscripts of Quranic verses from the early period. The first was attributed to al-caliph Ali and his son to Husain bin Ali. By Hamzah, A. R. (2007)

2.3 Development of the Arabic Islamic Calligraphy

Writing was introduced to the pre-Islamic Arabs as a result of their relation with the neighboring Nabataean, and they were exposed to the writing and reading method since the 6th century. This knowledge was extended to Hijaz because of various reasons but the most importantly was the economic perspective. (Saleh, I. 2003) One of the personalities who was in Arabic and Hebrew was Warqah Bin Naufal. There are also other documents supporting the fact that writing had already spread to Hira as Khalid al-Walid saw people in Anbar writing in Arabic and taught writing to each other. It was no surprise as some of the early companions of the Prophet were entrusted of copying the Quran. Beyond the restricted use, these scribes also wrote formal letters and other documents for Prophet Muhammad that indicates that they had already mastered the art of writing.

The emergence of Islam made a big impact on Arab life in all respects. The Quranic verses stimulated the earlier Muslim generations to learn and appreciate writing. Upon the rising of the state of Madina, the need in this skill was increased and the Prophet appointed few scribes to perform official documentation.

Among them were Ubai bin Kaab, Abu Bakr, Umar, Uthman, Ali, Zayd bin Thabit and Muawiyah bin Abi Sufyan. Al-Yaqubi also recorded the names of the Prophet's scribes in his book, it reports: "The Prophet's scribes, who wrote the wahy, letters and agreements are Ali ibn Abi Talib, Uthman ibn Affan, Amr ibn al-As, Muawiyah ibn Abi Sufyan, Shurahbil ibn Hasanah, Abdullah ibn Sa'd ibn Abi Sarh, Al-Mughirah ibn Shubah, Muadh ibn Jabal, Zayd ibn Thabit, Hanzalah ibn al-Rabi, Ubay ibn Kab, Juhaym ibn al-Salt, Husain al-Numayri." (Razwy, S. A. A. 2014).

They have left us with many manuscripts that are still preserved, belonging to the periods of Prophet Muhammad. The scribes of the Prophet wrote the revelations (wahy), the Prophet's words, public contracts and transactions, the Prophet's agreements signed with pagans and with Ahl al-Kitab (the followers of the religions recognized by Islam to have existed earlier as true divine religions), the ledgers for Sadaqat (charities) and taxes, the ledgers for war-spoils and for akhmas (plural of khums, an Islamic levy at the rate of one-fifth of one's savings and other items), and the numerous letters from the Prophet Muhammad (peace be upon him) to various rulers. Some of these letters were addressed to the rulers throughout the world, to the chiefs of tribes, to the Roman or Iranian rulers of the Persian Gulf, and to other persons, are invitations to accept the faith of Islam. Some other letters consist of circulars and procedures, which comprise Fiqh (Islamic jurisprudence). Other letters served different purposes.

A good many of such letters expose their writers, as the scribes indicated their names at the bottom of the letters. It is said that the one who initiated the traditional practice of having the scribe's name entered at the bottom of a letter was Ubai ibn Kab, a known companion of the Prophet (peace be upon him).

2.4 The Method of Arabic Letters and Writing

The Arabic alphabet letters, which are derived from the Nabataean, contained 22 letters. In constrain of the insufficient of these alphabets to the Arab pronunciation, they added

the original Nabataean with six new letters. They were: ث (th), ق (kh), ض (dh), ذ (d), ز (zh) and ج (gh). These letters were also called as rawadif as they added these letters into the original 22 letters with similar form as the Semitic letters or al-Sami al-Shimali. (Baalbaki, R. 1981).

Both the names and the sounds of the letters of the Arabic alphabet rest mainly on traditions. Most of these names had been derived from the Semitic ones, which referred mainly to everyday objects such as a house (beth) ب or ba, د a door (daleth) د or dal, ك a hand (kaf) ك or kaf, an eye (ayin) ع or ayn etc.

The completion of structuring the Arabic letters evolved in two centuries, starting from early 4th century to the 6th century. The characteristic of epigraphy in Hira (568AD) appeared with the new complete Arabic letters for it was the earliest inscription written in this form before the revelation of Quran.

The persistence of development or adjustment to the Arabic letters afterwards did not change these fundamentals. (Mohammed, Y. Z. 1992) the appreciation towards writing stimulated the Arabs to spread the knowledge among all Muslims. It increased the number of literate without any discrimination. There are numerous monumental inscriptions dated to the early Islamic period especially during the period of Umayyad's as there was a particular study by Saleh Ibrahim on sixty inscriptions located around Arafat and Mina, in which most of them dated to the first century. (Saleh, I. 2003)

Inscriptions during the first century can be found in many types of material. There were foundation inscriptions (chronograms), which appeared on a dam near Taif. It was written that the construction was commanded by Muawiyah bin Abi Sufyan (58/678) and this inscription was said to be the earliest inscription on Islamic building. There were also inscriptions inscribed on dinars, which belong to the reign of Caliph Abd al-Malik bin Marwan dated 77/696. It was said to be the earliest of Arab Dinar from the Islamic lands written fully in Arabic.

2.5 The Classification of the Islamic Calligraphy

Arabic writing, at first, was merely a mean of conveying knowledge but later became a lively and delightful expression of aesthetic beauty. It continued to develop and diversify until the methods of letter modification or partial letter variation in individual letters or in syllables became so exaggerated that each modification became a style in itself. According to Salih Ibrahim, the names of calligraphic styles (especially for the first three centuries of Hijrah) were referred to the following factors (Saleh, I. 2003).

Place or location where the script was developed or established. The obvious examples are Makki, Madini, Isfahani, Sudani and Basri scripts. Makki and Madini also known as Hijazi scripts were used to copy the Quran during the period of Prophet Muhammad and the first three caliphs.

Personal names, for example Nasiri, Ismaili, Ghazlani, Yaquti and Firamouz scripts. There was a copy of Quran by Firamouz script and the name belongs to a person from Iran.

The characteristic of the pen, for example Mudawwar or circle shape, Muthallath or triangle shape.

Writing method. The best example is the Muhaqqaq script, which was written meticulously and among the most difficult and fine script, which needed a really talented scribe.

Occupations of the script. There were scripts known as Shakistah, Diwani and Tawqi'. For example, Diwani was invented by the Ottomans for the use in Diwans (Government Offices).

According to the writing instruments, for example Riq'a script, which means a piece paper, cut out that is sufficient for small writings. Referring to the size of a pen. There were scripts known as Tumar, Thuluth, Thulthain and Jalil which obtained their names according to the size of pens. Jalil, for instance was called Jalil that means extremely

large, as it was the biggest of all scripts. Because of the huge size, it suits on large surfaces such as the inner and outer surface of mosques, on domes, facades or other parts of a building. The script written on the Dome of the Rock is the best example.

2.6 The Major Styles of Calligraphy

The Umayyad period (41-132/661-750) was particularly remarkable for the development of the Kufi scripts but the Abbasid period (133-656/751-1258) was generally considered to be the golden age of the art of calligraphy. Amongst the Abbasid calligraphers, Ishaq Bin Ahmad was among the most celebrated with his conception of several styles of calligraphic art. Each style was named according to its subject and purpose.

Those styles are classified as Tumar, Sijillat, Uhud, Amanat, Dibaj, Madih, Murassa, Ghubar, (Nasim, A. 2002). After Ishaq came Ibn Muqla, who was renowned for his contributions to the development of Islamic calligraphy. The development of Islamic calligraphy, which was established by Ibn Muqla and which had attained its ideal in the splendid achievements of Yaqut, left a big impact on the popular styles of calligraphy. (Schimmel, A. 1970) It is appropriate, therefore, to look at the major scripts in more detail.

2.6.1 Kufi Calligraphy

Kufi was the dominant priestly script in the early times. The Kufi script developed from the Jazm, al-Makki and al-Madini scripts and became prominent after it received fixed rules and later spread to most parts of the Islamic world. (Khader S. 2001) The script had specific proportional measurements, along with pronounced angularity. It became known as al-Khat al- Kufi (Kufi script).

As Kufi reached perfection in the second half of the 8th century, it superseded other earlier attempts of improvement of Arabic calligraphy, and became the only script used for copying the Holy Quran for the next three hundred years. Unfortunately, the precise

dating of the early Kufi Qurans is impossible to determine since the great Arab libraries in Baghdad, Cairo, Madina and Tripoli were destroyed and complete manuscripts with proper colophons giving their date and place of execution were not preserved. However, some indications for the dating of later copies of Quran were provided by donation notices, which were affixed to the manuscripts. Among the oldest dedication bears the date 866AD and 880AD. (Atıl, E. 1975) Kufi script had a profound effect on Islamic calligraphy.

In contrast to its low verticals, Kufi has horizontal lines that are extended. The script is considerably wider than it is high. This gives it a certain dynamic momentum. With its glorious geometrical construction, Kufi could be adapted to any space and material - from silk squareds to the architectural monuments. Because Kufi script was not subjected to strict rules, calligraphers employing it had virtually a free hand in the conception and execution of its ornamental forms.

There are two notable schools of Kufi, one in the East and is referred to as Eastern Kufi and the other developed in North Africa, known as Western Kufi. Each of these variants was distinct not only from the other, but also from original or Archaic Kufi. The original Kufi, which is the parent of these two, is still used today for certain purposes like chapter headings in books, particularly of a religious nature and also on buildings for architectural inscriptions. Kufi gradually lost its eminence especially from the thirteenth century, as this style became stereotyped and repetitive. Designers within this period reserved their greatest artistic efforts in elaborating cursive scripts. (Afifi, F. S. 1990) divided Kufi into four categories:

1. Archaic Kufi.
2. Fatimid Kufi.
3. Squared Kufi.
4. Modern Kufi.

The second type is called the Fatimid Kufi or decorated Kufi, which is a stylish modification of the archaic Kufi. The characteristics of this category include various styles of decoration applied on the letters itself – horned vertical letters etc., or on the background. The most popular styles of this category are the plaited Kufi, foliated Kufi and floriated Kufi.

لا ا ا ب ت ث ج ح خ د ذ ر ز ش
س ش ص ط ظ ض ظ س ش
ط ظ ع غ خ ح ف ق ك
ك ك ل ل م م ن ن ن
ه ه و و لا لا ي ي ا ا

20



Figure 2.3: In the name of Allah planted Kufic style. Calligrapher Mohammed Abdulkader - Egypt



Figure 2.4: Floriated Kufic style. Calligrapher Mohammed Abdulkader - Egypt

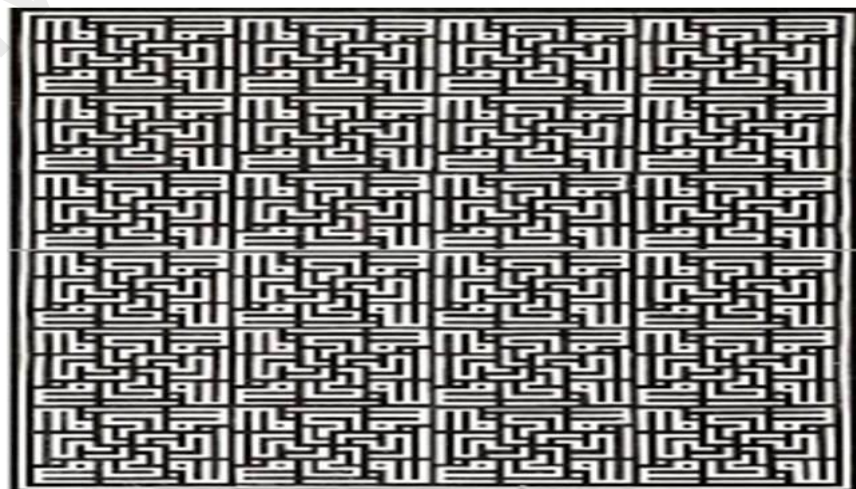


Figure 2.5: Two examples of Squared Kufic. (Top) Tr: There is no God but Allah, Muhammad is His Messenger. (Below) Tr: Allah is my Lord. By Hamzah, A. R. (2012)

2.6.2 Naskh calligraphy

Naskh was one of the earliest scripts to evolve. It gained popularity after being redesigned by the famous calligrapher Ibn Muqla in the 10th century. Because of Ibn Muqlah's comprehensive system of proportion, Naskh displays a very rhythmic line. It was called Naskh because scribes used it in transcribing the Qurans (Khader S. 2001). Naskh means "eradicating" because it replaced the role played by Kufi script, also means "copying" especially for transcribing the Quran, refined into a fine art form in Turkey in the 16th century. Since then it became generally accepted for writing the Quran.

Naskh later was reformed into an elegant script worthy of the Quran and more Qurans have been written in Naskh than in all the other scripts together. Since the script is relatively easy to read and write, Naskh appealed particularly to the general population. Naskh is legible and clear as it is usually written with short horizontal stems and with almost equal vertical depth above and below the medial line. The curves are full and deep, the uprights straight and vertical, and the words generally spaced well. Currently, Naskh is considered the supreme script for almost all Arabs and Muslims around the world.



Figure 2.6: Surah Al-fatihah Naskh script.by Hamzah, A. R. (2007)

2.6.3 Thuluth calligraphy

Thuluth script was first formulated in the 7th century during the Umayyad caliphate, but it did not develop fully until the late 9th century. The name Thuluth means “one third” because of the proportion of straight lines to curves, or because the script was a third the size of another popular contemporary script, which was Tumar.

The predominant view among researchers is that the term Thuluth (one third) derives from a ratio taken from the volume of the Tumar size of pen. This pen took its name from the sizes of paper on which it was written, the largest of which was the Tumar. This pen was used by caliphs for signing decrees and letters, and for writing to other caliphs and Sultans. It was agreed that the area of the head of the Tumar pen should be

24 hairs of a packhorse stuck together, and the largest calligraphic styles were written with it and al-Thuluth (one third) is eight hairs. (Khader S. 2001).

Curved letters written with barbed heads characterize Thuluth script. The letters are linked and sometimes intersecting, thus engendering a cursive flow of ample and often complex proportions. Thuluth is known for its elaborate graphics and remarkable plasticity. It can be formed into simple or basic Thuluth, Thuluth Al-Jali, Aynali (the mirrored image style) and the merged Thuluth (Afifi, F. S. 1992).

Jali Thuluth is specific for writing on a big surface. There are different rules and shapes for the Jali Thuluth compared to the simple Thuluth. The size of the Jali letters is bigger and the pen nib must be at least eight mm width. It has more variety and usually applied in buildings, mosques or other surfaces. A very high skill is needed to make the work looks balanced and harmony from whole structure (Afifi, F. S. 1990).

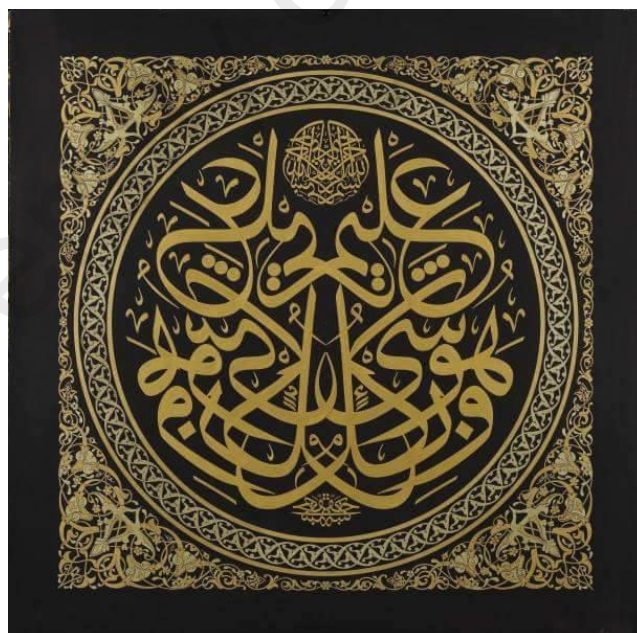


Figure 2.7: The Aynali Thuluth by Turkish Ismail Hakki Altunbezer from first half of the 20th century.

The Quranic text is Tr: and He is the knower of everything.

Merged Thuluth is an interlaced and knitted words to form certain shape- into rounded, squared or sometimes into figures known as the zoomorphic. The most important rule in

writing merged Thuluth is to always locate the word Allah S.W.T. (if the inscription contains it) on the upper part of the frame. The inscription may be written and organized from right to left, lower to upper or upper to lower, but never from left to right.

Thuluth is considered one of the finest types of scripts. It is a difficult script and the Qurans written in it is of high artistic value. Thuluth has enjoyed enormous popularity as an ornamental script for calligraphic inscriptions, titles, headings, and colophons. It is still the most important of all the ornamental scripts. The beauty of this script embellishes most of the mosques in the world as well as the inscriptions written on the Kiswa of Kabah.



Figure 2.8: The Surah Al-Kursi in merged Thuluth. By Hamzah, A. R. (2007)

2.6.4 Diwani calligraphy

Diwani script is an Ottoman formation parallel to Shikasteh (broken style). The script was largely developed by the accomplished calligrapher Ibrahim Munif in the late fifteenth century from the Turkish/Persian Ta'liq. Diwani reached its zenith in the seventeenth century by the effort made by the famous calligrapher Shala Pasha.



Figure 2.9: Diwani script. By Hamzah, A. R. (2007)

Like Riq'a, Diwani became a favorite script for writing during the Ottoman Empire. Diwani is excessively cursive and highly structured with its letters undated and unconventionally joined together. It uses no vowel marks. Diwani also developed an ornamental variety called Diwani Jali that also was known as Imperial. The development of Diwani Jali is credited to Hafiz Uthman. The spaces between the letters are spangled with decorative devices, which do not necessarily have any orthographic value. Diwani Jali is highly favored for ornamental purposes.

2.6.5 Riq'a calligraphy

This script evolved from Naskh and Thuluth. Although Riq'a has a close affinity with Thuluth, Riq'a developed in a different direction, the geometric forms of the letters are similar to those of Thuluth but are smaller with more curves. Riq'a is rounded and densely structured with short horizontal stems, and the letter *alif* is never written with barbed heads. Riq'a was one of the favorite scripts of Ottoman calligraphers and underwent many improvements at the hands of Shaykh Hamdullah al-Amasi. Later, Riq'a went on to become the popular and widely used script.

2.6.6 The calligraphy of Ta'liq, Nistaliq and Shikasteh styles

Calligraphy is the highest art form of the Islamic civilization, and like all forms of art that came into contact with Iran, it was enhanced and developed by the Persians. It was practiced not only by professional calligraphers, but also by princes and nobles

themselves. Calligraphers were an essential requirement for any self-respecting court, both to instruct the prince's children in the principles of the art and to produce manuscripts for the royal library.

During the 16th century in Persia an extremely important calligraphic development took place with the formulation of Ta'liq script from Riq'a and Tawqi. The rounded forms and exaggerated horizontal strokes that characterize the Ta'liq letters were derived primarily from the Riq'a script. The ornateness and sloping quality of the written line had roots in the Tawqi script of Ibn Muqla. Designed specifically to meet the needs of the Persian language, Ta'liq was used widely for royal as well as daily correspondence until it was replaced by Nistaliq. Ta'liq was written with a thick pen obliquely cut and looks quite different from the earlier scripts.

Basically it is the combination of short thin verticals with broad horizontals whose natural length is exaggerated whenever possible, especially at the end of words. Ta'liq which means "suspended" or "hanging" is also called as "Farisi" script by some Arab scholars. It is said to have got its designation from its letters being coupled to each other and giving a presentiment of suspension.

Ta'liq script is believed to have been developed by the Persians from an early and little known Arabic script called Firamuz. The calligrapher Abd al-Hayy, from the town of Astarabad, seemed to have played an important role in the script's early development. His patron, Shah Isma'ili, encouraged him to lay down the basic rules for the writing of Ta'liq (Safadi, Y. H. 1987).

From Ta'liq, an even lighter and more elegant form evolved, known as Nistaliq. Nistaliq is a compound word derived from Naskh and Ta'liq. All the important sources agree that the Persian calligrapher Mir Ali Sultan al-Tabrizi (d. 1416) was the founder of this script. According to legend Mir Ali prayed earnestly to be granted the gift of creating a beautiful new calligraphic style. The Imam Ali appeared to him in a dream and

instructed him to study a certain bird (flying grouse). (Safadi, Y. H.1987). He was then inspired to model his letters on the shape of its wings and movement.

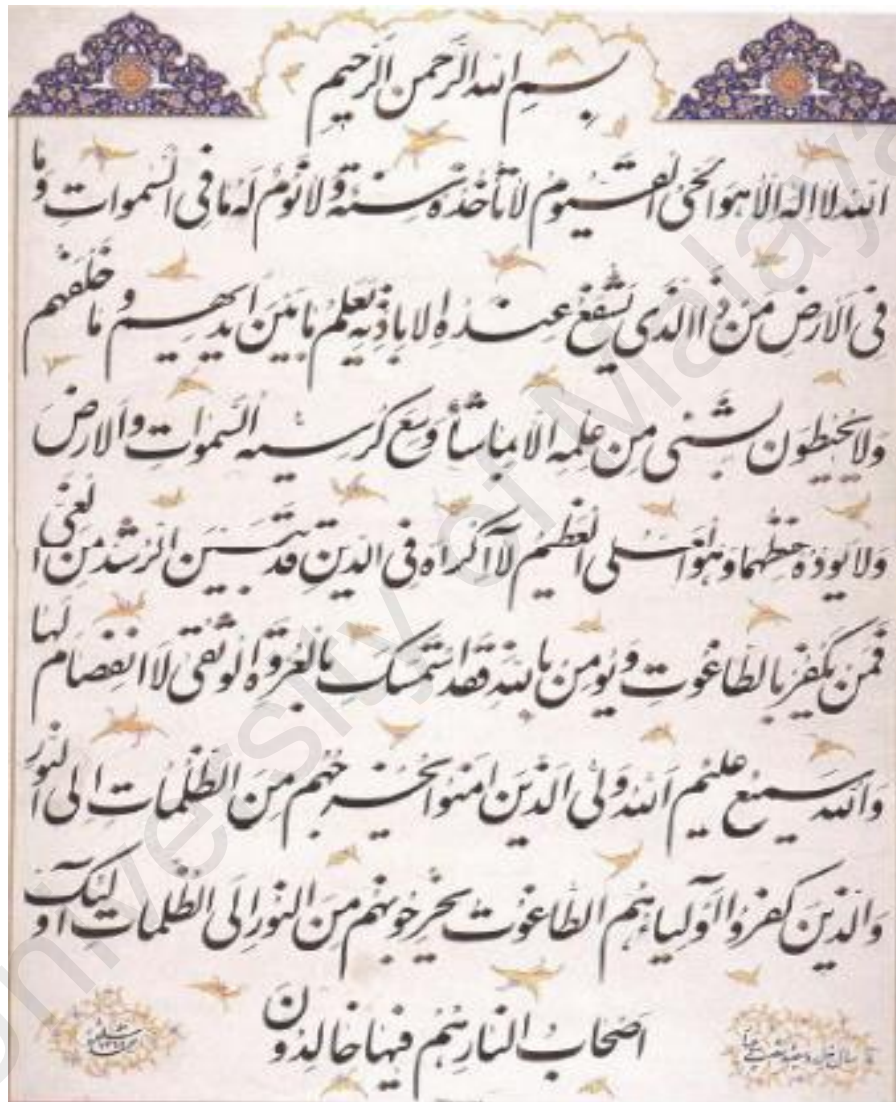


Figure 2.10: The Surah Al-Kursi written in Nistaliq script. By Hamzah, A. R. (2007)

Nistaliq featured elongated horizontal strokes and exaggerated rounded forms. The diacritical marks were casually placed, and the lines were flowing rather than straight. In contrast to other scripts, the Nistaliq script has characters that appear to swing from the upper right to the lower left of each word as if suspended by an imaginary line. The

Nistaliq script was the predominant style of Persian calligraphy. It was used extensively for copying Persian anthologies, poetry, epics, and other literary works, among them the famous Firdowsi's epic Persian myth Shah Nameh (Book of Kings) but not (seldom) for the Holy Quran. The Persian and Turkish calligraphers continued to use Ta'liq as a monumental script for important occasions. (Minorsky, V. & Wheeler M. T. 1959). It was frequently incorporated into contemporary paintings and is traditionally considered to be the most elegant of the Persian scripts.

The reign of the great Shah Abbas was the golden age for Nistaliq. It produced a large number of master calligraphers, the most famous of whom were Qasim Shadi, Shah Kabir al-Ardabili, Kamal al-Din Herati, Ghiyath al-Din al-Isfahani and Imad al-Din al-Husayni. (Safadi, Y. H. 1987).

Baba Shah Isfahani was famed as a master of the Nistaliq style of calligraphy. A modern authority on calligraphy has remarked, "By general agreement of historians contemporary with and later than Baba Shah, no calligrapher had reached his level in writing Nistaliq before Baba Shah appeared. He was adorned with an elegant style and a sweet hand, and even the great calligraphers recognized his mastery". The dates and details of his life have been a subject of some disputes.

According to modern authorities like the Turkish scholar Habib Effendi, Baba Shah Isfahani had begun the study of calligraphy from the age of eight, and studied night and day for eight years with the celebrated Mir Ali Hiravi (d. 951/1544-5), who perfected the Nistaliq style in Herat and Bukhara. Habib Effendi further stated that Mir Imad (d. 1012/1603) was perhaps the most admired master of Nistaliq, who derived his style from Baba Shah. Derived from both Ta'liq and Nistaliq was Shikasteh (broken form), which is characterized by an exaggerated density in the super structured letters. This final calligraphic development in Iran was invented by Sayyid Shafua of Herat in the 17th century. The Shikasteh style is characterized by extreme density resulting from

tightly connected ligatures, very low and inclined verticals, and no marks. Shikasteh is really an elaborate, romantic form of handwriting in which, contrary to its implied meaning, the natural pauses between the letters and words are blurred by the writer joining up the normally empty passages of the verse or sentence. In the 18th and 19th centuries Shikasteh became so involved and totally incomprehensible (Mahmood, S. 1981).



Figure 2.11: Shikasteh script. By Dr. Amir H. Zekrgoo

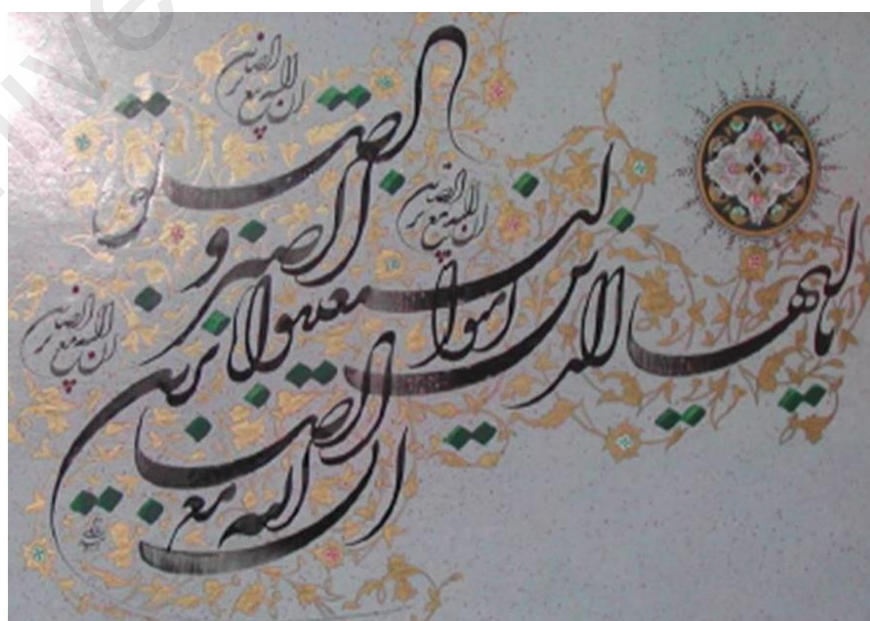


Figure 2.12: Shikasteh script by Iranian master calligraphers Muhammad Heidari

Today, there are ten styles of these scripts being practiced worldwide. They are currently in great favor with the Arabs, and the native calligraphic style among the Persian, Indian, and Turkish Muslims. These styles are usually taught to the beginners by using two different sizes of pen to observe the characteristics of the letters.

At the end of 19th century, in India, Persian style was the most popular style of Nistaliq but within next thirty years, there were three new styles evolved from it. First was Nistaliq Lakhnawi (Developed in Lucknow, India), second was Dehalwi (Developed in Delhi, India) and third was Nistaliq Lahori (Developed in Lahore, Pakistan). Dehelwi Nasta'liq was developed by Muhammad Yousuf Dehelwi and Lahori Nistaliq by Abdul Majeed Parveen Raqam. (Nasim, A. 2002)

2.7 Calligraphy's Unit of Proportion

Geometric principles play an essential role in Arabic calligraphy. As (Khatibi, A. & Sijelmassi, M,) write in *The Splendor of Islamic Calligraphy*, (1976) the legibility of a text and the beauty of its line require rules of proportion. These rules of proportion are based upon the size of the *alif*. The first letter of the Arabic alphabet, the *alif* is, in essence, a straight, vertical stroke. Besides looking at the *alif*, calligraphy considers the Arabic dot, which is the unit of measurement in calligraphy (Jafar, M. 2002).

The dot is a squared impression formed by pressing the tip of the calligrapher's pen to paper. The dimensions of each side of the squared dot depend on the way the pen has been cut and on the pressure exerted by the fingers. The pressure had to be sufficiently delicate and precise to separate the two sides of the nib, or point, of the pen.

Depending on the calligrapher and the style of script, the height of the *alif* varied from three to twelve dots. The width of the *alif* was equivalent to one dot. The important thing was to establish the height for each text. Once the calligrapher had his ideal *alif*, he would draw it in the same way throughout the text. This was the general geometric

principle, although in practice the calligrapher introduced variations. The arrangement of these variations is of great interest. The *alif* was also used as the diameter of an imaginary circle within which all Arabic letters could be written. Thus, three elements- that were chosen by the calligrapher became the basis of proportion. These elements were the height of the *alif*, the width of the *alif*, and the imaginary circle (Afifi, F. S. 1992).

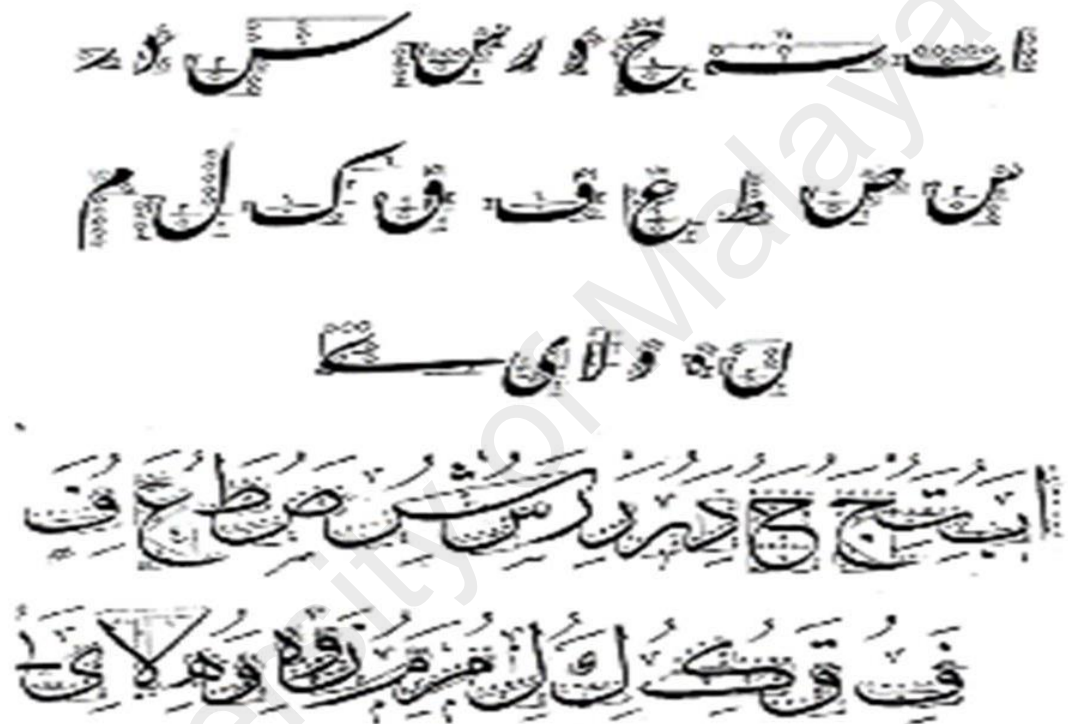


Figure 2.13: Each style has its own calligraphy unit of proportion. In Nistaliq (top), the letter *alif* is three dots tall whilst in Thuluth (below) is seven dots. By calligrapher Abas Al-Baghdadi

In Naskh script, for example, the *alif* is four or five dots high in measure. In Thuluth script, the *alif* is seven dots high with a crochet or hook of two dots at the top. A single character, which is the fundamental element in calligraphic writing, has a head, body and tail. The characters of calligraphic script also are interrelated with relationships of position, direction and interval. Interplay of curves and uprights; articulate the words, vowels and points.

2.8 The Tools of the Calligrapher

2.8.1 Reed Pens and Bamboos

The calligrapher's most precious instrument is his reed pen. Art shops may offer a variety of writing implements, but the best tool, for Arabic calligraphy was, and still is, the reed pen. It allows creating a writing instrument that suits the calligrapher's hand posture and writing angle, rather than having to adapt to a ready-made pen (Jafar, M. 2002) each pen was perfectly crafted so that the line it would produce would be the exact width and style that the artist wished to create. This meant that the minutest of variations had to be applied when crafting the instrument.

The best reeds to use were brown reeds because they were fine and light, with a hard outer skin and a tender inner fibre. This type of reed was most commonly found in India, Egypt, the marshes of Wasit in Iraq, and on the shores of the Caspian Sea. The pen needed to be firm so that it would last throughout the writing of a long text. No two reed pens were ever the same, and each master had his own technique for cutting and shaping the pen. Usually the reeds are harvested from the marshy banks of lakes and rivers in warm regions. They are not usable as pens in their natural state but first must be seasoned by burial (traditionally, for a period of four years) in horse manure, which maintains constant moist warmth. During burial, the reeds harden and changes color, becoming reddish brown, light or dark brown, or even black, depending on the type of reed (Derman, M. U. 1998). There were four stages to cutting a reed. Firstly, the reed was "opened" with a diagonal cut, giving the basic shape to the Qalam, which was then split.

The length of the split depended upon the hardness of the reed and the "weight" of the calligrapher's hand. The standard length of a pen ranged from 9 to 12 inches with a diameter of about half an inch. Ibn Muqla said: "The diameter of reed is between your

thumb and little finger” (Ibrahim, D. 1988). The split was situated either centrally, or at four-tenths across to compensate for wear on one side. The sides were then trimmed and then finally the nib-end was cut. This was done straight down or diagonally, either to let the hard skin overlap which increased clarity, or to allow the inner fibre to protrude which absorbed ink better. It was said that by cutting the nib obliquely, instead of straight across, Yaqut al-Mustasimi added the final ingredients of grace and elegance to the perfect proportions of the letters established by Ibn Muqla. Reed pens were the subject of extravagant poetical metaphors, “cypresses in the garden of knowledge”. The traditional way to hold the pen is with middle finger, forefinger, and thumb well spaced out along the (pen’s) shaft. Only the lightest possible pressure is applied while writing.

2.8.2 Calligraphy Ink

A variety of different recipes existed for producing lustrous black ink, which did not fade. The basic ingredient was soot, added to a heated mixture of water, salt, gum Arabic, grille led gallnuts, iron sulphate and honey. When honey was used to help dissolve the soot, the addition of myrrh was recommended to help repel insects. A wad of raw silk or cotton was placed in the inkwell to absorb the ink and to stop the pen from over-filling. This prevented overloading the pen and creating unsightly blobs (Jafar, M. 2002). Great artistry was lavished on the production of inkwells, as indeed on everything to do with calligraphy. Colored inks were made with the addition of different metal oxides, or arsenic in the case of yellow, while the recipe of Kufa produced dried ink pellets, which were suitable for travel (Derman, M. U. (998).

In Ottoman calligraphy, the most commonly used of the many different colored inks were yellow made of orpiment; white, made of white lead; and gold made by pulverizing high-carat gold leaf into a fine powder in a thick solution of gum Arabic or

honey in a porcelain dish. Then the substance was rinsed leaving the finest gold dust (Derman, M. U. 1998).

In Turkey, the most prized ink was made with soot from the vents of the Suleymaniye Mosque, which apart from its fine quality, was considered to bring with it the Baraka of the place itself. Glass, pottery, precious metals and jade were used, but particularly of note are the cylindrical bronze ink-wells inlaid with silver and sometimes with gold, which appear from the 13th century onwards. Ink was of many colors including black, brown, yellow, red, blue, white, silver, and gold. Black and brown inks were often used, since their intensities and consistencies could vary greatly.

Many calligraphers provided instructions on how to prepare ink, while others implied that their recipes were guarded secrets. The ink made by the Persians, Indians, and the Turks would stay fresh for a considerable amount of time. Ink preparation could take several days and involve many complex chemical processes.

2.8.3 Al-Maqta

The open reed pen was laid on a plaque called a *Maqta*, where a raised groove held it in place while the pen was cut. They were usually made of ivory, walrus tusk, tortoiseshell or mother-of-pearl, materials which are hard but will not damage the blade of the knives, used to cut the pens.

2.8.4 Knife

A good knife was a vital tool for the calligrapher, as its tempered steel blade needed to be razor-sharp in order to cut with the required precision. The blades are usually stamped with the maker's signature, sometimes set into a gold or brass lozenge. The highly decorative handles were made of ivory, walrus tusk, horn, agate, jade, wood, tortoiseshell, steel, or silver, and some are hollow so that they may contain a smaller

blade for splitting the nib. The narrower blades were designed for cutting thin pens for very fine scripts.

2.9 Islamic architecture

Throughout the history, Islamic architecture has developed lots of details and facilities to decorate and show the charm and attractiveness of the Islamic art. Many of this can be found at the mosques, palaces, houses, Madrasa (school), shrines and other Islamic building. The most important sacred art of the Islamic architecture existed on different parts of mosques, such as the dome, Mihrab and Minber.

Calligraphy is divided into six styles, while the ornaments are divided into florals and geometric. Hence, the Islamic elements have a relation between each other. For instance, the Islamic calligraphy can mix with a floral ornament or geometric ornament to give the principles of unity, rhythm, recurrence, symmetry, multiplicity, and the principle of eternity. “The sacred art of Islam is calligraphic writing of the Holy Quran” because the Islamic art was derived from the Quran. Quran divine revelation from the God Almighty (Teparic, M. 2013).

The architecture of mosques has used the tradition of calligraphy, particularly when decorating the interior and exterior. However, the Islamic architecture started from the first year of the migrate the Prophet Mohammed to Yathrib (also known as Al-Madina Al-Munawara), and the first mosque in the Islamic land was built which is known as Al-Masjid Al-Nabawi.

In the Islamic world nowadays, the function of mosque is not limited only to the congregation of the Muslims to perform the prayer in the main hall, but others facilities have become important as part of the structure such as a beautiful landscape, which include big water fountain and wonderful lake, nevertheless, the mosque also has conference room, a library, offices, reception hall and classroom. All these facilities are separated from the main prayer hall.

The surrounding environment in the mosques can give the prayers a comfortable place to perform worships. (Hamzah, A. R. 2011) For example, many mosques in Malaysia have facilities such as mentioned above, such as the Blue Mosque in Shah Alam, Putra Mosque in Putra Jaya and Wilayah Persekutuan Mosque in Kuala Lumpur.

2.10 Calligraphy in Mosques

The word mosque is derived from the French word “Mosque’s” and Spanish word “mezquita”. They are translations of the Arabic word masjid (Rasdi, M. T. H. M. 1998).

Masjid is derived from the radical verb Sajada. In order to arrive at an explicit interpretation of masjid, the meanings of prostration should be borne in mind. Prostration means putting the forehead on the ground or becoming lowly, humble and submissive. It is also a form of salutation or thanks-giving gesture (Hasan, S. M. 1983).

In the present architectural terminology, it is understood as a “building” for use by Muslims for the performance of prayers. However, it should also be noted that the word Masjid which is used generally in the Arab literature, also refers to any place of worship in any religion (Bosworth C. E. & Others, 1980).

A mosque is defined in Shariah as ‘any spot where the practice of prostration (touching the ground with the forehead) can be performed (as an act of worship). It was also described as “a wall correctly orientated towards the Qibla with no roof, no minimum size, no enclosing walls and no liturgical accessories. In fact as the Muslims began to build mosques, and as the number of these mosques multiplied, patterns of mosque architecture began to develop” (Hillenbrand, R. 1994). Within eighty years of the Prophet Muhammad’s death in 632AD, the simple ritualistic requirements of the faith were given a formal architectural expression in a number of great congregational

mosques. These buildings incorporated most of the features attributable to ritual as shown by the Prophet, which has characterized Islamic architecture throughout.

They included an arcaded portico, made of palm leaves erected in courtyard of Prophet Muhammad's house; the Minbar, or pulpit, situated to the right of the Mihrab, recalling no doubt the three steps from which the Prophet preached; the railed enclosure, Maqsurah, to protect the caliph or his representative when leading prayers; the basin for ritual ablutions; and lastly the minaret, an obvious convenience for the call to prayer five times a day (Norwich, J. J.1975).

In general, a modern mosque normally contains the following elements: A courtyard, rectangular and enclosed, a fountain with tank in the center of the courtyard, a Qibla wall, the wall of the mosque that faced Makkah, a Mihrab, the niche in the Qibla wall, a Minbar, the pulpit next to the Mihrab where the imam recited the Quran and gave sermons and a minaret (tower), or minarets, usually one of these is located at each corner of a mosque, and is used by the Muazzin to call the faithful to prayer. The first mosque ever to be erected on earth was The Grand Holy Mosque of Makkah as revealed in holy Quran. This first House of worship appointed for men believed to have been initially constructed by the Prophet Ibrahim (Surah, al-Baqarah, verses 125-127).

2.10.1 Types of Mosques

There are several types of Muslim worship places which are classified according to their functions. After more than fourteen hundred years, the mosques have developed and can be classified into four general types as follows: The community mosque, the Madrassa (school), the Musalla and the memorial mosque (Rasdi, M. T. H. M. (1998). The other word for mosque is al-Jami. This adjective was not known to the first generation of Muslims but was later used to describe a larger mosque where people can gather to attend the weekly Friday prayers.

Each community in the Muslim society usually has a small mosque designed to accommodate worshippers in relation to the population. Each group of several communities can have one larger or Jami type in which they can gather for Friday Prayer.

A small town must have one Jami and a small mosque in each quarter or neighborhood. As for major cities, they have one small mosque in each side street and one Jami or more in each main street.

We can say that mosques in Islam are divided into:

1. Ordinary mosques which are not used for Friday Prayer. These are usually very common and can be found in any part of major or minor cities. They are also called Musalla. Musalla usually refers to a building, a room or a place for the convenience of Muslims outside their residential areas to perform the daily prayers.
2. Higher or Jami type mosques which receive worshippers for the Friday Prayer and for the two Eid Prayers. They are also known as the community mosques. These are the most common mosques for they are the ones used most extensively in the Muslim world.
3. The Grand Holy or Sacred Mosques that are clearly mentioned as holy places in the Quran and in the traditions of the Prophet Muhammad (peace be upon him). They are Masjid al-Haram in Makkah, the Mosque of Prophet Muhammad (peace be upon him) in Madina and the al-Aqsa Mosque in Jerusalem.

2.11 Blue Mosque

In this study, our model to study calligraphy analysis is the Blue mosque. The Blue mosque has been given a great attention by many local research scholars as well as

other foreigner scholars who were looking for something to be considered beyond being a typical mosque calligraphy.

One of the important local researches in Malaysian Islamic architecture is Nurainun Bt Baniyamin. She has focused on a new aspect of architectural design, which is the daylight design in mosques. She has considered the Blue Mosque in her research 2007. She discussed the impact of daylight on worshipers.

On the other hand, Djamel Dilmi who is another important Islamic architecture researcher has written in 2009 about the implication of the Chinese temples script in the Islamic mosque's calligraphy and architecture where the Blue Mosque was one of the main examples in his study.

Furthermore, in 2007 Pasupathy. S in University Malaysia Sarawak has done a research in comparison of architectural design elements between major ethnic groups of Malaysia. The Blue Mosque was one of the samples that she used in her research.

Hamzah, A. R., is one of the most productive writers and researchers in Malays in the field of Islamic calligraphy. He has published a few books in 2011, 2012 and research in 2007. These books and research are related to mosques in Malaysia in general and focused mainly on comparing the Malaysian mosques with others that located in Turkey and Egypt.

He has done studies in the different scripts used in the mentioned mosques and the translation of the verses of Quranic calligraphy from Arabic to English.

Throughout the centuries, many scholars discussed the relationship between calligraphy and its effect on the Islamic culture. The calligraphy is considered a sacred art. However, the interpretation of the calligraphy was pointed out by many scholars from different aspects as aesthetic value, and some have defined calligraphy as mathematical

art. On the other hand, According to Waterman, M. 2009“ calligraphy is the art of beautiful or elegant handwriting as exhibited by the correct formation of characters, the ordering of the various parts and harmony of proportions” (Waterman, M 2009, p2). The following are the point of view from some scholars regarding to calligraphy and why it is highly respected in the Islamic world.

The respect of the Islamic calligraphy from all Muslims stems from the respect of Quran itself, Islamic calligraphy is considered of sacred text of the Muslim. “The reason for this lies in the fact that holy Quran, the divine book and its message are of paramount importance to Muslims” (Hamzah, A. R. 2012).

Calligraphy amplifies, “very often, the crystallization of spirit, a reflection of the artist's spiritual condition and purity of heart, with the condition that their handwriting becomes more and more sophisticated” (Teparic M. 2013 p 150).

“The development of calligraphy might be traced back to the earliest period of Islamic art, when floral motifs started to develop in calligraphy, which represented the first connection of abstract shapes of letters with material forms” (Teparic, M. 2013. p 151).

Khatibi, A. & Sijelmassi, M. in 1996 mentioned that the pliability of the Arabic alphabet letters has produced within the classical calligraphy the expression of figures and characters through writing because such expression did not violate the ideology of Unity. This kind of integration of letters and images uses primarily sacred elements. Although calligraphic work does not necessarily have to belong to the category of sacred art, but they usually have a religious character, depending on the subject of the inscriptions (p 90).

2.11.1 Structure and Architecture of the Blue Mosque

The site of Sultan Salahuddin Abdul Aziz's mosque is existed in the city of Shah Alam in the state of Selangor. The mosque site is located on a small hilltop, occupied 35-acre parkland which slopes down to a lake in which the blue water of the lake beautifully reflects the glory of the sacred building. His highness Sultan Salahuddin Abdul Aziz decided to build the mosque when the Sultan proclaimed Shah Alam as the capital state of Selangor on 14 February 1974. It took fourteen years to complete the mosque. The Blue Mosque was officially opened on the 11 of March in 1988. The following figures illustrate the mosque architecture and facilities.



Figure 2.14: Blue Mosque, the dome with four minarets and the beautiful landscape of the mosque. By

Mohamad Ridzwan Bin Rosman 2015

The Blue Mosque has many facilities such as the landscape, garden, and the park in which inspired by the Quranic garden of paradise. Moreover, the fountains surround the mosque to further enhancing its beauty.



Figure 2.15: Fountains surround the mosque. By Mohamad Ridzwan bin Rosman 2015

According to Arun Blswas & Hamin Melan (1988), the site of the mosque was chosen after a detailed study of the layout of the town which is divided in four zones.

- The first zone is allocated for recreational facilities.
- The second zone for commercial activities.
- The third zone for cultural and commercial purpose.
- The fourth zone is for residential and commercial activities.

Overall, the Blue Mosque has three essential elements taken into account when the mosque is designed.

- The prayer hall needs a flat roof.
- The prayer courtyard, larger than prayer hall, also serves as an overspill praying area on Fridays when the congregation is bigger. The courtyard has to be open on three sides and each must have an entrance to the mosque.
- The third element, in a traditional mosque there is a special platform that higher than the roof of the building of the mosque. This special platform specified for

the Muadzn to call the Azan five times a day. (New Straits Times , Arun Blswas & Hamin Melan.1988).

The Blue Mosque has the uniqueness of having the biggest sacred dome in the world; the measure of the main dome of the mosque is a 51.2 m (167 ft.) in diameter and reaches 106.7 m (350 ft.) above ground level.

Traditionally, the Sultan Salahuddin Abdul Aziz Shah's Mosque called as the "Masjid Sultan Salahuddin Abdul Aziz". The Blue Mosque is the state mosque of Selangor, Malaysia. However, this Mosque in Malaysia is also known by the local as the Blue Mosque for the reason of its blue color dome. The Blue Mosque is the country's biggest mosque. Its most unique feature is its huge blue and silver dome. Traditionally, the dome plays an important role in the mosque and to match its magnificence more than one minaret has to be built. It is constructed primarily from aluminum. The minarets are placed at each of the four corners and each minaret is 142.3 m (460 ft.) tall (Arun Blswas & Hamin Melan. 1988).

The dome is built using aluminum and the outer surface is clad with vitreous enamel-baked trilateral steel panels decorated with a design of the verses from the Quran Islamic calligraphy (Surah Yasin).

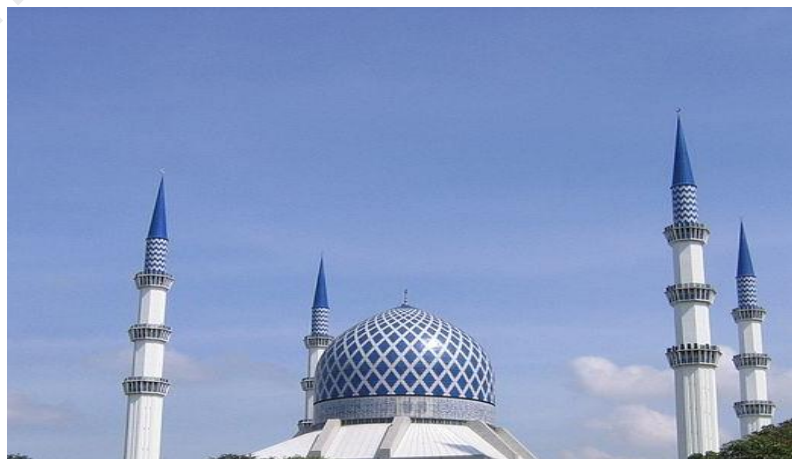


Figure 2.16: The Blue dome and four minarets of the Mosque.By Mohamad Ridzwan bin Rosman 2015

According to Hamzah, A. R. (2012) in his book under the title of “*Introduction to Islamic Calligraphy*” (p 90), the Blue Mosque was “the tallest minaret and the biggest dome in the world. It is presently the largest in Southeast Asia, able to accommodate a maximum of 24,000 worshippers”. At any one time and is large enough that on a clear day it can be seen from some vantage points in Kuala Lumpur.

The mosque has four Minarets. Each Minaret is erected at each of the corners. The four minarets are the second tallest in the world, the distinction of the world's highest being held by the Hassan II Mosque in Casablanca, Morocco. In 1988, the mosque was listed in the Guinness World Records as having the tallest minaret in the world before being supplanted by the 210 m (689 ft.) at the Hassan II Mosque when that structure was inaugurated in August 1993.

Back to the Blue mosque, each one of its minarets has a crown nest that accessible by spiral staircase. The Blue Mosque (Masjid Sultan Salahuddin Abdul Aziz) does however still maintain the distinction of having the world's tallest group of minarets as the set of four each stand above ground level.



Figure 2.17: The Blue Mosque minaret with three crowns of nest accessible by spiral staircase. By

Ahmed Abdulkadhim Crimsh 2016

The sheer size and complexity of the mosque required the use of modern design technology to design and build the Blue Mosque of with such magnitude and complexity. Building such mosque needs not only ingenuity and vision, but also much technology, especially in the design of the mainframe of the dome.

The historical development of mosques in Malaysia according to N. Utaberta, in 2012, “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 trough their artistic excellence, in terms of physical heritage or in form of thought” Islamic architecture is emerging in line with the development of Islam in Malaya in 12th century. Immigrant groups to spread missionary serving in

Malaya introduced the Islamic element of architecture and the Islamic arts. The construction that was developed shows the Malay 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.

Previously the mosque built near the king's castles or areas of economic activities, such as rice fields or near the trade center. The latter mosques designed with onion-shaped domes were constructed. Nevertheless, those domes design are different from the traditional mosque design. Domes of this type came after the British colony, which is not reflected the regional mosque as can be seen on the traditional mosque such as Blue Mosque. This building design was inspired by the architecture of the Middle East and India. Construction of structures such as domes, pendentive and many influence from Middle East design only appear in Malaya in the middle of the 20th century and continuously applied in the construction of new mosques such as the National Mosque in Malaysia up until now.

The architecture of mosques in Malaysia has always evolved over time. Currently, there are spectacular styles in terms of construction materials and techniques. But still, with the use of the new technology, new mosques design should be away from the influence of Middle East and India because we should developed our own traditional design of the mosque that reflect our culture and lifestyles of our local communities, which also combines of Malay, Chinese, Indian and other ethnics Muslim to have our own identity. N. Utaberta (2012).

John Clark in his book *Modern Asian Art* (1998), interpret the definition of the traditional as a "little more than what 'we' like, when 'we' think of our self as a culture, people or nation historically transmitting or receiving 'our' values. But the 'we' who think this is very different from any 'we' of even one hundred years ago" on the other

hand, the neo-traditional reinterpretation of “formal value of style markers, or technique or content”

The massive and modern structure involved the use of both local and foreign expertise to ensure that it was ready for royal silver Jubilee celebrations. (New Straits Times.1988). The traditional architectural design of Mosque is a mix between Malay traditional design and modern design. The mosque would be the ideal center to instill these noble qualities in followers.

The Sultan mention to New Straits Times newspaper in 11 march 1988 “a mosque is more than a house of God where Muslims go to pray”. He suggested that the scope of the mosques widened to include more that their traditional functions on the Malaysian mosque.

In the Islamic world nowadays, the function of mosque is not limited only to the congregation of the Muslims to perform the prayer in the main hall, but other facilities have become important as part of the structure such as a beautiful landscape, which include big water fountain and wonderful lake, nevertheless, the mosque also has conference room, a library, offices, reception hall and classroom.

All these facilities separated from the main prayer hall. The surrounding environment in the mosques can give the prayers a comfortable place to perform worships. (Hamzah, A. R. 2011). For example, many mosques in Malaysia have facilities such as the aforementioned above, such as the Blue Mosque in Shah Alam, Putra Mosque in Putra Jaya and Wilayah Persekutuan Mosque in Kuala Lumpur.

Features of Islamic architecture and Malay architecture are united into the finishes of the building. The layout of the Arabic calligraphy on the dome written by the Quranic verses and portions of the right and the left of the Qibla walls. The Islamic calligraphy artwork on the mosque done by Shiekh Abdul Moneimm Mohamed Ali Al-Sharkawi who is an Egyptian calligrapher.



Figure 2.18: The calligraphy applied on the Blue Mosque by a Shiekh Abdul Moneimm Mohamed Ali Al-Sharkawi. By Mohamad Ridzwan bin Rosman 2015

The first factor is the attach of Muslims to their Holy Book, the Quran, in which promises divine blessings to those who read and write it down. This indicates that the aim of Islamic calligraphy was not merely to provide decoration but also to worship and remember Allah. The Qur'anic verses mostly used are those which are said in the act of worship, or contain supplications *Duea*, or describe some of the characters of God, or his messenger Prophet Muhammad. Calligraphy is also used on dedication many places of the mosques such as Dome Mihrab Minaret Qibla wall the courtyard of the Islamic buildings. Blue Mosque is not an exception. The Blue mosque shares the same standard decorations of the Islamic calligraphy.

The second factor behind the appearance of Arabic calligraphy, is linked to the importance of the Arabic language in Islam.

The use of Arabic is compulsory in prayers and it is the language of the Quran and the language of Paradise, (Saoud, R. 2004). Furthermore, the Arabs have always attached a considerable importance to writing, emanating from their appreciation of literature and poetry. It is reported that the Prophet Muhammad said Tr: "Seek nice writing for it is

one of the keys of subsistence” and the fourth Caliph, Ali ibn Abi Talib commented on calligraphy as Tr: “The beautiful writing strengthens the clarity of righteousness” (Al-Jaburi, M. S. 1974)



Figure 2.19: The calligraphy applied on the Blue Mosque by Shiekh Abdul Moneimm Mohamed Ali Al-Sharkawi. By Ahmed Abdulkadhim Crimsh 2016

On the right and left of the Mihrab design the five panels of the different styles of the Islamic calligraphy positioned on the Qibla wall.



Figure 2.20: (Surah Al-Fatihah) the calligraphy applied on walls the Blue Mosque. By Ahmed

Abdulkadhim Crimsh 2016



Figure 2.21: (Surah Al-ikhlas) the calligraphy applied on walls the Blue Mosque. By Ahmed

Abdulkadhim Crimsh 2016



Figure 2.22: (Surah Al-nas) the calligraphy applied on walls the Blue Mosque. By Ahmed Abdulkadhim

Crimsh 2016



Figure 2.23: (Surah Al-falaq) the calligraphy applied on walls the Blue Mosque. By Ahmed Abdulkadhim

Crimsh 2016



Figure 2.24: (Surah Al-Fatihah) the calligraphy applied on walls the Blue Mosque with a different style of calligraphy. By Ahmed Abdulkadhim Crimsh 2016

The other feature of the mosque is that its windows are fitted with blue stained glass to reduce the amount of light that can enter the main prayer hall. The resulting filtered illumination renders a bluish ambiance to the interior spaces evoking a sense of peace and serenity.

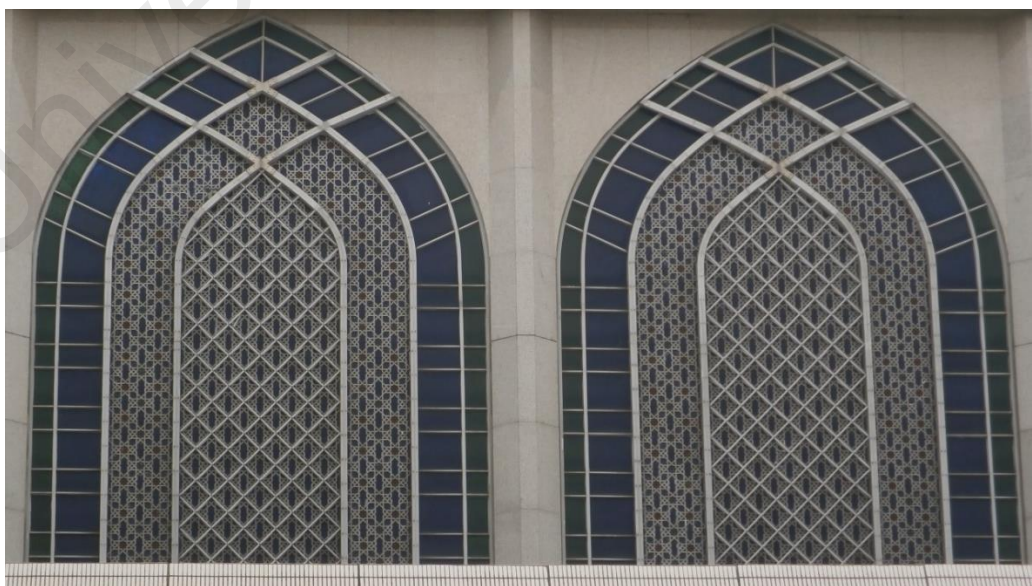


Figure 2.25: Windows decorated with geometric pattern. By Ahmed Abdulkadhim Crimsh 2016

The windows and the main doors of the Blue Mosque were done with geometric design and the stained glass green and blue the figures below show the different colors of the geometric glass.



Figure 2.26: Green glass and blue glass in the Blue Mosque. By Ahmed Abdulkadhim Crimsh 2016

The carpet for the prayer hall made from the fine wool with geometric design with a blue background, on the right side of the Mihrab (niche) the Minber (platform) made by a local craftsman carved from the timber and the design taken from the old traditional mosques in Malaysia.



Figure 2.27: The carpet on the blue mosque made of fine worsted wool with geometric design. By Ahmed

Abdulkadhim Crimsh 2016



Figure 2.28: The Minber (platform) made by a Malay craftsman carved. By Ahmed Abdulkadhim Crimsh

2016

The high roof designed from inside the main prayer hall has triangular panels of red *Balau* and *Ramin* timber wood that are set in criss-cross pattern. The main prayer hall, over two levels, is fully carpeted and air conditioned and is one of the largest such spaces in the world. The upper gallery of the prayer hall is reserved for the use of female worshippers.

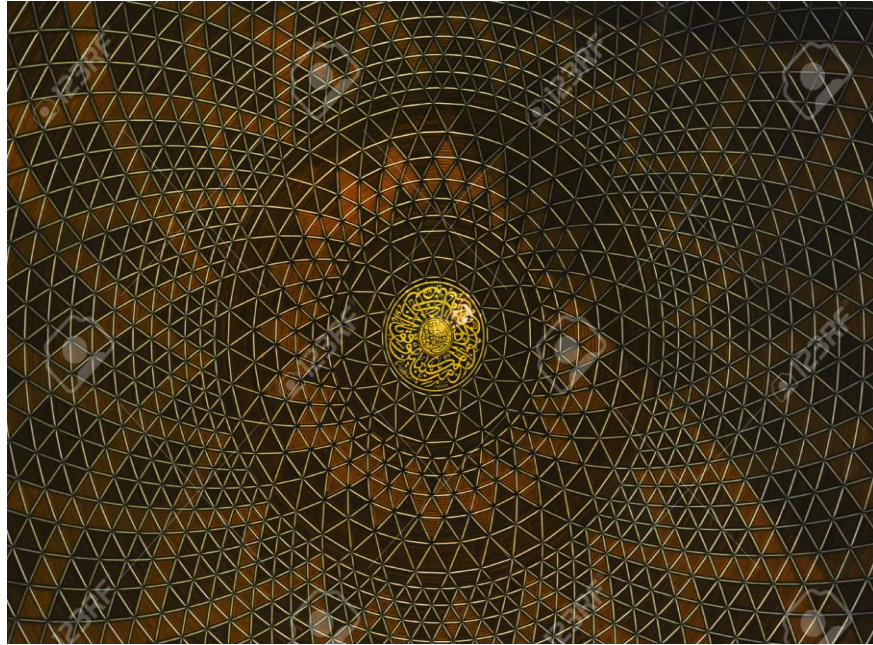


Figure 2.29: The high ceiling has triangular panels made by the wood also the calligraphy decorated the center of the dome from inside. By Mohamad Ridzwan bin Rosman 2015

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

Islamic calligraphy is the most prevalent, significant and widely appreciated art for Muslims culture. It can shed light on many aspects of Muslim's life. This chapter looks at the research methods and research design used in conducting and performing the research. This section also looks at the theoretical framework and explains the theory of Ibn Muqla. The method used in this research is to achieve the aims and objectives of the study identified as historical exploratory and descriptive research of the Islamic calligraphy. This is an essentially archaeological research, concerned with the scope of art as part of the Islamic calligraphy. The objectives of this section of the research is to determine which steps that have been thought to be necessary to gather detailed information in achieving the objectives of the research as have been described earlier. Furthermore, the collected data of this research was gathered from primary and secondary sources.

This study adopts the qualitative method. Primarily the study will rely on books and researches found in many universities as well as journals and accurate sources of the data such as the University of Malaya (UM), International Islamic University Malaysia (IIUM) and University Technology MARA (UiTM). The qualitative method will be adopted in reading extensively to understand the process of development of Islamic calligraphy in different time and area. This will enable us to understand the purpose and used of the Islamic calligraphy in the mosques, manuscripts of the Quran, the styles of Islamic calligraphy developed during the advent of Islam in the period of the Al-khulafa Al-Rashidun, the Umayyad dynasty, Abbasid dynasty and Ottoman Empire. The main subject of the current research will be focusing on the development of the Islamic calligraphy supported by the theory of ibn Muqla proportion system during the ninth

century. Accordingly, selected written verses on the Blue Mosque structure in Malaysia will be study and analyze based on Ibn Muqla theory.

The research begins this study with the extensive reading of the literature review of relevant and significant literature to provide the background and context of the research problem. This will help the research to establish the knowledge about the topic and the area of study. On the other hand, this study will understood the essential questions about the Islamic calligraphy.

The research will follow:

1. The historical of the development of Islamic calligraphy.
2. Styles of the calligraphy structure.
3. The materials, tools techniques and the purpose of used of Islamic calligraphy.
4. The application of Islamic calligraphy on the mosques structure and manuscripts applied on the sacred Islamic places.

3.2 Interview

At the beginning, the study will benefit from rich interview with respected scholars and researchers of calligraphers in Malaysia to expand knowledge based on the experts. Accordingly, this research has interviewed many Calligraphers from Malaysian such as Hj. Mohamed Yusuf Bin Abu Bakar, Abdul Baki Abu Bakar, the calligraphers, and other foreigners from the different countries such as Wisam Hussein Ahmad Naji, Dr Hayder Rabie, Dr Abdulreza Bahia and Abbas Al-Baghdadi from Iraq. The interview sessions were carried out to obtain quality information about the favorite styles of the Islamic calligraphy used in Malaysia and parts on the world. Furthermore, the impact of Ibn Muqla theory on those styles is determined.

However, understanding the standpoint of the Malaysian calligraphers about the Islamic Calligraphy to helps improve the artwork of Islamic calligraphy in Malaysia and establish a new school of the Islamic Calligraphy. This will increase the rank of

Malaysian calligraphy like the other Islamic schools such as Egyptian or Baghdadi or Turkish and Persian schools. On one hand, the calligraphers living overseas have been communicating with them by the phone or by emails. On the other hand, the information from the foreign calligraphers especially from the Arab countries have improved this study interims of the accumulated experience they have about the Islamic calligraphy.

3.3 Books and journals

In addition, reading extensive literature review about the Islamic structure of different mosques and the calligraphy applied on their walls, which emphasize the styles of the calligraphy used on the Blue Mosque. The books, journals and accurate sources of the data finding in the University of Malaya and other universities in Malaysia, add rich and valuable information about the history of Islamic calligraphy that had been applied on shrines, mosques, schools and other Islamic buildings.

3.4 Site Visit & Case Studies

The research has chosen the case study of the Blue Mosque, which has diversity from the different styles of Islamic calligraphy applied on it. Also to get more accurate information of the aesthetic value of the structure of the calligraphy and to compare the calligraphic inscription applied on the Blue Mosque with the basic rules of the Ibn Muqla theory.

Visiting the Blue Mosque was one of the most important approaches to improve this research by several styles of the Islamic calligraphy. However, the calligraphy applied on the dome was very high and cannot reach to take the measurement of the letters, Photographs were taken with a high quality of camera to capture the calligraphy applied inside and on surface of the dome of the mosque will be a substitute in this research. Taken the measurements to some samples of the Arabic letters (verses of the Quranic

calligraphy applied on the walls of the Blue Mosque) to analyses the theory of the Arabic calligraphy. The theory used in this research achieved the aesthetic value of the Islamic calligraphy applied on the Qibla wall, Minber and the external and internal of the dome. On the other hand, the theory of Ibn Muqla makes it easy to check whether or not the proportions of a calligraphy work are correct or not. The visit to the Blue Mosque makes it easier observe the styles of Islamic calligraphy and to determine of the styles applied on the mosque.

3.5 Data collection

The first impression one can have about the Islamic calligraphy is how elegant and free cursive letters the Islamic calligraphy enjoys. The Blue Mosque is a prominent monument in Malaysia. This monument has many interesting facilities such as its geometrical and the vegetal decoration, blue dome and the calligraphy applied on the walls of the mosque. A place such as the Blue Mosque with its rich Islamic art heritages indeed deserves to shed more lights on the Islamic art this mosque has. Thus, this study is meant to focus on one of the Blue Mosque's Islamic arts which its calligraphy. In this section, the data analysis will take place. The main tool of data analyzation is going to be the theory of Ibn Muqla. This theory used to show the proportion of the letters and the esthetic value of the Islamic calligraphy applied in the mosque.

3.6 Research design

The research design is as follow:

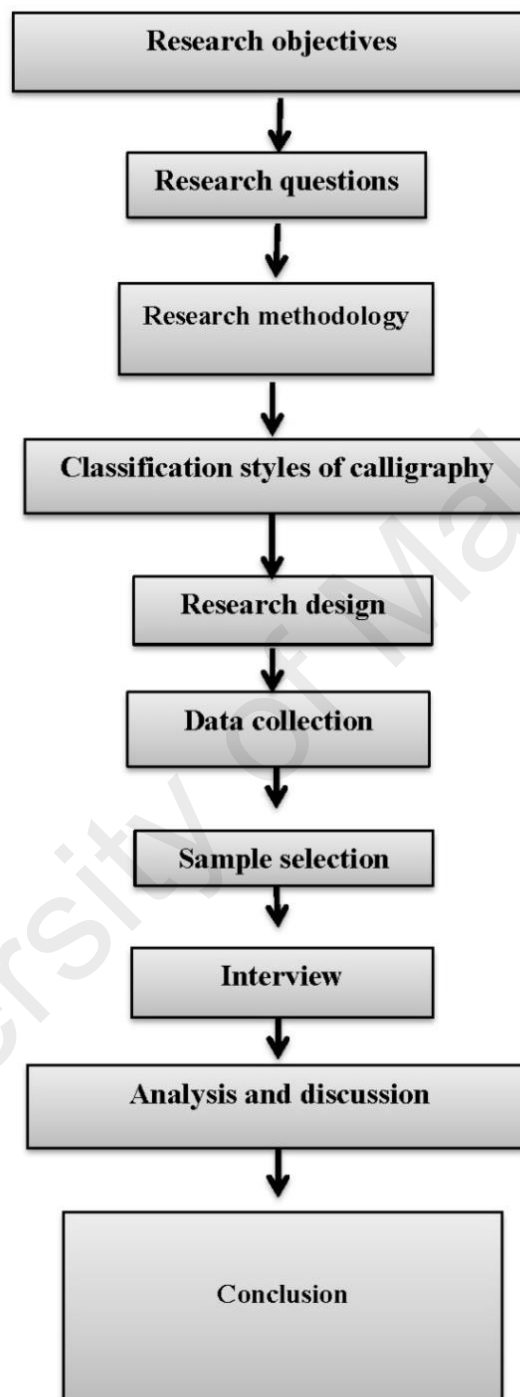


Figure 3.1: The process of the research design

Figure3.1 illustrates the research design the development of the research and explains the research methodology. As shown in the figure the research methodology has many

aspects to explain and understanding the method of the research, research design started with the research objectives as follow the research questions and the classification of the Islamic calligraphy applied on the Blue Mosque in order to determine the calligraphy according to established the calligraphy during the different period since the evident of Islam, on the other side, answering the essentially questions related to this research. On the other hand , to achieve the objectives of this research through analyses the diversity of the Islamic calligraphy applied on the Blue Mosque based on the Arabic letters.

However, the objectives of Islamic calligraphy related with the principles of the Ibn Muqla theory as analyzed by the mathematical proportions of the letters. Moreover, the chart showed the collecting data from the different aspects of the mosque such as the walls, dome, Mihrab and Minber, using the camera and determine the masseur of the calligraphy. On the other hand, after the collected the data from the mosque and chose some samples of Arabic calligraphy will analyses in chapter four according to Ibn Muqla theory.

In addition, the rich interview with many calligraphers in Malaysia and some others from other countries was one of the important ways to improve this research to explain and explore the basic rules of the Islamic calligraphy. The research designs also showed the analyses and discussion of the Islamic calligraphy used in the Blue Mosque. Finally, the conclusion of the research design will explain the finding from this research and present the benefits from it.

3.7 Theoretical Framework

The Islamic concepts introduced by Ibn Muqla and Ibn al-Bawwab and other Muslims scholars writing about the Islamic theory of knowledge will be referred to in this study. The determinant of the framework is based on the Islamic history of calligraphic styles through the differences of the shapes and forms.

This theory selected because of three reasons:

- Many scholars used the philosophy of Ibn Hayyan Al-tawhidi and other theories related only to Islamic religion.
- Many scholars used the theory of Al-Ghazali, his theory adopted to analyses the calligraphy by the conception of the Islamic art.
- Al-Bawwab theory adopted to Ibn Muqla theory but in his theory did not touch the main principles of ibn Muqla theory; he only adds some of the aesthetic value to the letters.

3.7.1 Ibn Muqla theory

This research adopts the theories of the shapes and forms of calligraphy as it is observed that the styles of Islamic calligraphy have different peculiarities from the shapes, forms and lines. Basically, they differ in term of their features due to each style of calligraphy according to the history of Ibn Muqla. However, the basic rule of Islamic Calligraphy depends on the size of dots made by the bamboo or reed nib. Therefore, the system of proportion script (*al-Khatt al-Mansoub*) of Ibn Muqla is based on the principles of geometric design shape and size of the dots to determine the aesthetic value of the Calligraphy.

Ibn Muqla is the founder of the calligraphy principles. Until today, Islamic calligraphers use his theory. The theory utilizes a proportion that based on three sets of measurements: the dot, *alif*, and circle. The correlated measurement among letters in a script is determined by the width of the rhomboid dot produced by the bamboo or reed nib. The letter *alif* can then be drawn based on a set number rhomboid of the dots determined by the type of script being used. Once the letter *alif* is formed, an invisible circle is drawn around the letter (the height of the *alif* is the diameter of the circle),

serving the basis from which all letters of a script may be calculated. For example, figure 3.2 below shows the basic rule of the *alif*, dots and circle.

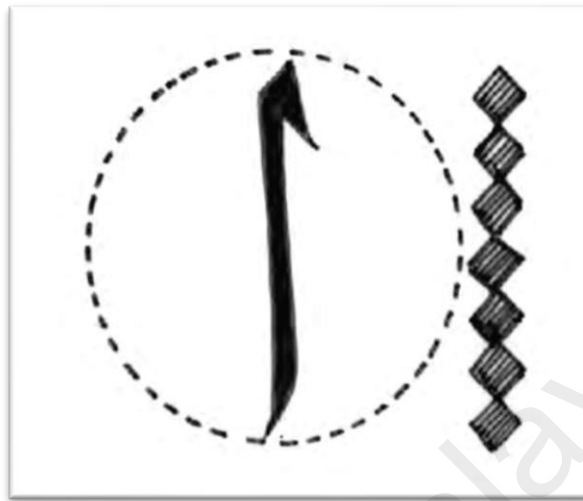


Figure 3.2: Basic rule of the *alif*, dots and circle. The letter *alif* consisting of 7 rhomboid dots.

The *alif* letter has various styles of calligraphy characters such as the line, size, shape and angles. According to Ibn Muqla's theory, the height of the letter *alif* is seven dots in which makes the scripts looking clear, elegant and in graceful form. An example to check the theory is by writing *alif* letter four times and next draw a dot among the letters. Next, it will be easy to observe that the overall look of the simple script shows the harmony and rhythm existed between the shape and size with other letters. This method makes it easy to check whether or not the proportions of a calligraphy work are correct or not.

Accordingly, the Calligraphy in the Blue Mosque will be analyzed by the mathematical principle of Ibn Muqla proportion system of the calligraphy structure. Thus, the dot will be considered as the measurement unit of the calligraphy that applied on the mosque.

3.8 Conclusion

In summary this chapter presented the research methodology first stage, the visiting the Blue Mosque to collecting data and reading extensively the history of Islamic calligraphy and development of the calligraphy during the different period since the evident the Islam. Also in this chapter, the rich interviews to the many calligraphers have been done to get beneficial information with locals and foreigners calligraphers. On the other hand, this chapter was explained the theoretical framework and illustrate the theory of Ibn Muqla used in this research and the reasons why this theory important to analysis the Islamic calligraphy by mathematical analyses.

The theory used in this research is to achieve the aesthetic value of the Islamic calligraphy applied on the Qibla wall, Minber and the external and internal of the dome. On the other hand, the theory of Ibn Muqla makes it easy to check whether or not the proportions of a calligraphy work are correct or not. The visiting of the Blue Mosque in order to observe the styles of Islamic calligraphy and to determine of the styles applied on the mosque.

The essentially steps of the collecting data and analyses the calligraphy in the Blue Mosque according to Ibn Muqla theory will follow:

Collecting data on different aspects of the Blue Mosque such as its dome, Mihrab, and Menber in order to study the verses of the Islamic calligraphy applied.

This research includes analytical and descriptive study of the Islamic calligraphy applied on the Blue Mosque.

Analyzing the Islamic calligraphy according to the history of Ibn Muqla, those verses as well as examining whether they were influenced by the Islamic Malaysian culture.

Using books and manuscripts as the category of the comparison to its popularity in Islamic architecture and its wide use in Malaysia.

University of Malaya

CHAPTER FOUR: ANALYSES OF THE ISLAMIC CALLIGRAPHY ON SELECTED QURANIC VERSES IN THE BLUE MOSQUE

4.1 Introduction

The aim of this chapter is based on three steps. These steps are one to analyze the Islamic calligraphy in the Blue Mosque-Malaysia. In order to achieve the first objective, the styles of calligraphy applied on the Blue Mosque will be analysed based on the Arabic letters. The second step of this chapter is to explain the content and meaning Quranic verses of the Islamic calligraphy used in the Blue Mosque, which represents the second objective. The last objective is to investigate and analyse the Islamic calligraphy based on the mathematical proportions of the letters according to Ibn Muqla proportion system.

4.2 Analysis of the Islamic calligraphy in the Blue Mosque based on the Arabic letters

This section discusses the first objective that is analysing the styles of calligraphy applied on the Blue Mosque in Malaysia based on Arabic letters.

The Arabic alphabets are originated from Nabataean script. It is developed from the script used by Nabataean, the dialect of Aramaic that was utilized as a part of northern Arabia and what is now Jordan roughly during the thousand years before the beginning of the Islamic time (Najda 1994, p1- 3).

Hence, Islamic calligraphy developed since the starting of the Islamic era, and the Arabic alphabet included only 18 letters. In 69 AH, the Arabic alphabet have many different consonants with an identical letter, which can differentiate by one, two or three dots, placed above or below the letters (Safadi, Y. H. 1987, p13). Abu Al-Aswad Al - Du'ali has invented the grammarian in Arabic, and started to lay dots above and below letters to make up 28 letters in total. This idea was first introduced by Al-Calipha Ali

Bin Abu Talib. “When you see me open my mouth at a letter, put a dot above it. When I close it, put one next to the letter. When I draw them apart, put a dot under it,” he said to Abu Al-Aswad (Muhammad Ibn-Hallikan 1843, p 664) Figure 4.1.

Another feature of the Arabic alphabet is the three long vowels represented by the letters A, U and I, Al-Calipha Ali Bin Abu Talib also added “When you see me open *fathah* (nominative) my mouth in” pronouncing a letter, place a point over it; when I close *dammah* (accusative) my mouth” place a point before (or, upon) the letter, and when I pucker up *kasrah* (genitive) my “mouth, place a point under the letter” ((Muhammad Ibn-Hallikan 1843, p 665) Figure 4.2.

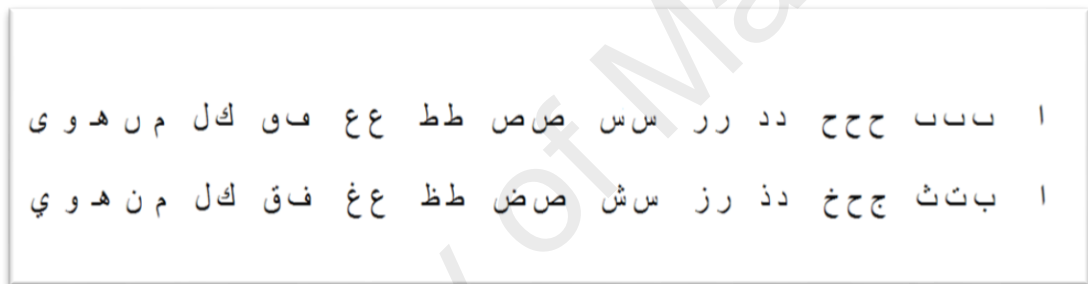


Figure 4.1: The Arabic alphabet before and after the reform By Ahmed Abdulkadhim Crimsh 2016

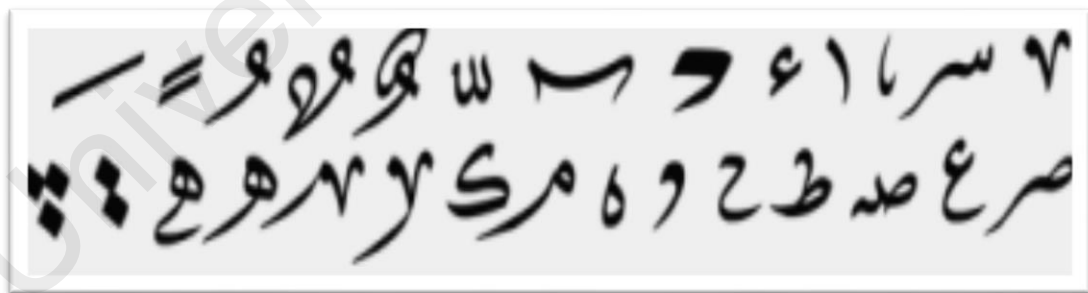


Figure 4.2: The diacritical mark used in Arabic writing. By Ahmed Abdulkadhim Crimsh 2016

The reforms of the Kufic script was implemented in order to explain the Arabic letters to the countless of non-Arab who have been converted to Islam as a result of the Islamic conquest of Iraq, Syria, Egypt, Persia, and furthermore in the East and west of the Arabian Peninsula (Safadi, Y. H. 1987. p13). Those reforms help the non-Arab Muslims

to read and understand the pronunciation and interpretation of the Quran. The figures below shows the reforms of the Kufic script before and after were added the dots. See Figures 4.3 and 4.4.



Figure 4.3: The original of the Kufic script without dots

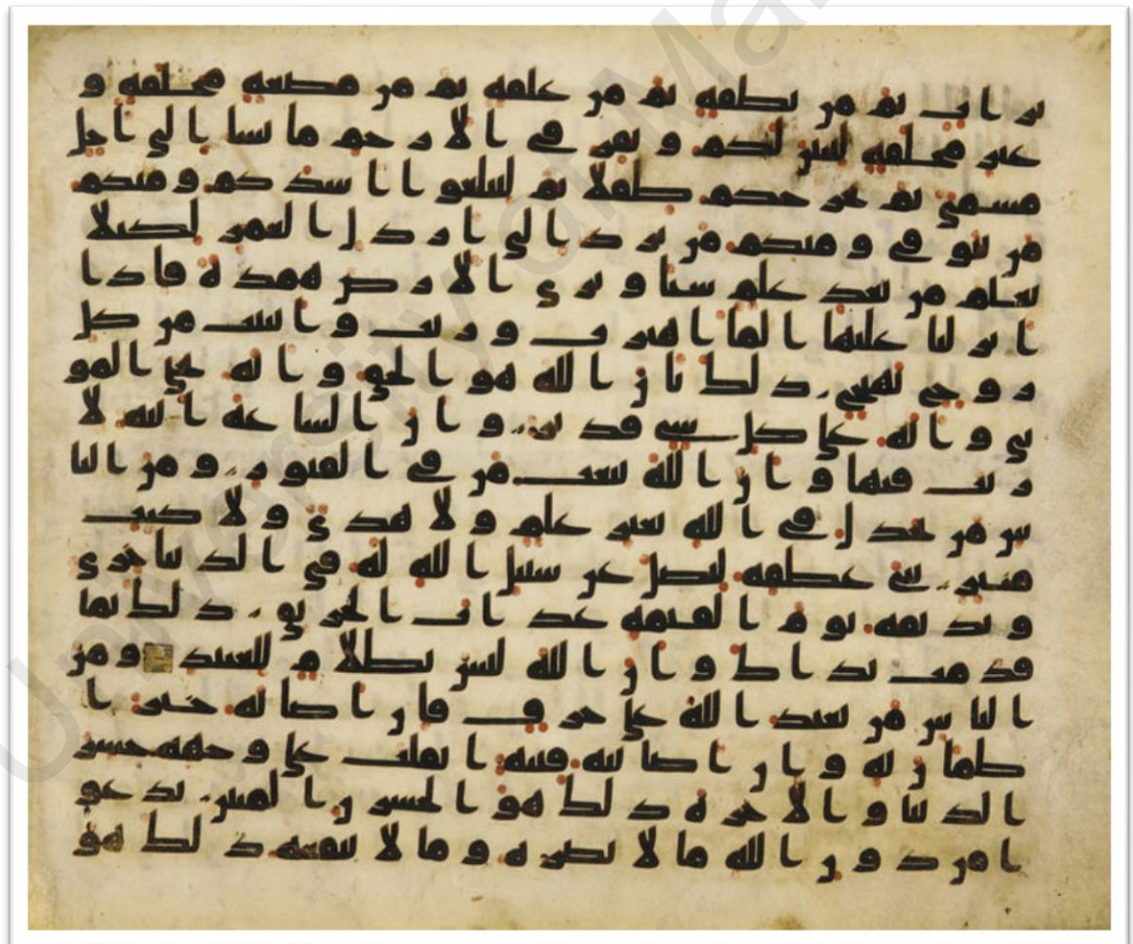


Figure 4.4: The Islamic calligraphy Kufic script after the reform Abu Al-Aswad Al -Duali

The new system of diacritical marks of the grammar has become closely associated with the Arabic Kufic script and evolved to the new other styles of the Arabic calligraphy. It

was later supplemented by two pupils of Abu Al-Aswad, Nasr Ibn Asim and Yahya Ibn Yamur. (Muhammad Ibn-Hallikan 1843).

Despite, the vast spread of Islamic calligraphy during the beginning of the Islamic era, the first style of calligraphy was Kufic, emerged the need to use the new script to write the holy book of Islam. The significant of the calligraphy is that Muslims have been widely using it for different aspects such as in Qur'anic writing and decorating a wide range of Muslim buildings and mosques. On the other hand, the Muslims from different countries, from east to west, from the Arabic peninsula to the borders of China, need to read and write the Quran because of it is the words of God Almighty.

Back to the Islamic calligraphy used in the Blue Mosque, the calligraphy in this mosque has the same Arabic letters according to the history of Arabic writing. The Calligrapher of the Blue Mosque, the Shaikh Abdul Munim Muhammad Ali al-Sharqawi, has considered the main rules of Arabic writing. He used the flexible letters to decorate the mosque.

Safadi, Y. H, in 1979 mentioned, "The primacy of the word in Islam is reflected in the virtually universal application of calligraphy. Writing is given pride of place on all kinds of objects-objects of everyday use as well as entire wall surfaces, mosque furniture, the interiors and exteriors of mosques, tombs, and al-Ka'ba, the most famous sanctuary of Islam. However, like the icons of most other faiths, the script also represents power. Its preeminent use is the writing of the divine message of the Quran, of course, which endowed it with extraordinary strength and transcendent significance. From this world's manifold possibilities, Allah had chosen Arabic as the vehicle for His final revelation."

In addition, the Quranic verses applied on the walls of the Blue Mosque have been done with different styles of Arabic Islamic calligraphy such as the Naskhi, Thuluth, Thuluth

Al-Jali. Riq'a, Diwani and ta'liq. The verses of Qur'anic writing on the Blue Mosque used the dots to make the words of Allah clear and readable and the diacritical mark is given to the Islamic calligraphy charm and aesthetic value to show the distinctive of Arabic letters and the flexibility of the Arabic writing used to decorate the Blue Mosque. Figures 4.5 to 4.9 below shows the aesthetic value of the Arabic letters with diacritical mark with various styles of Islamic calligraphy applied on the Blue Mosque.



Figure 4.5: Surah Al-Fatihah on the Blue Mosque, the dots and diacritical mark above and below the words of Allah



Figure 4.6: Surah Al-Falaq on the Blue Mosque. The dots and diacritical mark are placed above and below the words of Allah. By Ahmed Abdulkadhim Crimsh 2016



Figure 4.7: Surah Al-nas on the Blue Mosque, the dots and diacritical mark above and below the words of Allah. By Ahmed Abdulkadhim Crimsh 2016



Figure 4.8: Surah Al-ikhlas on the Blue Mosque, the dots and diacritical mark above and below the words of Allah. By Ahmed Abdulkadhim Crimsh 2016



Figure 4.9: Other type pf Islamic calligraphy, Surah Al-Fatihah on the Blue Mosque

The calligrapher Wisam Hussein in 2016 has mentioned, Tr: “The Islamic calligraphy is not just forms component by the letters, but it can be considered as a living entity. In addition, with a perfect calligraphic I feel that Arabic letters interacting with me as if these letters want to speak out. Each letter has a certain impression to explain itself by different way as a symmetry, harmony and rhythm showing the aesthetic of the letters when it is isolated or joined with each other to make new creations form of the Islamic calligraphy”.

The present of calligraphy in the mosques, add spiritual effects on congregation of worshipers in the mosque when they look around and see the Islamic calligraphy with a beautiful shape decorated with the words of Allah surrounded them.

Gabriel Mandel Khan in 2001 said, “Arabic script gave rise to calligraphic art, which became an art form of astonishing beauty. More highly regarded than painting, Arabic calligraphy is approached aesthetically, like music, with its own rules of composition, rhythm, and harmony”. The Islamic calligraphy artworks on the Blue Mosque can turn into symphonies of colors and shapes and spiritually inspiring compositions.

In addition, the Arabic Islamic calligraphy applied on the Blue Mosque based on the Arabic letters which used the basic rules of the writing and grammars. However, it is not easy or, to understand the Arabic text without the dots. Furthermore, the advantages of dots in Arabic writing can be listed as follows:

The Arabic letters based on the dots to measure the letters of each type of Arabic calligraphy that has several dots of writing. Moreover, the diacritical mark gives the Arabic words correct pronunciation. On the other hand, the diacritical mark makes Arabic writing more flexible to fill the space between the letters and words. In addition, the diacritical mark shows the aesthetic value of Islamic calligraphy.

4.3 The description of the Content and Meaning the Quranic verses of the Islamic Calligraphy

Throughout the centuries, there have been many types of the Islamic arts distinctive such as the arabesque, mosaics, geometric patterns and floral motifs, Islamic calligraphy one of the most important types of the Islamic art. Calligraphy has different purposes of writing, started with evident of Islam in order to write the Holy Book of the Muslims and sending letters to kings, decorated the mosques, shrines, houses, palaces and other Islamic building. Islamic Calligraphy, the complementary sacred art of Islam which manifests the word of Allah (God). The writing of the Holy Book has the largest part of interest by the Muslims. Muslims calligraphers tried to make the words of the Holy Book around them to feel more calm and contentment.

4.3.1 The Calligraphy Applied On the Qibla Wall

In Blue Mosque, the Islamic inscription calligraphy decorated the following: inside the main prayer hall Qibla wall, Mihrab, inside, outside the surface of the dome main entrance and the courtyards of the mosque. In addition, all of the Islamic calligraphy applied on the mosques have a content and meaning for the verses related to Islam.

At the center of the main prayer hall, Figure 10, Qibla wall have five scripts of Quranic verses, all written on the white marble with the blue color and elegant letters of Islamic Calligraphy. Figures 11 to 15 show the Islamic calligraphy on the Qibla wall with different forms. The Islamic calligraphy on the Qibla wall has the higher aesthetic value; because the distinctive of the Islamic calligraphy by the distribution formats of the calligraphy used the principles of the symmetrical shapes, harmony between the calligraphy and the homogeneity of the objects.

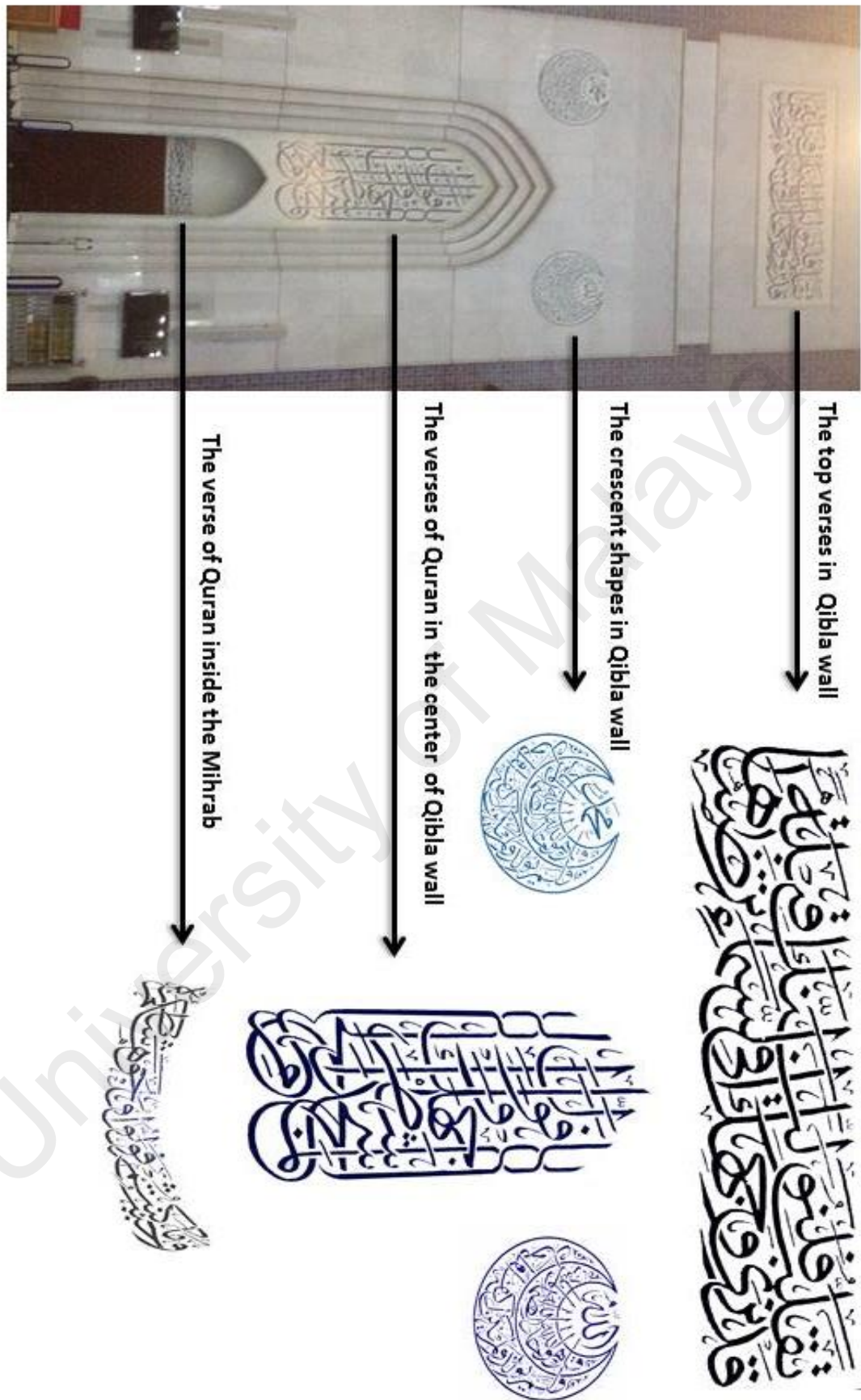


Figure 4.10: The five verses of Islamic calligraphy in the Qibla wall. By Ahmed Abdulkadhim Crimsh

On the top of Qibla wall the verses written by the style of Thuluth Tarkibi (combination) calligraphy. This type of Calligraphy similar with Thuluth styles the only different is the size, which it is called Thuluth Al-jali, because It can write the long verses of Holy Book and fill the space between the letters and words in order to achieve the aesthetic value of the Quranic verses. On the other hand, the words of Allah must to be clear and readable. Figure 4.11 below verses placed on the top of Qibla wall to show the direction of the Makkah.



Figure 4.11: The first verse of the Quran applied on the Qibla wall, Blue mosque. By Ahmed

Abdulkadhim Crimsh 2016

On the other side, two verses of Quranic scripts are guarding the on the top of Qibla wall placed on the right and left with a similar crescent form of complete Surah al-Ikhlās. The only difference between these two shapes of the verses of Quran, on top of them- Allah on the right crescent and Muhammad on the left. The two words of Allah and Muhammad are probably understood as representation of the (Profession of Faith) al-Shahadah. The figures 4.12 and 4.13 below shows the two crescent forms of the Surah al-Ikhlās.



Figure 4.12: The crescent form with the name of Allah, Surah Al- Ikhlâs on the Qibla wall, Blue Mosque.

By Ahmed Abdulkadhim Crimsh 2016



Figure 4.13: The crescent form with the name of Prophet Mohammed, Surah Al- Ikhlâs on the Qibla wall,

Blue Mosque

At the center of the Qibla wall there is other verse of Quranic written by the Thuluth styles to fill the space of the Qibla and complete the first verses placed on the top. This style of Islamic calligraphy placed on the Qibla wall make the Muslims focus to the direction of Makkah and al-Masjid al-Haram. The figure 4.14 shows the Thuluth styles of the Islamic calligraphy.

Finally, the last verses of Quranic place on the Qibla wall, placed on the center of Mihrab it also continues the verses of the words of Allah to the direction to al-Masjid al-Haram at Makkah, written by Thuluth styles of the Islamic calligraphy Figure 4.15.

The five verses of the Holy Quran written on the Qibla wall by Thuluth styles of the Islamic calligraphy showed to the Muslims the monotheism to Allah and the prophet Muhammad his messenger.

On the other hand, all the verses of the Islamic calligraphy applied on the Qibla wall the calligrapher made by mosaics used the blue color to make the decoration of the mosque are unique and the color is similar an inside and the outside decoration of the mosque.



Figure 4.14: The Thuluth script on the Qibla wall, Blue Mosque. By Ahmed Abdulkadhim Crimsh 2016



Figure 4.15: The verse of the Quran placed on the Mihrab, Blue Mosque. By Ahmed Abdulkadhim

Crimsh 2016

4.3.2 The Composition of the Five Verses of the Calligraphy on the Main Prayer Hall

The Islamic calligraphy applied on the main prayer hall varies with the styles. The five panels of the Islamic calligraphy applied on the right and left respectively of the Qibla wall, have similarity with the same size and color of the panels but it was different to the styles of Islamic calligraphy written on this panels.

There are five verses of the Islamic calligraphy applied on the main prayer hall espacially on the Qibla wall which has many different styles of the islamic calligraphy. On the right and the left side respectively of the Mihrab, there are five verses panels of the islamic calligraphy. Background of the panels are blue in color and the verses are colored by the yellow color. The form of the panels like a arch can give the main prayer hall more distinctive and shows the aesthetic value through the symmetry of the panels. The Surah Al-fatihah written twice to each side with different styles of the islamic calligraphy. According to the Jeanan Shafiq 2014 mention in her study the islamic art mostly used the symmetrical arrangements to decorate the islamic bulding. In the Bule Mosque can be observe that the panels have similar principles of the old islamic

architecture. Figure below shows symmetry of the panels on the Blue Mosque Figure 4.16.



Figure 4.16: the five panels on the right side of the mihrab. By Ahmed Abdulkadhim Crimsh 2016

The five panels started with same words and written by the same style of Islamic calligraphy (*BISM ALLAH ALRAHMAN ALRAHEEM*) (In the Name of Allah, the Most Beneficent) written in Nistaliq style to make the panels are unification. Other functions of the panels pay some attention that styles are similar to the Islamic calligraphy that has a unit configuration aesthetic value Figure 4.17.



Figure 4.17: In the Name of God written on the Nistaliq calligraphy applied on the five panels in main prayer hall. By Ahmed Abdulkadhim Crimsh 2016

In addition, the calligrapher takes into consideration the formation of the five panels with variety styles of Islamic calligraphy, each panel used with different styles of the Islamic calligraphy, in addition similarity with the outline of the same form such as on the second verses of Quran, the verses written by the Thuluth Al-Jali with different words and similar shapes. The first and the last verses are same Surah Al-fatihah written with a same type of the calligraphy Figure 4.18.

Figures 4.18 A,B,C and D below shows the different verses of the Quran written in similar form of the Islamic calligraphy on the right and left of the Qibla wall.



A



B



C



D

Figure 4.18: The Thuluth tarkibi in the Blue Mosque . By Ahmed Abdulkadhim Crimsh 2016

Islamic calligraphy related with a verses of the Quran, with each verses written on the mosqu have a meaning on how the Muslims reverence the worls of Allah on the main prayer hall on the Blue Mosque. The heading Surah Al-fatihah written by the Nastaliq style, the first verse written by the Thuluth Al-Jali style while the rest of surah written completely by the Naskh Islamic calligraphy. According to the Abd Rahman Hamza 2007, Surah Al-Fatihah is held in the highest respect among all Muslims. Because of its

intrinsic value, it has been assigned a place of honor to appear on the very first page of the Quran as well as emphasized in many Muslim buildings especially the Malaysian mosques Figure 4.19.



Figure 4.19: Surah Al-fatihah Thuluth calligraphy main prayer hall in the Blue Mosque. By Ahmed

Abdulkadhim Crimsh 2016

The second inscription Surah Al-Naas, which written by the Nistaliq at the heading of surah and the first verse the calligrapher used the same outline form of the first panel which used the Thuluth Al-Jali in order to make the panels design similar by the first verse of the surah. The rest followed by Ta'liq calligraphy for the whole Surah Figure 4.20.



Figure 4.20: Surah Al-Naas Nistaliq calligraphy main prayer hall in the Blue Mosque. By Ahmed

Abdulkadhim Crimsh 2016

The middle of the Qibla wall the inscription of Surah Al-Falaq calligrapher used the three styles of the Islamic calligraphy. The heading of surah written by the Nistaliq following the first words of the surah used the Thuluth Al-Jali. While the Riq'a script is used for the rest of Surah Figure 4.21.



Figure 4.21: Surah Al-Falaq calligraphy main prayer hall in the Blue Mosque. By Ahmed Abdulkadhim

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Next to surah Al-Falaq is Surah Al-Ikhlās (the purity) the Nistaliq script started with heading of Surah as usual followed the Thuluth Al-Jali style of the Islamic calligraphy used for the first verse of the Surah, following the rest is written by the Diwani script of the surah Al-Ikhlās Figure 4.22.



Figure 4.22: Surah Al-Ikhlâs calligraphy main prayer hall in the Blue Mosque. By Ahmed Abdulkadhim

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Finally, the extreme on the right side of Qibla wall is Surah al-Fatihah once again, In the Name of Allah, the Most Beneficent written by the same style of the other inscriptions Nistaliq. In addition, the first verse written by the Thuluth Al-Jali script, while the rest of Surah written by Thuluth script Figure 4.23.



Figure 4.23: Surah Al-fatihah written by Thuluth calligraphy main prayer hall in the Blue Mosque. By

Ahmed Abdulkadhim Crimsh 2016

4.3.3 The Main Entrances And The Courtyard

Islamic calligraphy are applied on the Blue Mosque on many places. On the main entrance there are many panels of islamic calligraphy, that surround the main prayer hall

and the courtyard of the mosque. The distinctive of these panels the similarity of the forms. The calligrapher used the same styles to each of this panels. This harmony and similarity of the panels give to the mosque the unity of forms and content of the aesthetic value of the islamic calligraphy, the Figuer 4.24 shown the islamic calligraphy on the main entranc of the main prayer hall.



Figure 4.24: Calligraphy on the main entrance and the couartyard on the Blue Mosque. By Ahmed

Abdulkadhim Crimsh 2016

The scripts are written in yellow color with blue background. Calligraphyer used the Thuluth style of islamic calligraphy in order to ensure the unification of the the panels. In addition, to decotate the mosque with the *Salawat* at the top panel its means as an invocation which Muslims make by saying specific phrases to compliment the Islamic prophet Mohammed and at the bottom of the panel the *Duea* (prayer) its means the Muslims used to asking the God for forgiveness.

4.3.4 The Calligraphy Inside And Outside The Dome

The design of the islamic calligraphy has decorated the inside and outside the surface of the dome by the different styles of the islmic calligraphy. In the main prayer hall, the calligraphy decorated the dome by Surah Yassin known as the heart of the Quran. The type of calligraphy inside the dome written by the Thuluth style and the calligrapher

repeated the Surah twice to fill the space and to decorate the dome with rhythm, harmony and unity of form by the Thuluth style. On the other hand,

the calligrapher wrote the beginning of Surah and the end of Surah with similar form to give the dome high aesthetic value of the Islamic decoration. Figure 4.25 shows inside the dome the Islamic Calligraphy applied on it with a Thuluth style of the Islamic Calligraphy and the similarity of forms of the Calligraphy.

According to Abbott, N. (1939) mentioned that “Ibn Muqla real influence on the Arabic script that he laid down systematic rules for shaping the letters”. The Islamic calligraphy applied inside the dome of the mosque has a similar unification of the character of the shape, the purpose of the similarity to give the vitality and harmony to the Quranic manuscripts, which placed on the dome.

In addition, Othman, R. in 2011 demonstrated about the Islamic mosques “the Calligraphy is filled with aesthetic value as well as being a message conveying precise meanings of Al-Quran and Hadiths” so the calligraphy inside the dome based on the verses of Quran to give meant the calligraphy on the dome achieved the aesthetic value of the Islamic arts.

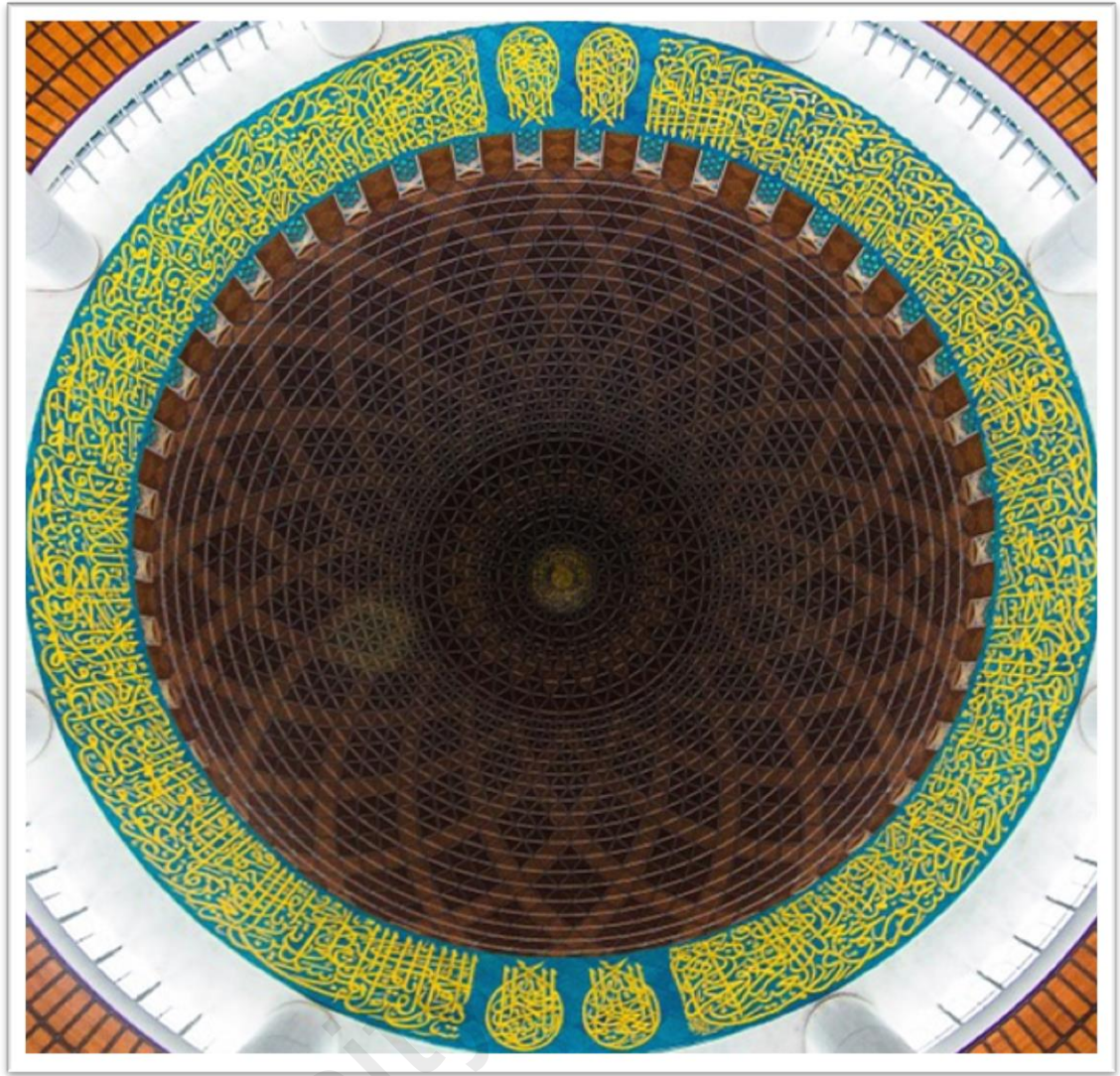


Figure 4.25: Islamic calligraphy inside the dome, Blue mosque. By Ahmed Abdulkadhim Crimsh 2016

Therefore, during the interview that has conducted with a calligrapher, most of them mentioned that in methods of writing Islamic calligraphy “the basic roles of the Thuluth style of the Islamic calligraphy, the word of Allah is always located at the top of the writing panel or at least on the middle part of the Quranic inscription. On the other side, the word of Allah cannot put at the bottom whatever the situation”. This arrangement for the word of Allah can be seen clearly inside the dome and the Qibla wall, which indicates how Muslims revere the word of Allah and everything that relates to Him only. Figure4.26 show also the word of Allah located on the top.

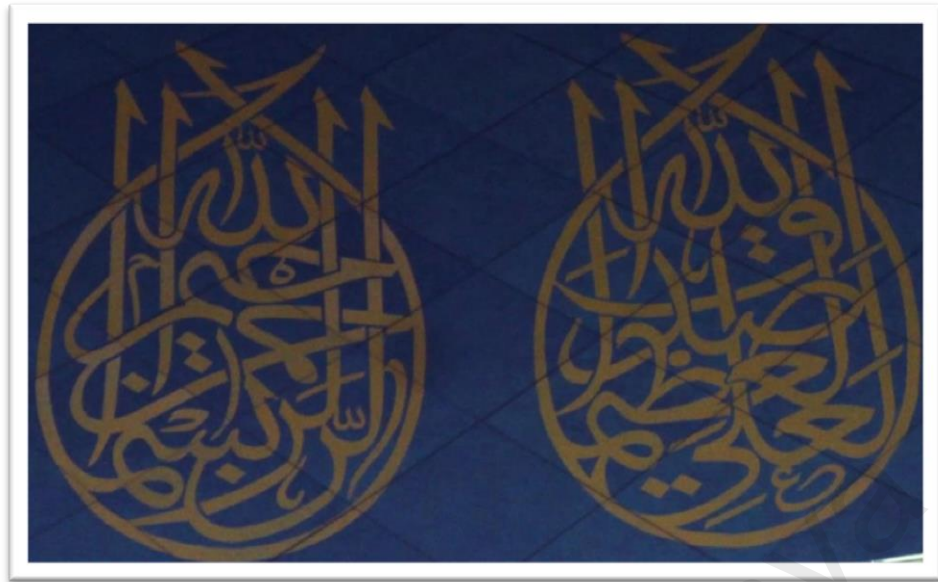


Figure 4.26: Thuluth calligraphy with similar form on the dome, Blue mosque. By Ahmed Abdulkadhim

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On the outside of the dome, the Islamic calligraphy decorated the surface of the dome with blue color and white background of marble, the calligrapher used the Thuluth style of the Islamic calligraphy on the beginning of the Surah and follow it by the Thuluth also on the rest of the Surah. The unification of the calligraphy inside and outside the mosque gives a wonderful overview to the mosque. Figure 4.27 showed the Thuluth calligraphy on the surface of the dome.



Figure 4.27: Thuluth calligraphy on the surface of the dome, Blue Mosque By Ahmed Abdulkadhim

Crimsh 2016

Finally, the calligrapher used variety of the Islamic calligraphy on the Blue Mosque except the Kufic style. From the researcher opinion of view, excluding the Kufic style from the calligraphy of the Blue Mosque is due that Kufic style, although has a high aesthetic value, it is considered as a geometrical style more than expressing on the calligrapher itself, and consequently, there will be mismatching in the overall the styles of the calligraphy of the Blue Mosque.

Table 4.1: location of the islamic calligraphy styles in the Blue Mosque

No	Name of Surah	Calligraphy styles			Location of the verses
		Beginning surah	Rest Surah	End Surah	
1	Surah al-Ikhlâs	---/-----	Thuluth	---/-----	On the top of Qibla wall
2	Surah al-Baqarah	---/-----	Thuluth	--/-----	The center of Qibla wall
3	Surah al-Baqarah	---/-----	Thuluth	---/-----	The Mihrab
4	Surah al-Fatihah	Nistaliq	Thuluth Tarkibi	Naskh	Right and left of Qibla wall
5	Surah al- Nass	Nistaliq	Thuluth Tarkibi	Ta'liq	Right and left of Qibla wall
6	Surah al-Falaq	Nistaliq	Thuluth Tarkibi	Riq'a	Right and left of Qibla wall
7	Surah al-Ikhlâs	Nistaliq	Thuluth Tarkibi	Diwani	Right and left of Qibla wall
8	Surah al-Fatihah (again)	Nistaliq	Thuluth Tarkibi	Thuluth Jali	Right and left of Qibla wall
9	Surah Yassin	Thuluth	Thuluth	Thuluth	Inside the dome
10	Surah Al-tawbah	Thuluth	Thuluth	Thuluth	Outside the dome
11	Duea (forgiveness prayer)	Thuluth	Thuluth	Thuluth	The entrance of the mosque

4.4 The Islamic calligraphy in the Blue Mosque determines the mathematical proportions of the letters according to of Ibn Muqla theory

Malaysia owns many wonderful Islamic arts, such as the Islamic architecture. Blue Mosque has many facilities, for instance the huge dome, the tallest Minaret, the biggest landscape, the unification of the colors and the collection of the Islamic calligraphy.

These facilities give the Blue Mosque a uniqueness in terms of its architecture. This section will explain the uniqueness of the Islamic calligraphy according to Ibn Muqla proportion system of the letters.

4.4.1 The main rules of the Islamic calligraphy

According to Hilal Naji in (1991) in his book *Tr: Ibn Muqla Khitatan Wa Adyaban Wa Insana*. Tr: (to ensure the elegant of Arabic calligraphy it must maintained the two sides of the writing, firstly, the shapes and secondly the positions of the letters.)

Ibn Muqla has five important rules to writing the letters for the first section that is the shape. These rules give the Islamic calligraphy the correct letters that assure the aesthetic value of the Islamic calligraphy.

The followings are the rules of the shapes:

1. Al- ttawfia: it means giving each letter the correct drawing (curved, flat, erect and arched) when it joins with other letters. See Figure 4.28.
2. Al-aittimam,: it means giving each letter the correct ratio (if the letter long, short , large or small) See Figure 4.29.
3. Al-aikmal,: to provide the letter its need of curing, starting . See Figure 4.30.
4. Al-aishbae: the Arabic writing must be clear and the letters should be very precise. Not be thick or thin except some letters like *al-alf* and *al-rra*). See Figure4.31.
5. Al-airsal : it means that the writer writes clearly and carefully without shivering his hand in making the writing elegant and clear. See Figure 4.32.

On the second side of writing is the position of letters. The calligraphers have to follow the four steps for writing.

1. Al-ttarsif,: each letter must be joined with others to make the writing clear except for some isolated letters. See Figure 4.33.
2. Al-ttalif,: joining each isolated letters with other letters on the middle or the end of the words. See Figure 4.34.
3. Al-ttansil,: looking into the position of prolongation between the joining letters. See Figure 4.35.
4. Al-ttastir: it is to add the word to other words in order to complete the sentence. See Figure 4.36 (Hilal, Naji 1991)

This is the basic rule of the Arabic writing as mentioned by Ibn Muqla in his messages of writing Arabic Islamic calligraphy. From this point, it can be checked that the Islamic calligraphy applied on the Blue Mosque is based on the theory of Ibn Muqla.

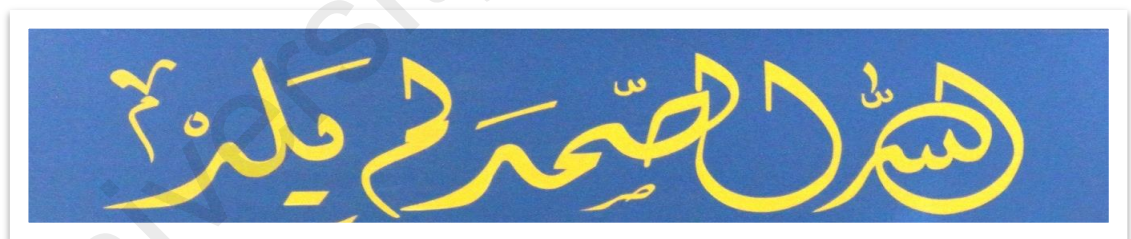


Figure 4.28: Al-ttawfia in Blue Mosque script. By Ahmed Abdulkadhim Crimsh 2016



Figure 4.29: Al-aittimam in Blue Mosque script. By Ahmed Abdulkadhim Crimsh 2016



Figure 4.30: Al-aikmal in Blue Mosque script. By Ahmed Abdulkadhim Crimsh 2016



Figure 4.31: Al-aishbae in Blue Mosque script. By Ahmed Abdulkadhim Crimsh 2016

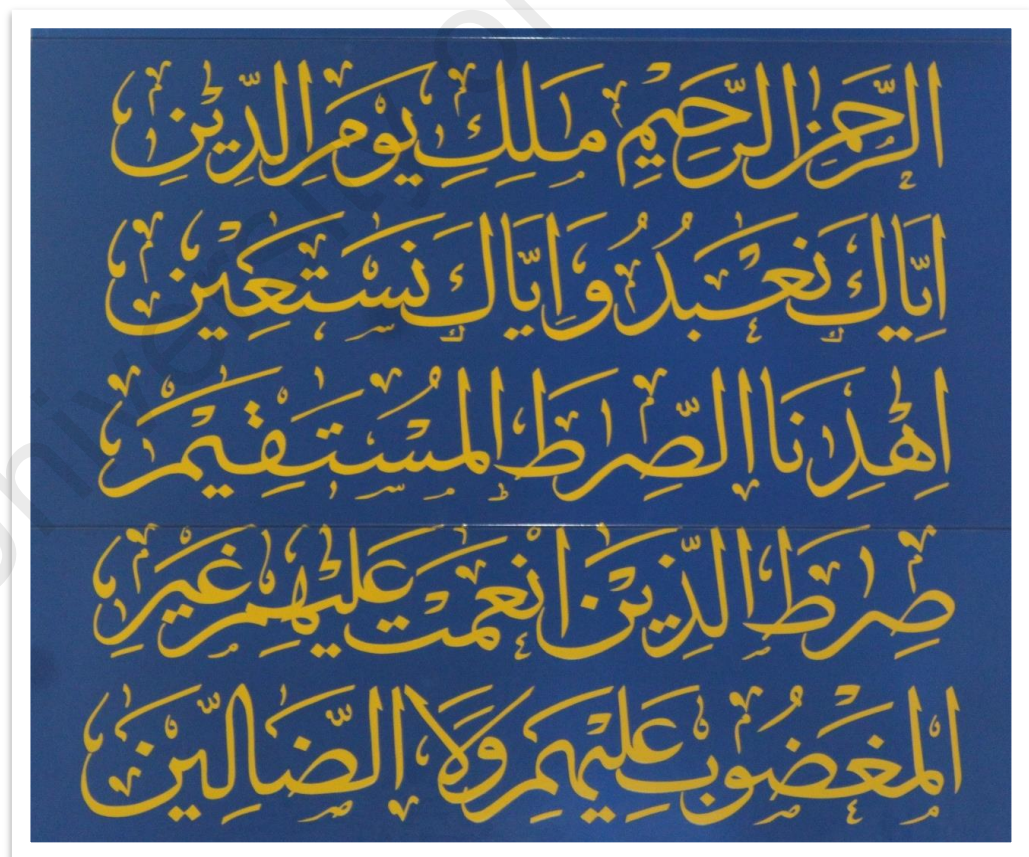


Figure 4.32: Al-airisal in Blue Mosque script. By Ahmed Abdulkadhim Crimsh 2016



Figure 4.33: Al-ttarsif in Blue Mosque script By Ahmed Abdulkadhim Crimsh 2016

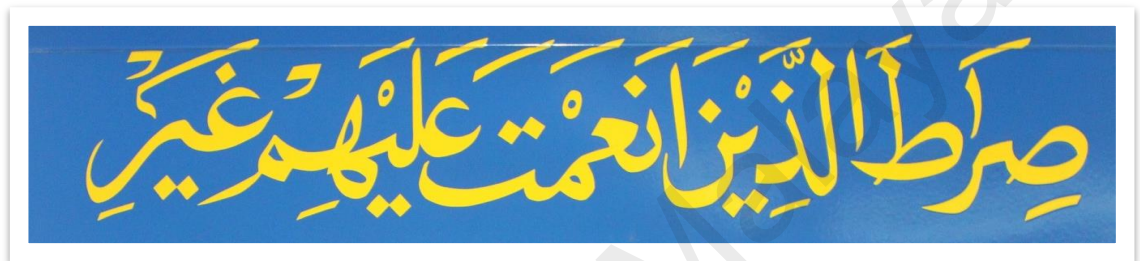


Figure 4.34: Al-ttalif in Blue Mosque script. By Ahmed Abdulkadhim Crimsh 2016



Figure 4.35: Al-ttansil in Blue Mosque script. By Ahmed Abdulkadhim Crimsh 2016



Figure 4.36: Al-ttastir in Blue Mosque script. By Ahmed Abdulkadhim Crimsh 2016

4.4.2 The proportion of the letters on the Blue Mosque

According to the Ibn Muqla's theory, Arabic calligraphy is based on the size of dots; the correlated measurement among letters in a script is determined by the width of the rhomboid dot produced by the bamboo or reed nib. The measurement of the letters on the Blue Mosque is measured by the size of the dots and *alif* letter on the manuscripts on the Qibla wall and the Mihrab.

The five panels on the Qibla wall from the left side of the Mihrab, started with the Surah Al-fatihah; the measurement of the dot of the surah is 3.4cm with the Naskh style.

The second verse of the Islamic calligraphy in Surah Al-Nas, the measurement of the dot is 4cm with Ta'liq style.

The third verse of the calligraphy in Surah Al-Falaq, the measurement of the dot on the Surah is 4cm with the Riq'a style.

The fourth Surah Al-Ikhlās written on the Blue Mosque with Diwani style of the Islamic calligraphy, the measurement of the dot is 3cm.

Finally, the last verse of the Quranic manuscript written in Thuluth style of Surah Al-fatihah the measurement of the dot is 2cm.

On the other side, the verse of the Quran placed on the Mihrab written in Thuluth style the measurement of the surah is 5cm.

According to principles of the Islamic calligraphy, the letters must be measured by the numbers of size of dots made by bamboo or reed nib. The *alif* letters are as follows:

1. Thuluth style seven dotes.
2. Naskh style five dotes.
3. Ta'liq style three dotes.

4. Nistaliq style three dots.
5. Riq'a style three dots.
6. Diwani style six dots.
7. Jali Diwani style six dots.

Figure 4.37, shows the number of dots in the basic rules of the Islamic calligraphy for each style that compare with the scripts on the Blue Mosque in determining the letters applied on it. Next, the Figure 4.38 shows the verses of Quran written in Blue Mosque with the measurement of the letters according to main principles of the Islamic calligraphy as mentioned earlier. The figure also shows the number of the dots beside the letter in explaining the size of the letter and to achieve the uniqueness of the Islamic calligraphy on the Mosque. We can observe that by looking to each panel on the mosque, Islamic calligraphy is written with the same principle of the Arabic writing. The verses of Holly Book written on the Blue Mosque have similarity of the same size of the letters according to the calligrapher except for some letters only. Calligraphers can extend or shortening the letters to fill the space between the words in achieving the aesthetic of the shape and give the harmony to the letters.


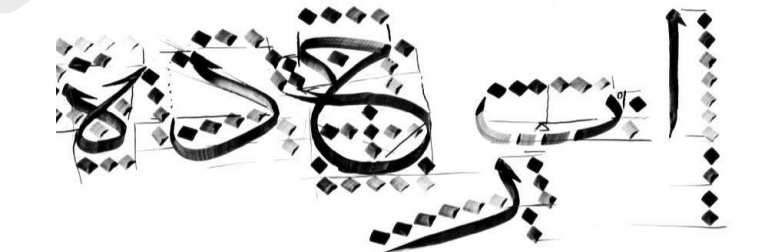
Samples of the letters	Styles of the Islamic Calligraphy
	Jali Diwani
	Ta'liq
	Riq'a
	Diwani
	Naskh
	Thuluth

Figure 4.37: The measurement of the Islamic calligraphy. By Ahmed Abdulkadhim Crimsh 2016



Figure 4.38: The proportion of Surah Al-Iklas in Blue Mosque . By Ahmed Abdulkadhim Crimsh 2016

4.4.3 Anatomy of the Islamic calligraphy applied on the Blue Mosque

The proportion of the letters will be shown in the figures below and the anatomy of the words with number of the dots up and below the scripts, which explain the size of the letters. Islamic calligraphy can be anatomical by putting the word between the ascender line and the descender line as part of a letter that extends up and below the level of the base of a letter. In figures 4.38 to 4.0, the rhombic dot for each letter is not included and dimensioning was used instead. This is to clearly show the dimensions and spaces between the letters.

At the beginning, the measurement of the calligraphy in the Blue Mosque started with the main principles size of the letters. For the *alif* letter in the figure 4.38 that shows the height of the letter in Diwani style of the Islamic calligraphy was six dots. According to the main principle of the calligrapher, it can be seen that the Diwani style manuscript in the Blue mosque has similar letters size, which can compare to figure 4.37. Figure 4.39, shown the proportion of the *alif* letter with other style of the Islamic calligraphy, the figure illustrates the size of *alif* letter that has three dots. This it can be observed that in figure 4.37, with Riq'a style. In addition, the manuscripts on the Blue Mosque were written by the main principles of the Islamic calligraphy because the scripts have been written by the dot and the size of the *alif* letter.

The other letter that is written according to Ibn Muqla's theory is the *Rra* (ر) letter. Naji in 1991 mentioned that in his book, the *Rra* (ر) letter consists from a curve that is equal to the quarter of the circumference of the circle that based on height of *alif* letter. Figure 4.39, shows the *Al-raa* (ر) letter and the size of the letter is similar with main body of the letter of Islamic calligraphy.

In the other side of the Islamic calligraphy in Surah Al-Ikhlâs, the style of the

calligraphy is the Thuluth Tarkibi. This shape of the Islamic calligraphy has been written by the wonderful and elegant letters in order to show the character and the magnificence of the Islamic calligraphy in the Blue Mosque. The calligrapher's work in the Blue Mosque used the basic rules of the writing according to Arabic writing. The calligrapher follows the ascender line, baseline and the descender line to write the words of the text. Figure 4.40, shows the baseline for each word and the anatomy of the words. The

the word and the space between the letters and the size of the sloping of the Arabic letters are often used in Islamic calligraphy. However, the shape in the same figure, the calligrapher draws the *Haa* (ح) letter smaller than the correctly size of the Islamic calligraphy in Thuluth style to maintain the unification of the shape with other panels.

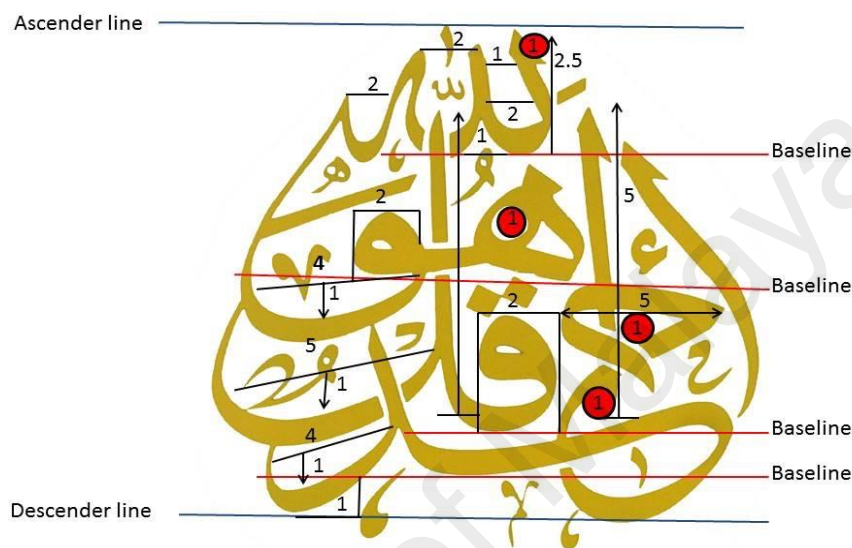


Figure 4.40: The proportion of the letters and anatomy of the words surah Al-Iklas in the Blue Mosque .

By Ahmed Abdulkadhim Crimsh 2016

On the other hand, the *Al-qaf* (ق) letter is noticed in the breadth, the curved and the size as three dots, in the Ottoman style, Baghdadi and Egyptian as can be see in figure 4.41.

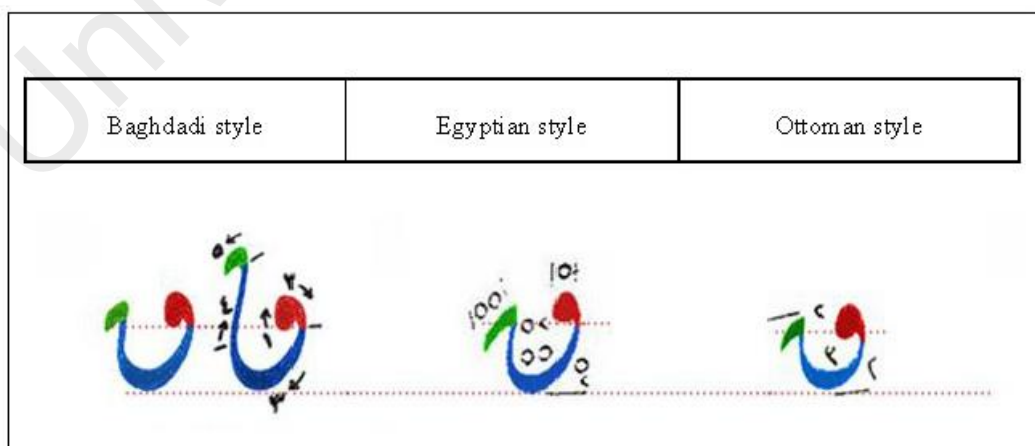


Figure 4.41: *Qaf* letter in different schools of the Islamic calligraphy Thaer Atrqchi (2014)

The same figure shows the *qaf* (ق) letters in Egyptian style are similar with the letter written in the Surah Al-Falaq on figure 4.39. The size of the letter started with the two dots at the head of the letter (red color). The curved of the letter was three dots according to the calligraphers writing (blue color). Finally, at the end of letter shape, the size was two dots (green color).

Each letter in Islamic calligraphy is written with a slope angle of specific value, figure 4.42, shows the slop angle for different letters in Riq'a style. The sloping angle of letters ranging between 45° to 60° and the ratio of the Thuluth style almost similar with Riq'a style. Furthermore, the other types of the Islamic calligraphy like Naskh and Jali Diwani, the ratio will be around 60° to 80° .

On the other hand, the ratio of Kufic letters is 90° because Kufic script is a geometrical style of the Islamic calligraphy.

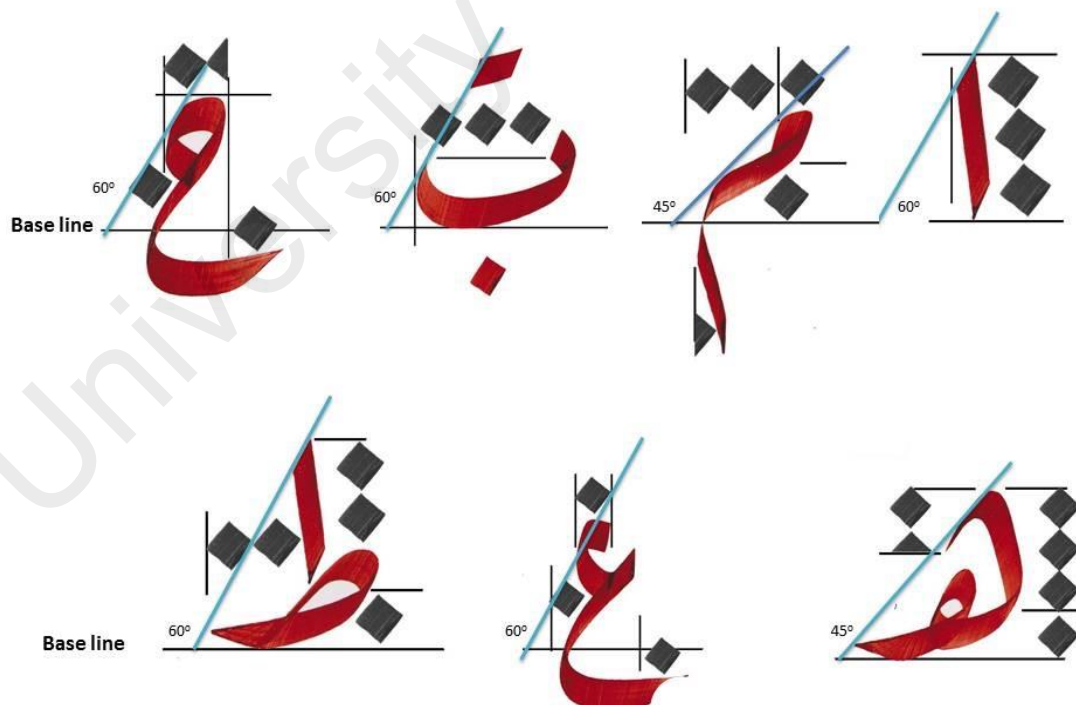


Figure 4.42: The ratio of Riq'a letters By Ahmed Abdulkadhim Crimsh 2016

Naskh style in general, the vertical letter as *alif* letter more elegant and thin compared with other horizontal letters like *Ba* letter. In this case the *kaf* (ك) letter can be chosen, Figure 4.43 below shows the thickness of the vertical letters and horizontal letters that show the relation between *alif* and *Ba* to create the *kaf* (ك) letter. The thickness of the *alif* letter is equivalent with *Ba* letter, which is half of horizontal letter.

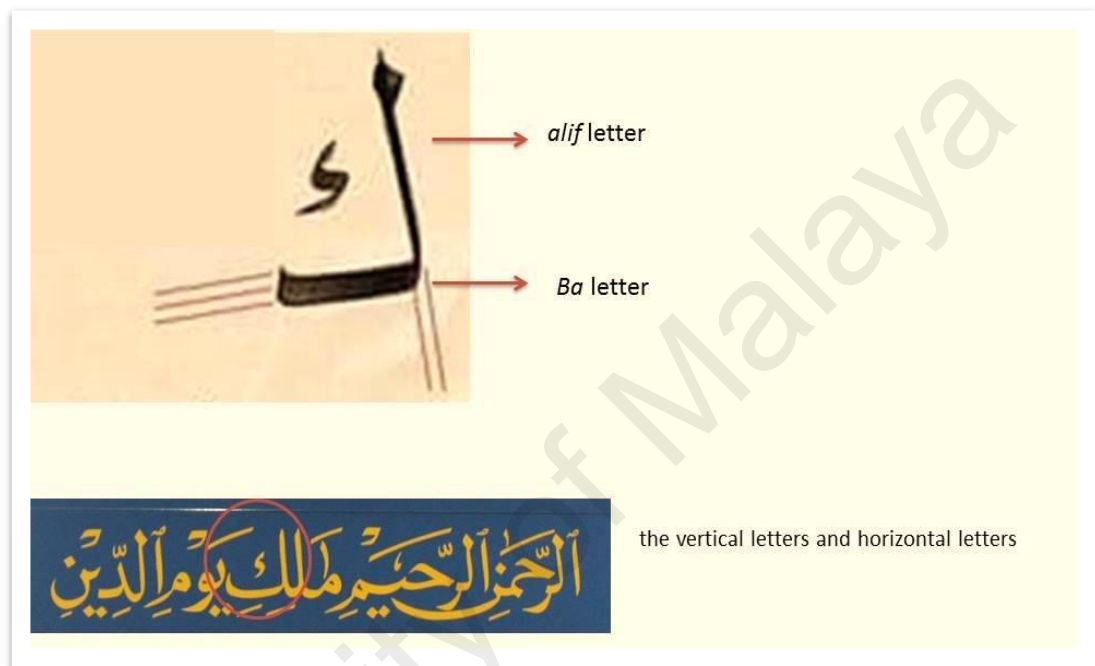


Figure 4.43: The thickness of the *alif* and *Ba* letter in Naskh style. By Ahmed Abdulkadhim Crimsh 2016

4.5 Conclusion

Various types of Islamic calligraphy have been applied on the Blue Mosque. In addition, the research analysis of the Islamic calligraphy on the Blue Mosque is simplified and concluded by tabulating the findings into three separate sections. These sections are as follows:

- First section: this section focuses on the Islamic calligraphy and the relationship between the Islamic calligraphy and analyzing styles of Islamic calligraphy applied on the Blue Mosque in Malaysia based on Arabic letters. On the other

hand, it also explains the relation between the diacritical marks with the Islamic calligraphy.

- Second section: this section explained and demonstrated the content and meaning of the Quranic verses in general to the muslims and describe the styles of the Islamic Calligraphy that was applied on the Blue Mosque Qibla wall, Mihrab, the right side and left side of the Minber. Moreover, it explained the calligraphy applied on dome and the courtyard of the Mosque is part of this section.
- The third section: this section explained and analyzed the Islamic calligraphy in the Blue Mosque according to the main principles of the Islamic calligraphy.

Finally to summarize this study, used the mathematical proportions system of the Islamic calligraphy according to Ibn Muqla's theory in order to insure that the Islamic calligraphy on the Blue Mosque was done in the unique styles and correct proportion of the letters. We can observe the uniqueness of the islamic calligraohy by looking to each panel on the mosque, Islamic calligraphy is written with the same principle of the Arabic writing. The verses of Holly Book written on the Blue Mosque have similarity of the same size of the letters according to the calligrapher except for some letters only. Calligraphers can extend or shortening the letters to fill the space between the words in achieving the aesthetic of the shape and give the harmony to the letters.

The six styles of the Islamic calligraphy used in the Blue Mosque were done on the diversity of the Quranic verses and styles of calligraphy inscriptions used on the Qibla wall dome and Mihrab related on the Arabic letters. Thuluth and Thuluth Al-Jali scripts are indeed the most frequently used style to decorate the main prayer hall, Qibla wall, Mihrab and inside and the surface of the dome due to its elegance, it can be used to write long verses of the Quran with different shapes that it can give the unification of the writing.

On the other hand, the Naskh style of the Islamic calligraphy used in the Blue Mosque, which is readable and understood by non-Arabic speaking nations such as Malaysia. However, the Thuluth style more is difficult to read because Thuluth style is very complex compared with other styles. Other styles used in the Blue Mosque such as Nistaliq, Riq'a, and Diwani used to decorate the main prayer hall.

The content and meaning of the verses of the Quran written on the Qibla wall and Mihrab used to show the worshipers the direction of prayer towards the direction the Kaaba in Mecca. In addition, the name of Allah and Prophet Mohammed His messenger related to the al-shshihadh Muslims used to read this word five times during the prayer time. Surah Yassin is written inside the dome known as heart of the Quran.

Furthermore, the Islamic calligraphy in the Blue Mosque used the main proportion system of Ibn Muqla known as the inventor of the six styles of the Islamic calligraphy and his theory based on the size of dots and *alif* letter. These principles make the calligraphy correct and show the elegant of the Islamic calligraphy.

As a conclusion and based on the conducted study on the Islamic calligraphy that decorates the Blue Mosque in Malaysia, the following unique features have been observed;

1. Different styles of the Islamic calligraphy are written by the basic rules of the Arabic writing.
2. The diversity of shapes of calligraphy that placed on the Blue Mosque has shown the ability of the Islamic calligraphy to decorate the mosque with wonderful panels.
3. The Islamic calligraphy in the Mosque shows the elegant of the Arabic letters that have the ability of making different shapes to decorate the sacred place of Muslims.

4. Islamic calligraphy in the Blue Mosque considers as the unique Arabic writing according to the principles of the Arabic calligraphy.
5. The calligraphy in the Blue Mosque has been done by the Egyptian school of the Islamic calligraphy according to the basic rule of the Egyptian style of the writing.
6. The Blue Mosque has the aesthetic value of the calligraphy because the calligrapher follows the basic rules of the Ibn Muqla principle of writing.
7. The Islamic calligraphy adopts the proportion system of the Ibn Muqla to write the different verses of the Quran.
8. Islamic calligraphy in the Blue Mosque has content and meaning, the calligrapher wrote the verses of Quran to show the message of Allah to the Muslims. On the other hand, the verses written in the Blue Mosque remind the Muslims about *al-shahada* “there is no god but Allah and Muhammad is messenger of Allah”. Other verses of Quran written in the Blue Mosque have meaning to the Muslim as mentioned in chapter four. This word of Allah gives the Muslims tranquility and stillness while the worship.
9. The different styles of the Islamic calligraphy give the Mosque the charm and the magnificence Islamic architecture.
10. The Islamic calligraphy related to the words of Allah, make Muslims proud to read and understand its meaning.
11. The Islamic Calligraphy considered as the main Islamic arts of the Muslims can be seen in the Blue Mosque.

CHAPTER FIVE: CONCLUSION RECOMMENDATIONS FOR FUTURE RESEARCH

5.1 Conclusion

The art of Islamic calligraphy is the art of the beautiful and elegant handwriting in the Islamic world. Throughout the history, Islamic calligraphy has reformed to many styles. Some of the significant styles were developed by different calligraphers from distinctive parts of the Islamic world, we can see that the Islamic calligraphy is applied on Islamic architectures and in copies of the Quran. The aim of the thesis is to demonstrate the Islamic calligraphy in the Blue Mosque. Moreover, to show that the Islamic calligraphy in the Blue Mosque has unique styles in terms of the aesthetic value of the Islamic calligraphy applied on the different parts of the Mosque. In addition, this study has reviewed the history of the Islamic calligraphy and the contribution of Ibn Muqla to improve the Islamic calligraphy in the tenth century and throughout the centuries.

Moreover, the main focus in this study was on the Islamic calligraphy existed in the Mihrab, Qibla wall and dome of the Blue Mosque.

This research has successfully answered some of essential questions related to the Islamic calligraphy in the introduction of chapter one.

Reviewing previous studies related to the Islamic calligraphy during the different period of the Islamic dynasty, gives this research a significant information regarding to the development of the calligraphy and the styles used in these different periods.

Subsequently, this study analyzed the Islamic calligraphy in the Blue Mosque using Ibn Muqla theory (proportion system of the letters) in which this theory can check if the letters have written following the Ibn Muqla standard and theory of the Islamic calligraphy. This theory has discussed in details in chapter three.

On the other hand, the research is meant to explore and analyze verses of the Quran that applied in the Blue Mosque and explain the effect of the diacritical marks on the Islamic calligraphy.

Consequently, this research focuses on both; calligraphy styles and the aesthetic awareness of those styles, in which represent an important values for Muslim society. In addition, this study provides better understanding and explanation of the meanings of the styles applied on the exterior and interior decoration including the Qibla wall, dome, and Mihrab, as well as the relationship between that Islamic calligraphy and sacred buildings.

This research also adds valuable information to researcher who really interested to know about Islamic calligraphy, especially the tourism Muslims and Non-Muslims looking for the Islamic architecture and Islamic arts.

The result of this research shows that diacritical marks give the Arabic words correct pronunciation and makes Arabic writing (calligraphy) more flexible to fill the space between the letters and words. The results show the aesthetic value of Islamic calligraphy.

To sum up, The Islamic calligraphy styles that used in the Blue Mosque are unique, in which reflected the beauty of Islamic art. The calligrapher has decorated the Mosque with variety styles and different shapes of the calligraphy. The other result of the research is reviewing the theory of Ibn Muqla that used by all the calligraphers to insure the precision of the Islamic calligraphy.

5.2 Recommendations and Future Work

Calligraphy is known as one of the most important arts in Islamic world. This art (calligraphy) has many different aspects to study to understand the structure of calligraphy in the Blue Mosque.

The elements of the calligraphy have a high aesthetic value reflected in the styles, shapes, forms, materials and the tools used for the calligraphy.

Yet, in the Blue Mosque in addition to the calligraphy, there are different styles and unique features and historical value needs to shed some light on to reveal the aesthetic value of the Malaysian Islamic architecture and show the unique structures built in Malaysia.

For future work, it is recommended to study the architecture and calligraphy of other mosques in Malaysia that their work done by local calligraphers to make a comparison with Blue Mosque architecture and calligraphy work.

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