

THE ISLAMIC CALLIGRAPHY STYLES AND SCRIPTS IN MUSLIMS' ARCHITECTURE: AN OVERVIEW

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ABSTRACT

Islamic calligraphy is one of the most highly notable by the Islamic civilisation. This art is the most prevalent in the countries of the Arabs and Muslims alike. Islamic calligraphy strongly presents in many types of buildings, furniture, and clothes with different styles and scripts. The presence of calligraphy in those objects is not only for an aesthetic purpose but also an essential element, reflecting cultural values. In architecture, for example, in a mosque, Islamic calligraphy is the primary tool of Quranic expression, which is combined with a spiritual geometry, thus providing the viewers with aesthetic and cognitive frameworks. Many past kinds of research have emphasised the comprehensive explanation of Islamic calligraphy types and styles in general. However, little studies give concerns about the archetypal characteristics of the calligraphy in Muslim architecture. This paper aims to discuss Islamic calligraphy and architecture design based on the literature review and research published in the past few decades. The author adopted this method to investigate the most common types and styles of calligraphy in Muslim architecture that can be used for the archetypal profiling of Islamic calligraphy in public buildings. The analysis results are presented simultaneously with the information that characterises the valuable calligraphy about its types, styles, and shapes relevant to the Islamic architectural buildings. The research findings suggest further investigation of the calligraphy elements essential to sustain its harmony and aesthetic value in the Islamic architectural building concept.

Key words: Islamic Calligraphy, Muslim Architecture, Calligraphic Styles and Scripts

INTRODUCTION

Islamic calligraphy is the unique art form created by developing Arabic letters in the Islamic world, and it has been utilised to decorate objects in different sizes and scales (Othman et al., 2015). Numerous scripts were emerged serving many religious, political, social, and cultural functions over the centuries as calligraphy is the creative exercise of writing by hand. It is created upon the alphabet to share a common Islamic cultural tradition (Hamidon & Ishak, 2015). This includes Arabic Calligraphy and Ottoman calligraphy. It is known in Arabic as Khat Islamic (خط إسلامي), that means an Islamic line, design, or construction (Noh et al., 2016). The enhancing of Islamic calligraphy is strongly recommended, especially in the Qur'an scripting. The chapters and excerpts from the Qur'an are public and nearly universal texts upon which Islamic calligraphy is based (Sardar, 2011). The suspicion of figurative art with its interrelation to the Qur'an has directed calligraphy to be one of the main forms of artistic expression in Islamic cultures. It was argued that Islamic calligraphy had been motivated less by iconophobia (since images were absent in Islamic art) than by the significance of the idea of scripting and writing text in Islam (Herrin, 2014). No wonder why calligraphy is strongly connected to the Islamic revolution while the prophet Muhammad had confirmed the importance of calligraphy by his saying: "The first thing Allah created was the pen and His first Ayat was Iqraa which He is asking all Muslims to read the Ayat."

The importance of calligraphy has directed many researchers to study this subject matter in various field of studies. One of the main focuses of the studies was pertaining to the visual expression of Arabic calligraphy in the architecture of Islamic cultures. However, the trend of research fell into a discussion of dealing with the calligraphy in terms of a visual and formal application and pure architectural aspects. Many studies show some lacking emphasis in categorising the styles and principles of Islamic calligraphy used in public buildings. Understanding of the styles and principles could help designers to use the Islamic calligraphy correctly as part of the decorative element. Therefore, the aim of this paper is to discuss Islamic calligraphy and architecture design based on the review of the literature and related researches published in the past few years by elaborating the categories of styles and scripts based on the use of Islamic calligraphy in the interior and exterior of public buildings. The main essential objective is to analyse and categorise the styles of calligraphy scripts used for the public building's decoration and its placement within the interior and exterior of the buildings.

ISLAMIC CALLIGRAPHY ORIGIN AND DEVELOPMENT

Arabic calligraphy got great importance in the Arab-Islamic civilisation. The calligraphy's need arose from the beginning of the civilisational advancement witnessed by the Arab nation in the early days of Islam (Baydoun, 2017; Kamarudin et al., 2020; Rosenthal, 2015). God has revealed the virtue of writing and calligraphy in the first verse of the revelation. The Almighty said in

his holy book: "Read and your Lord, the Most Gracious, who taught with the pen, taught the man what he did not know." It was the most excellent witness to the generosity of writing, and the first Surat mentioned in Al Qur'an "the pen" to relate calligraphy to the almighty of Allah.

The prophet (peace and blessings of Allah be upon him) about calligraphy was great, and he was keen to urge Muslims to learn it. The Arabic calligraphy developed later and became widely used in the media, and the calligraphers started to innovate and decorate their writings (Boulid et al., 2017).

Although many Arabic dialects were spoken in pre-Islamic times, and some are known to have been written down, most literature was transmitted orally (Kamarudin et al., 2020; Shichinohe et al., 2011). The Qur'an was preserved by oral transmission until the time after the prophet's death, while it had been recorded in the written form at that time. This required that the Arabic script be standardised. The typical way of the script was used by the end of the 7th century. It was employed on the first surviving monument of Islamic architecture, the Dome of the Rock in Jerusalem as figure 1, built-in AD 691. The new writing also performed on the coins made for the caliphs of the prophet.



Figure 1: the dome of rock with calligraphy
Source (Alwaleed, 2019)

The Arabic language with calligraphy art is held in great esteem by Muslims. Arabic was the language of the Qur'an when it was revealed to the prophet Muhammad by the 7th century (Allen Jr, 2016). The Qur'an, with its Arabic text, is sacred to Muslims. It got a high status with associated respect for books. It is quite interesting that the Qur'an's holy status refers to the importance of calligraphy. This means that most of the Arabic calligraphy is religious in content. Generally, calligraphic inscriptions on works of art comprise one or more text types such as the Quranic quotations, poems, praise for rulers, aphorisms, and other religious texts.

These text types can be seen across all forms of calligraphy. Since Muhammad's time, Arabic has become a great world language, used over a huge area as a language of religion, government, commerce, literature, and science (Stokstad, 2018). The letters of the Arabic script with the addition of letters with new forms were used to write in Persian, Turkish, and other languages. Calligraphy has been utilised to a much greater extent and in greatly varied and imaginative ways that took the written word of the limit of a pen and paper into all art forms and materials (Lings, 2005). For this reason, calligraphy counted as a unique and original feature of Islamic art. The generosity of Islamic calligraphy relies on the unlimited creativity and versatility and on balance struck by calligraphers between transmitting a text and expressing its meaning throughout a formal aesthetic form.

In terms of the styles of Islamic calligraphy, Figure 1 illustrates one of the most famous calligraphy in the world of Islamic architecture, which is Kufic calligraphy. It was used in interior and exterior decorative elements of the Islamic buildings (Gacek, 2009). The Kufic calligraphy continued to be used to write the Qur'an and the painting. It was used to be engraved on the walls until the minister Ibn Muqlah set the rule of the Naskh calligraphy, and the Arabs like it as a result of being easy and beautiful. Ibn Muqlah was the minister three times, but he was famous for being a calligrapher more than being a minister. The knowledge of Ibn Muqlah in geometrical sciences was an important factor in developing the art of calligraphy and its rules. The Naskh calligraphy is considered a soft picture of the dry Kufic calligraphy. The people of Morocco have gathered between both in their writings. This phenomenon is evident in the report of the Moroccan information of the Qur'an. Among the first pioneers who set the rules of calligraphy are Ibn AL Bawwab and Yacout al-Mustangs. Each has its special technical features and opened the door wide to those

who came after them from the calligraphers who are inspired to embark on this magnificent art to the broad horizons of aesthetic values and make it reach the top of perfection and beauty (Crimsh, 2017).

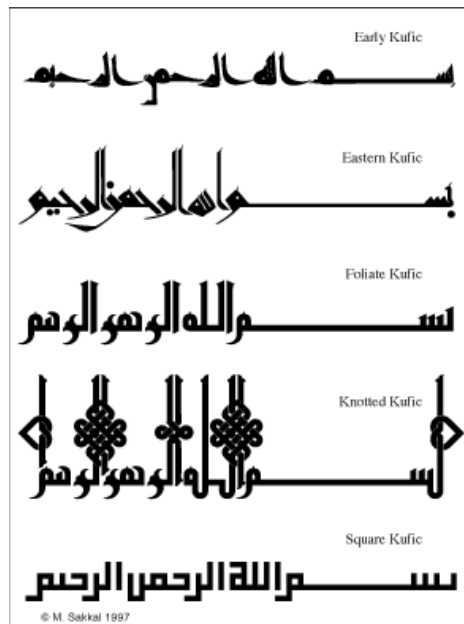


Figure 2:Kufi khat styles
Source (calligraphy, 2017)

The other factor is the type of used pen that is made from a reed. Several effects could be attained by cutting the nib in different ways. If the end of the reed is cut using a knife, a bill can be created. After that, rounded scripts can be written with a nib that is cut at an oblique angle, which allows the calligrapher to make both thick and thin lines, adding elegant diversity to the script (Almusallam, 2014). The width of the pen is also significant. While wider nibs were required for a bigger script, the line's width remains in proportion to the writer's overall size. The system of ratio based on the width of the nib determines the forms of the individual letters. The letter Alif contains a single vertical stroke fundamentally, as can be seen in figure 3. It is three times as high as its wide in each style, while it is seven times as high in another one. Therefore, the letter Alif is more prominent in the second style and contributes to its overall appearance (Azmi & Alsaiani, 2014).

| | Transcrip- tion | Numerical value | Alone form | Initial form | Medial form | Final form |
|-------------|--------------------|--------------------|---------------|-----------------|----------------|---------------|
| <i>alif</i> | ' / â | 1 | ا | ا | ل | ل |
| <i>bā'</i> | b | 2 | ب | ب | ب | ب |
| <i>tā'</i> | t | 400 | ت | ت | ت | ت |
| <i>thā'</i> | th | 500 | ث | ث | ث | ث |
| <i>jīm</i> | j | 3 | ج | ج | ج | ج |
| <i>ḥā'</i> | ḥ | 8 | ح | ح | ح | ح |
| <i>khā'</i> | kh | 600 | خ | خ | خ | خ |
| <i>dāl</i> | d | 4 | د | د | د | د |
| <i>dhāl</i> | dh | 700 | ذ | ذ | ذ | ذ |

Figure 3:The First few letters of Islamic calligraphy
Source (Islamic. Art, 2018)

The different contexts allow variations to take account in a letter; flexibility in the length of the ligatures or joins exists between the notes. This was important because the Arabic script is always cursive, joined-up, and never has separate letters, as in printed English (Florey, 2013). Another elementary ingredient in the formation of a style was the nature of the mainline. The invented line in many scripts was written strictly horizontally. In others, each new group of letters began above the baseline and then sloped downwards to the left to meet it. Arabic script, unlike English, can be read right to the left. These 'hanging' scripts were initially devised as a security feature in official documents because the 'hanging' groups could be placed very close to prevent unauthorized additions. Later, this feature was used in other contexts because it was considered elegant (Chazal, 2013).

THE METHODS

An investigation was conducted to understand the styles and scripts of calligraphy applied to the interior and exterior spaces of several buildings that carry the Islamic identity. This study employed the qualitative method to investigate the most common types and styles of calligraphy in Muslim architecture that can be used for the archetypal profiling of Islamic calligraphy in public buildings. Literature reviews yielded to the identification of calligraphy styles and the importance of calligraphy texts in the elements of decoration. A set of research criteria has been formulated to visualise the study in the context of the field of knowledge, namely Islamic calligraphy, architectural decoration, mosque architecture, and Islamic art. Secondary data as literature comes from journals, books, articles and thesis were obtained from the research have aided as primary research techniques that provide evidence that enable authors to construct interpretations of data and evocative conclusions in relation to the research aim and objective.

Qualitative Methods of Data Collection

A qualitative approach of data collection was conducted through a review of the pieces of literature that are related to Islamic calligraphy origin and developments, timelines, styles, scripts, types, and Islamic calligraphy with architecture. The researcher focused on the most used styles and scripts of Islamic calligraphy that are applied in interior and exterior architecture public buildings since this research seeks to analyse and categorise the styles of calligraphy scripts used for the public building's decoration and its placement within the interior and exterior of the buildings. The researcher established the main criteria to determine the most workable calligraphy, which includes the architectural style and availability of the calligraphy scripts in the three selected buildings as referenced case studies. These include all buildings in Malaysia, namely Moroccan pavilion in Putrajaya, Masjid Raja Haji Fi Sabilillah, Cyberjaya, and Islamic Art Museum in Kuala Lumpur that are considered as buildings with an Islamic design concept. Islamic architecture in the peninsula Malaysia comes in a wide range of styles, and they exhibit plenty of Islamic calligraphy decorative elements as part of the building design with its sense of moderate scale. This makes them worthy of inclusion as referenced case studies for the research. This allowed the researcher to investigate on the styles and types of calligraphic scripts found in the buildings since the main essential objective of this research was to analyse and categorise the styles of calligraphy scripts used for the public building's decoration and its placement within the interior and exterior of the buildings. The systematic review of the related researches and kinds of literature helps the researcher to categorise the major types and styles of Islamic calligraphy that can be used as a reference in the architectural design and decoration of the public buildings with the Islamic identity.

ANALYSIS, RESULTS AND FINDING

According to the literature review, the researcher found that there are quite a good number of researches that focused on Islamic calligraphy origin, developments, and the history of Islamic calligraphy. In contrast, quite a small number of researches focused on Islamic calligraphy in architecture, emphasising the calligraphy styles and scripts with the archetypal characteristics. Table 1 shows the related researches that include the subject of Islamic calligraphy in various aspects. Many studies focused on the development of Arabic calligraphy and the relation between Arabic and Islamic calligraphy, while other researches focused on the timeline of calligraphy in general. Other studies covered the most used calligraphy styles and scripts with the use of writing. On the other hand, many types of research explain the relation of Islamic calligraphy and architecture as decorative elements, and few of these researches elaborate on certain calligraphy styles and scripts that have been used on different types of buildings. From the review of the literature and researches, the researcher was able to categorise the most used calligraphy in the buildings as decorative elements.

From the styles and scripts of Islamic calligraphy and its relation to architecture, it is exceptionally fundamental for an Islamic categorised building to have the three significant decoration elements in its exterior design: the floral design, the geometrical, and the Islamic calligraphy. The Arabic script is inscribed in a complete aesthetic form with a variety of inscriptions. The splendour of these inscriptions has inspired many works in art and architecture.

Table 1 Related studies of Islamic calligraphy origin, development, and architecture

| No | Year | Author Name | Research Title |
|---|------|--------------------------|--|
| Islamic calligraphy origin and development | | | |
| 1 | 2018 | Dr. Nasr Abd rabo | The Globalisation of The Arabic Alphabet and their influences On the Modern European Languages |
| 2 | 2018 | Fragment | Arabic Script and The Art of Calligraphy |
| 3 | 2017 | Ahmed Abdulkadhim Crimsh | Analysis of The Calligraphy Design on Selected Quranic Phrases in The Blue Mosque Malaysia |
| 4 | 2014 | Basma Almusallam | Developing an Arabic Typography Course for Visual Communication Design Students in the Middle East and North African Region |
| 5 | 2015 | Damla Arifoglu | Matching Islamic Patterns in Kufic Images |
| 6 | 2013 | Meliha Teparić | Islamic Calligraphy and Visions |
| 7 | 2013 | Julien Chazal | Calligraphy: A Complete Guide |
| 8 | 2013 | Amer Alkharoubi | Modern Arabic Calligraphic-Based Logos: The Influence of Traditional Arabic Calligraphy On Modern Arabic Calligraphic-Based Logo Designs |
| 9 | 2012 | Rahman Hamzah | Introduction to Islamic Calligraphy |
| 10 | 2011 | Mohd Sanusi Azmi | Arabic Calligraphy Identification for Digital Jawi Paleography Using Triangle Blocks |
| 11 | 2010 | Alain George | The Rise of Islamic Calligraphy |
| 12 | 2009 | Titus Burckhardt | Art of Islam: Language and Meaning |
| 13 | 2008 | Ali A. Alshahrani | Arabic Script and The Rise of Arabic Calligraphy |
| 14 | 2008 | Irvin Cemil Schick | The Iconicity of the Islamic Calligraphy in Turkey |
| 15 | 2006 | Sheila S. Blair | Islamic Calligraphy |
| Islamic calligraphy and Architecture | | | |
| 1 | 2016 | Mayyadah Hussein | The Role of Arabic Calligraphy in Forming Modern Interior Design |
| 2 | 2014 | Jeanan Shafiq | Architectural Elements in Islamic Ornamentation: New Vision in Contemporary Islamic Art |
| 3 | 2013 | Mohammad Gharipour | Calligraphy and the Architecture of the current Muslim World |
| 4 | 2011 | Zoe Griffith | Calligraphy and The Art of Statecraft In The Late Ottoman Empire And Modern Turkish Republic |
| 5 | 2011 | R. Othman | The Importance of Islamic Art In Mosque Interior |
| 6 | 2010 | Abby M. Kornfeld | Introduction to Islamic Art & Architecture |
| 7 | 2009 | Megan Waterman | Introduction to Arabic Calligraphy |
| 8 | 2007 | Hamzah | The Application of Calligraphy in Mosques Case Studies In Egypt, Turkey, And Malaysia |

Styles and Scripts of Islamic Calligraphy

Many literatures highlighted that the first official calligraphy is the Kufic style coming from the city of Kufah in Iraq, but at the same time, there were several calligraphy styles before, such as Arabic masnad, aljazem, Hijazi, etc. as stated in Figure 8. The Kufic calligraphy was used in the early Qur'an manuscripts. And it was used for interior and exterior inscriptions such as those at the Dome of the Rock in Palestine, as can be seen in figure 1. Surprisingly, the name Kufi also refers to a major group of script styles, which became very important in the 10th century (Porter, 2010). This group includes new, more angular types showing many fanciful alternatives such as foliated Kufic, which is decorated with curling leaf shapes, and the floriated Kufic that is decorated with flower forms. This group of Kufic styles was utilised in several frameworks like Qur'an manuscripts, coinage, architectural inscriptions, as well as the decoration of ceramics. While this second type of Kufic was being advanced in the Middle East, a new style was probably established far to the west in Baghdad when Muslims ruled Spain and Morocco (Almusallam, 2014).

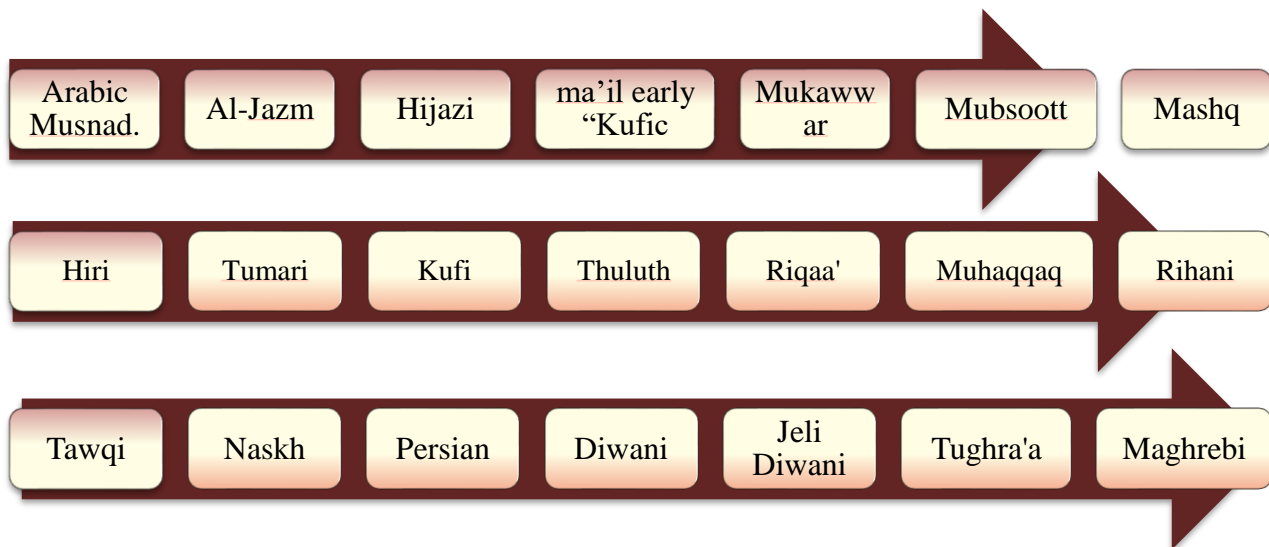


Figure 8 :The Styles of calligraphy

The new style was called Maghrebi according to the Arabic name for the western region that is called A.L. Maghrib. Several calligraphers still use this Maghrebi style until today. However, in the Eastern Islamic world, the Kufic styles were rarely used by the 13th century, replaced by the range of more rounded styles. The more fluid styles had been advanced in the East since Parchment and papyrus had been changed to papers as the main medium for significant manuscripts and documents. The paper's surface could be sized (coated with starch) and rubbed with a stone until extremely smooth and glossy (Alkharoubi, 2013). The pen can be moved over this surface very easily. In that time, Parchment continued to be used until a much more in Maghrib.

Styles of Islamic Calligraphy in Architecture

There is a special and unique advantage in Islamic calligraphy that is rarely found in other writings, explained in its flexibility to decorate things in countless methods. Some of the decorators created forms in which viewers cannot find the basic sacred element, among those decorative combinations created by the creative minds (Dilmi, 2014). This can be seen in the sharp Arabic Kufic inscriptions and the other soft writings alike. Thus, the Arabic word is a picture that includes a voice and a visual form. Each part of it is equal and parallel to another. Based on that, the Arabic word is used as an artistic element in the Islamic decoration applied in the buildings. The intent was not to benefit from the form of its artistic shape, but the artist intended to install a complete piece of art (Kornfeld, 2018).

There are a few examples of building that exhibit calligraphy in their exterior successfully. One of them is Masjid Raja Haji Fi Sabilillah in Cyberjaya, as shown in Figure 4. This building is one of the predominant Islamic buildings that represent the modernity and sustainability of the architectural design with a great reflection of the geometrical pattern and calligraphy on its pure façade using Kufic calligraphy (Mustafa, 2009).



Figure 4: Masjid Raja Haji Fi Sabilillah, Cyberjaya

The Mosque of Moulay Idriss Zerhoun is a deeply revered and significant place for Moroccans. While visitors cannot enter inside, they can fill their sights by staring at the only round minaret in all of Morocco covered in bright green tiles and text from the Holy Quran. The minaret was added to an older mosque in 1939. The minaret's Kufic calligraphy created a unique identity and special character to the building's façade (Coleman, 2013).



Figure 5: the Islamic museum in Kuala Lumpur, the dome. (Islamic museum Malaysia, 2012)

According to the Islamic calligraphy book that was published under the Islamic museum Malaysia (2012), the significant and robust connection between Islamic calligraphy with its floral and geometrical combination is the Islamic museum in Kuala Lumpur. The museum has intricate architecture and interior. There is a beautiful blue façade and dome covered with Islamic art features on its façade and roof equally to the building's interior. At the same time, the visitor can find unique crafted Islamic patterns with exceptional care all over the dome-shaped ceiling. Thuluth and Naskh are the main Islamic calligraphy applied at the interior of the walls and ceiling of the museum, while Thuluth and Kufic are shown at the dome and entrance. The usage of glazed walls allows plenty of natural light to shine through it. The mixture between the geometrical, floral pattern and the Islamic calligraphy creates outstanding compositing and identity to the museum's design.



Figure 6: Islamic museum in Kuala Lumpur, the main façade

The Islamic art at the Moroccan pavilion in Putrajaya with its floral and geometrical designs and motifs is the strongest proof of Putrajaya being an Islamic city. A great effort was exerted in it to include the whole Islamic elements and details, the Islamic calligraphy was the main Islamic element of the decoration purpose while Thuluth was applied at the most of the walls, arches and ceilings, some Dewani calligraphy shown at the column and the Kufic calligraphy was clearly shown at the main instance of the building from outside (Mustafa, 2009). From that point, Putrajaya has started to apply the Islamic motifs richly in any modern or traditional government building. Obviously, Putrajaya's architecture is full of the Islamic signs that can be embodied in the arches, domes, and geometrical patterns. After a few discussions and observations with authorities, and from comparing the Moroccan pavilion with the other governmental buildings, Putrajaya's buildings' designs lack the most important Islamic design element that exists richly in the Moroccan pavilion that is calligraphy.



Figure 7: Astaka Morocco, the Islamic calligraphy element
Source (illashanahila. 2017)

Using Islamic calligraphy as a decorative element for interior design is relatively less challenging than exterior usage. It can be easily used in any type of Islamic calligraphy style and scripts since the most famous calligraphy that was used before are Nasakh, Dewani, and Thuluth. No matter how it is aimed to shape, it is always excellent for decoration, and these scripts are readable. It is found that the Kufic and Thuluth calligraphies are the most suitable types of decorative elements for the exterior parts of the buildings. Figure 9 summarises the categories of Islamic calligraphy as decorative elements for the interior and exterior of the buildings. The many types of calligraphy scripts are found in the few selected Islamic buildings that have applied calligraphic decorative elements on its external façade in an elegant and modern way.

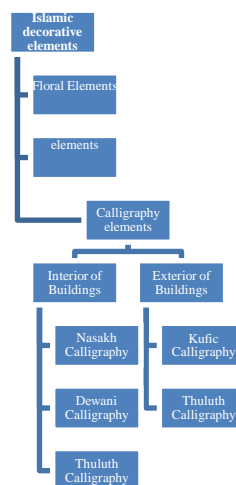


Figure 9 Categorization of major calligraphy

This flow diagram in figure 9 illustrates the three principal elements of interior decorations, namely floral, geometrical and calligraphy. As can be seen, all those elements can be applied in exterior and interior area of the buildings. The calligraphic scripts of Nasakh, Dewani and thuluth, are the most common type that has been used in the interior of the building. While Kufic and thuluth are shown mostly in the exterior of the building. This shows that the thuluth script is not only found in the interior part of the buildings but also in the exterior part. This suggests that Thuluth script is one of the predominant scripts used in the Islamic buildings that represent its versatility and adaptability due to its special character.

CONCLUSION

The main objective of the research is to analyse and categorise the styles of calligraphy scripts used for the public building's decoration and its placement within the interior and exterior of the buildings. The analysis reveals that many Islamic calligraphy styles and scripts are found in the buildings. Some of them are main styles such as Kufic, Thuluth, Diwani, Farisi, Nasakh, and Ruq'a, while others were sub-main like Rihanna and jeli Diwani. It was found that the Kufic and Thuluth calligraphies are the most suitable types of decorative elements for the exterior parts of the buildings. A number of those styles and scripts, for examples

Kufi and Thuluth are functional to be used for decoration and as a decorative architectural element. Meanwhile, the cursive scripts like Naskh and Riqaa' are better just for writing and decorating a Quranic manuscript. To sum up, since there is a good number of Islamic calligraphy choices, the researcher categorised them into two groups, namely interior calligraphy and exterior calligraphy. This can easily help the architects or designer choose the best options for using and presenting Islamic calligraphy in a good and beneficial way. Islamic calligraphy is regarded as an exclusive art because of the Arabic letters' enhancement and innovation, leading to a variety of styles and scripts. It can be employed as the main decoration of items in different styles, sizes, and scales. Many calligraphy scripts appeared to serve as visual message apart from being decorative functions. The findings from this research are significant to cover up the Islamic calligraphy in architecture design based on the review of the literature and related researches published in the past few years. By categorising the calligraphic styles and scripts into major principles, this could help designers to use the Islamic calligraphy correctly as part of decorative element for the interior and exterior of public buildings. The use of Islamic calligraphy represents its interrelation to Qur'an, thus has significantly directed the calligraphy to be one of the core forms to serve as visual expression through building decoration. That is why calligraphy is powerfully linked to the Islamic art and design as the Islamic calligraphy played a big role in presenting Islamic design's identity and it is one of the important elements of Islamic decoration besides geometrical and floral elements. Hence, more researches should be further pursued to determine the principles of categorising Islamic calligraphy scripts in relation to their placements and distribution in public buildings.

REFERENCES

- Alkharoubi, A. (2013). Modern arabic calligraphic-based logos.
- Allen Jr, C. H. (2016). Oman: the modernisation of the sultanate. Routledge.
- Almusallam, B. (2014). Developing an Arabic Typography Course for Visual Communication Design Students in the Middle East and North African Region.
- Azmi, A. M., & Alsaiari, A. (2014). A calligraphic based scheme to justify Arabic text improving readability and comprehension. *Computers in Human Behavior*, 39, 177-186.
- Baydoun, Z. (2017). The traditional method and techniques of Ajami handmade art from a Syrian master artisan.
- Boulid, Y., Souhar, A., & Elkettani, M. Y. (2017). Handwritten Character Recognition Based on the Specificity and the Singularity of the Arabic Language. *International Journal of Interactive Multimedia & Artificial Intelligence*, 4(4).
- Chazal, J. (2013). *Calligraphy: A Complete Guide*. Stackpole Books.
- Coleman, D. Y. (2013). Culture and Arts [Article]. *Egypt Country Review*, 222-223.
- Crimsh, A. A. (2017). Analysis of the calligraphy design on selected Quranic phrases in the Blue Mosque Malaysia.
- Dilmi, D. (2014). SINO-ARABIC SCRIPT AND ARCHITECTURAL INSCRIPTIONS IN XI'AN GREAT MOSQUE, CHINA. *Journal of Islamic Architecture*, 3(1), 39-48.
- Florey, K. B. (2013). *Script and scribble: the rise and fall of handwriting*. Melville House.
- Gacek, A. (2009). *Arabic manuscripts: a vademecum for readers* (Vol. 98). Brill.
- Hamidon, N. A., & Ishak, S. M. M. (2015). The New Categorisations of Style in Contemporary Islamic Calligraphy Paintings in Malaysia. *International Journal of Social Science and Humanity*, 5(4), 403.
- Herrin, J. (2014). What Caused Iconoclasm? *The Journal of Ecclesiastical History*, 65(4), 857-866.
- Kamarudin, Z., Kassim, P. S. J., & Abdullah, A. (2020). The Variants And Meanings of Malay Motif Ornamentation in The Urban Context: A Case Study of Putrajaya. *PLANNING MALAYSIA*, 18(12).
- Kornfeld, A. M. (2018). *Introduction to Islamic Art & Architecture*.
- Lings, M. (2005). *Splendours of Quran calligraphy and illumination*. Vaduz: Thesaurus Islamicus Foundation, 20052.
- Mustafa, M. (2009). Public Art in the Federal Territory of Putrajaya: Questions of Value and Role. *Wacana Seni Journal of Arts Discourse*, 8.
- Noh, M. A. M., Harun, M. F., Abdullah, N. N. N., Baharuddin, N. F., & Ramli, Z. (2016, 2016). Kufi Lari: The Hybrid of Khat Kufi to Uphold the Malays' Identity in Digital Art Application.
- Othman, Z., Aird, R., & Buys, L. (2015). Privacy, modesty, hospitality, and the design of Muslim homes: A literature review. *Frontiers of Architectural Research*, 4(1), 12-23.
- Porter, V. (2010, 2010). The use of the Arabic script in magic.
- Rosenthal, F. (2015). Significant uses of Arabic writing. In *Man versus Society in Medieval Islam* (pp. 1043-1065). BRILL.
- Sardar, Z. (2011). *Reading the Qur'an: the contemporary relevance of the sacred text of Islam*. Oxford University Press.
- Shichinohe, T., Yamabe, T., Iwata, T., & Nakajima, T. (2011, 2011). Augmented calligraphy: experimental feedback design for writing skill development.
- Stokstad, M. (2018). *Medieval art*. Routledge.