

The Transformation of Calligraphy from Spirituality to Materialism in Contemporary Saudi Arabian Mosques

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Dedication

My great mother,
your constant wishes and
prayers were accepted.
Sadly, you will not hear
of this success. Happily,
you are always in the
scene; in the depth of my
heart. May Allah have
mercy on your soul.

Your faithful son:
Ahmad

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Abstract

Contemporary discourses by both Western and Muslim scholars on the subject of Islamic philosophy and art, especially the influence of globalisation on Islamic Art in general and the art of calligraphy in particular, have drawn attention to the new architectural styles of mosques in Saudi Arabia and the representation of calligraphy in them.

The present study aims to analyse the impact of globalisation on the transformation of calligraphy in Saudi Arabian mosques, and investigate the paradoxical nature of authenticity in relation to the art of calligraphy. In this study, the historical, theoretical and qualitative data were amassed as part of the methodology. A qualitative descriptive method to a case study approach was the primary approach for data collection. The main aim was to understand the historical mapping of the origin and development of calligraphy, analysing its outcomes in the context of the contemporary mosques in Saudi Arabia. The results section focuses on the answers obtained from a questionnaire directed at artists and calligraphers, and in the interviews conducted with experts in calligraphy. The discussion section focuses on the detailed analyses of the answers. The study demonstrates the process of change and the misrepresentation of calligraphy and its applications inside the mosques selected for study, including forces that have been influencing such change. Consequently, the results show that there is a remarkable transformation of calligraphy in its form and function in contemporary mosques in Saudi Arabia. This transformation has been caused by due to several dominant factors including the way of representing calligraphic patterns, the impact of the local culture, and spread of the culture of materialism and globalisation.

Terms of References

The following terms are defined according to their use in this study:

- **MATERIALISM:** also called ‘physicalism’, is the way of promoting mass production over the cultural values and metaphysical beliefs. It suggests a ‘sameness’ consumer culture as society’s inspiration glorifies ownership of material objects rather than philosophical or non-physical socio-political ideals. Therefore, the value of materialism centres on the importance people place on material possessions as a way of defining, constructing, and maintaining their concept of self (stressing the outer world over the inner world).
- **MODERNISM:** is the philosophical movement that arose after the development of modern industrial societies. It includes the activities and creations of those who felt, while appreciating the traditional forms of art, architecture, and literature that they were becoming ill-fitted to their tasks and outdated in the new environment of an emerging fully industrialised, modernist, world.
- **SPIRITUALITY or SPIRITUALISM:** is where the mind focuses on the higher perceptions and non-material realities. It is the opposite of materialism. Thus, the concept focuses not on mere appearances in a material-minded or materialistic way, but on inner feelings rather than outward sophisticated appearance.

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CHAPTER I: INTRODUCTION

1.1 Introduction

As an artist and a calligrapher, I have been involved in many discussions about the impact of globalisation on Islamic Art, specifically calligraphy. My research topic relates to these discussions, in investigating the role of calligraphy in architecture and visual art in contemporary Islamic culture.

Islamic Art is classified into two forms: ‘temporal’, such as poetry, and ‘spatial’, such as architecture and decoration. In some types of Islamic spatial art, one can observe the gradual influence of western Modernism, following World War I, and the rapid influence of globalisation since the late 1980s, for example in significant changes that have taken place in Dubai. However, such influence on most types of spatial art, especially calligraphy, has not been fully realised and has continued to remain the subject of controversy and debate among Islamic artists and scholars. Traditionalist scholars believe in the fixed identity of calligraphy, based on the spiritual philosophy of Islam, which is not subject to change. Whereas Modernists, while appreciating the spirituality that comes from the Islamic faith, follow the contemporary philosophical debates projecting its identity as a dynamic concept, containing both traces of its past and the narrative of contemporary social life.

1.2 Research Questions

The transient views of Modernists have generated the following two interrelated questions that are key to the present research:

1. What has been the influence of the Modernist school on calligraphy?
2. What is the impact of the above on the spiritual concept of calligraphy and religious spaces in contemporary mosque architecture?

1.3 Aims of the Research

The study aims to:

- Analyse the impact of globalisation on the transformation of calligraphy used in Islamic architecture since the late twentieth century,
- Examine the changing relationship between calligraphy and space in contemporary Islamic architecture,
- Investigate the paradoxical nature of authenticity in relation to the art of calligraphy.

1.4 Research Objectives

To achieve the above aims, the objectives are to:

- Review the definitions of ‘art’.
- Conduct a review of the history of Islamic architectural ornament and calligraphic figures.
- Review the historical development of calligraphy and its use as an ornamental element in transforming space.

- Review the social, cultural and global/external factors that affect both contemporary architecture and calligraphy.
- Review the applications of calligraphy in contemporary architecture and in the visual arts.

1.5 Scope of the Study (including its relationship to previous work)

This study is based on my previous experience as an artist and a lecturer. I have nineteen years' teaching experience and my experience as an artist and calligrapher drew my attention to the influence of globalisation on Islamic Art in general, and on calligraphy in particular. Studies by both western and Islamic scholars such as: the 'Art of Islam, Language and Meaning' (Burckhardt, 2009), 'The Formation of Islamic Art' (Grabar, 1987), 'Islamic Art and Spirituality' (Nasr, 1987), and 'The Sense of Unity: The Sufi Tradition in Persian Architecture' (Ardalan, 1970) were pivotal in identifying the scope and focus of the study.

These studies provide important insights into the key role Islam has in enriching and enlivening the visual and aesthetic aspects of Islamic Art. There is also a great volume of published studies describing the role of Islamic Art, its origin and philosophy. These studies argue that it is based on the concept of Monotheism (Tawheed) manifesting the divine beauty and the sense of unity. Hanash (2012) argues that unity is the origin and the essence of Islamic Art, while diversity is its symbolic manifestation.

Awawdeh (2009) examined the philosophy of moderation and abstraction in Islamic Art, discussing the application of such thought in Islamic architecture. His study aims to find a guiding basis for contemporary architects, stemming from a contemporary flexible methodology in Islamic thought. While opening up a new concept for discussing Islamic Art and architecture, his study falls short in presenting an argument on the relationship between space and decoration.

Other studies have focused solely on art, such as 'Calligraphy as a Modern Plastic Movement through Contemporary Arabic Graphic Art' (AbdelKader, 1998); 'Islamic Ornaments as A Source for Modern Decorative Work' (El-Sharkawy, 2000); and 'The Plastic Systems of Arabesque and its Uses in the Field with Silk Screen and Stencil' (Ahmed, 2007). Such studies generally concentrate on the artistic side and the practical applied aspects of decoration, rather than spiritual ones. Collectively, they investigated the characteristics of Islamic decoration and its flexibility and how to deploy it in different fields of art, such as pottery, murals, woodwork, and printing.

The above studies are critically analysed in the literature review section to clarify the research question and further guide the direction of the study.

1.6 Research Strategies and Methodologies

Due to the nature of the research questions, qualitative research was considered most appropriate for the current study. Qualitative research aims to answer questions by making use of a predefined set of procedures, gathering evidence, and analysis to draw new conclusions that had not been presented before, as well as help in setting boundaries of the study. The qualitative research approach focuses on discovery. The present study did not begin with a set of hypotheses to test, nor did it intend to test the generalisability or predictive power of the preliminary conceptual model. Instead, data was collected through a variety of techniques and then used in

thematic analysis, to identify and characterise the important categories, dimensions, and interrelationships of the phenomenon under study. Linking the assumptions to the specific character of the research demonstrates that a qualitative research approach was appropriate for this study. This qualitative approach complemented the third facet of the research strategy, using a revealing case-study investigation.

Consequently, a qualitative approach to the case study was used, but Miles and Huberman (1994), indicate a ‘concurrent approach’ must be undertaken for the analysis and the collected data to be compatible. This approach is the conceptual framework of the study that includes the system of concepts, assumptions, expectations, beliefs, and theories that supports and informs the research. Following a concurrent approach allows the support of identifying new areas to focus on qualitative research or case studies. For the case studies in this research, two mosques were surveyed, 68 online responses to a questionnaire were received from artists, and six unstructured interviews were conducted with experts. Chapter 3 explains in depth the methodology of the research and its approaches.

1.7 Thesis Structure

The research consists of three main stages: the literature review, data collection and examination, and data analysis. The strategy for each stage is to focus the research on its main aims and research objectives.

In this section, the three stages of investigation are briefly introduced.

The historical and theoretical part of the research was conducted through a literature review. It covers the socio-historical background of calligraphy, its meaning expression and its relation to culture. The research focuses on the philosophy and definition of ‘art’, including art and ornamentation in Islamic societies. The literature review (Chapter 2) then covers the development of writing, including its origins, characteristics, and the rise and types of Arabic calligraphy. Since the present study concerns Arabic calligraphy, the section about the history of Arabic scripts, its characteristics, and its major styles with references to the linkages between calligraphers, spirituality and to aesthetic values in the production of calligraphy is discussed in detail. Therefore, to understand such spiritual correlation, it was essential to introduce linguistics for understanding spiritual interpretations. This involves Panofsky’s Theory and the Iconological Approach and his method as Structuralism (see Chapter 2).

After that, the changing forms of ornament from the 6th to the 17th centuries (dates used in the current study use Christian Era: CE, and Before Christian Era: BCE) in Islamic architecture were investigated. This covers the Umayyad, Abbasid, Fatimid, Seljuk, Mamluk, Ottoman, Safavid and Mughal eras. The impact of mosques’ architecture on calligraphy are discussed, including the spiritual forms of Islamic decoration and calligraphy in the 6th to the 17th centuries CE. Finally, the literature concerning the changing pattern of calligraphy in architecture and its causes, during the late twentieth century is discussed with more focus of the influence of

globalisation on Islamic architecture, art and calligraphy. The review of literature provides an essential backdrop for conducting the case studies.

The main intention of the thesis is to identify and examine the transformation of calligraphy in Saudi mosques, therefore Chapter 3 explains the methodological approach and strategies and the tools required. The research design resulted in surveying two mosques: Al-Naim in the city of Al-Ahsa and King Abdullah mosque in the city of Riyadh, as well as conducting a questionnaire with a group of Saudi Arabian artists, and unstructured interviews with six experts in the field of calligraphy. The analysis tools and styles of the calligraphic patterns of the two mosques is introduced. The pilot study, its limitations and obstacles are also covered in Chapter 3.

Because of the importance of the case studies, Chapter 4 describes them in detail. It discusses mostly using a pictorial framework with captions, where needed. It also justifies the selection of the case studies. Consequently, Chapter 5 shows the results, including analysis of the artists' questionnaire responses, and analysis of the feedback from interviews with experts. Chapter 6 focuses on discussing the findings and analysis.

Chapter 7 focuses especially on calligraphy, and summarises the history of its development of its physical structure and functions. It includes a review of the responses to the research questions, the research outcomes, contribution to knowledge, limitations of the study and opportunities for future research.

CHAPTER II: BACKGROUND AND LITERATURE REVIEW

2.1 Introduction

This chapter aims to provide the fundamental background information to support the objectives, research questions, and methods for this thesis. The literature review addresses the pertinent literature and includes the fundamental concepts related to the research (scope), the current gaps in the literature, how this research sits in relation to other authors' current research, the methods others have used to define/measure/identify the key concepts of the research, and the data sources used, or other researchers have used, in developing general explanations for relevant concepts.

The literature covers an analytical account of the development of Islamic Art, focusing on calligraphic decoration. The study is divided into sections that follow the changing patterns of calligraphy over time in relation to socio-cultural changes and identifies elements that represent continuity. It includes analysis of the philosophical views on art in general, and Islamic Art in particular. This is important in the present research because, as Burckhardt (2009) argues, it demonstrates the basis of the various types of graphic symbolism in Islamic Art.

Views about the interpretation and explanation of 'art' have differed between philosophers. For Plato, (c. 428-348 BCE) it is cognitively, but in the view of Arthur Danto (1924-2013 CE), it has neutral quantities, similar to being distant from the procedural daily practice (a Kantian idea: Danto discusses Kant in his book "What Art Is" (2014); he goes on to tackle other renowned philosophers' view on art). Art is an experimental reality for Schopenhauer, and a form of philosophical and conceptual meditation for Hegel (Lemkow, 2011). Read (1972) stated that aestheticism is a union of formal correlation between senses and perceptions. This suggests that a theory of art can be built up in terms of its essentialness. Concerning the origin of Islamic Art it is "a simple aggregate of constructional procedures and decorative formulae adopted by Islam from the techniques of the people under its domination" according to Godard (1965, p. 254).

Blair and Bloom (2003) reported that the Universalist approach¹ to Islamic Art identifies all Muslims' art as a reflection of Islam as a constitution, just as God's indescribable unity that includes the infinite diversity of his creations. According to Nasr (1987), the inner aspect of Islamic Art is interrelated to Islamic spirituality. This spirit of Islamic Art is the most important phenomenon in its history, more important than all the formal vicissitudes of its growth (Nath, 1976):

"The esoteric doctrine concerning the nature of calligraphy combined with the beauty of its immediate presence which touches all who are sensitive to the saving and liberating grace of beauty provide the key for understanding the central position of this art in Islam and the reason for its privileged position in the hierarchy of Islamic art as well as its important role in Islamic spirituality itself", (Nasr, 1987, p. 34).

This sacred calligraphy tends to mimic the grand style of the Qur'anic verses, despite the impossibility of reflecting their purity. Calligraphy rendering the words of Allah is recognised as the greatest Islamic artform. Therefore, and by definition, it is likely the most typical art of the

¹ Religious, theological, and philosophical concepts with universal application or applicability (McKanan, 2013).

Arabs (Burckhardt, 1971). In traditional Islamic architecture, one can see/sense how inscriptions spiritually transform the space to a place in between Heaven and Earth (Scelta, 2002).

A historical review of the appearance, development, and prosperity of Islamic decoration from the 6th to 17th centuries indicates how Islam discourages the use of actualistic pictures and images, especially in religious contexts, which is different to Christian art. This led to the use of figurative images that encouraged Muslim artists to establish a privileged compendium of non-pictorial ornament that appears as a hallmark of Islamic artwork. This resulted in the creation of complicated forms of decorative elements and arabesques. The primary representation of images was initially improved in the areas which had stronger pre-Islamic traditions, like those which had been controlled by the Roman and Byzantine empires, and the development of stylised patterns that represent plants, flowers, birds, and animals were used in the areas under the rule of the Persian Empire in the Sassanian dynasty (modern-day Iran). Sassanians were the masters of art and the artistic traditions of the old Eastern World, and they ruled during the period (226-641 CE). The Arab Peninsula, the native lands of Islam, did not include such art. Thus, the impact of both the Byzantine and the Persian influences helped form the art of Muslims during its developmental period (Kaptan, 2013).

Early Islamic ornament was very simple. Artists preferred the use of geometric patterns over figurative imagery. It allowed them to cover vast surfaces with intensive geometric layouts without depictions of life on Earth. Then there was much development after Muslims came into contact with, and were influenced by, many different cultures. Such development resulted in obtaining complicated patterns such as pentagonal, hexagonal, heptagonal and octagonal forms. Calligraphy was added to glorify the ornamental decorations, especially in mosques' architecture.

2.1.1 A review of the early western influence on calligraphy, 18th -20th centuries

When Constantinople (modern-day Istanbul, and formerly Byzantium) fell to the Ottoman Turks in 1453, another new era in Islamic Art emerged. The Ottomans employed the most-talented calligraphers available. Illuminated Qur'ans were commissioned, which enhanced the standards of the decorative arabesque. Primarily, this book was developed into a single flowing artistic concept (see *Origins of calligraphy*, 2003 and Azmi and Alsaiani, 2009). As a result, incredibly intricate bindings, made from hand-tooled leather, were as attractive as the pages themselves. Calligraphy had never received such a high degree of care and respect. Western painting gradually affected Islamic Art, mostly through trade and diplomatic ties. Therefore, this Europeanised effect resulted in an emerging formidable style in the nineteenth century. Printing was also introduced to the Islamic world between the 18th and 20th centuries. However, most books, such as the Qur'an, continued to be produced by hand for most of the Islamic period².

2.1.2 A review of the changing patterns of decoration/calligraphy, since the late 20th century

Study of decoration/calligraphy since the end of the twentieth century mostly focuses on the role calligraphy has had in influencing contemporary mosques' architecture. No research on the

² The general use of the term Islamic period is to identify the periods of all Islamic states from the period of the Prophet until the end of Ottoman Empire.

subject in this period has yet been carried out. The case studies described in the present thesis, therefore, aim to provide primary data to address the aims of the study. Many factors have affected Islamic decoration in general, and calligraphy in particular. One of these factors is European artistic trends, besides the prosperity of calligraphy as an individual entity. A series of drawings in the present thesis demonstrates the manifestation of thought and concepts of different periods on calligraphy and architecture.

2.2 Definition of Art

2.2.1 Introduction

This section provides a discourse on the relationship of art and society, cultures, worldviews, and social background. Islamic discourses could capitalise more fully on these interrelationships. An exploration of a phenomenon that depends on interrelationships through its historical development makes it essential to the reader in gaining a broad perception of its roots. Thus, introducing definitions of ‘art’ in Islamic societies, as well as contemporary definitions, is necessary. Such a review raises a number of questions, since there are some contradictions about definitions of art and the terminology used. Additionally, there are some studies that consider calligraphy as a minor art, or not even classified as an art. This section also includes philosophers’ contributions in the field, and in religious discourses. This creates a strong platform as a basis for discussion.

2.2.2 Defining art philosophically

Defining art philosophically is controversial, since definitions of ‘art’ itself are confusing. The usefulness of such philosophical definitions of art is also a matter of argument (Adajian, 2012). Philosophers have had differing opinions on art. For example, some explain art as being either cognitively worthless (Plato) or in Danto’s view, the quantity of euphemisticism for the same reproduced thing, as being at an unquestionable distance from the daily experiences and practices (Kantian philosophy), from exceptional experimental reality (Schopenhauer), or from philosophical-conceptual thinking (Hegel) (see Danto, 2014 and Lemkow, 2011 for further discussion). In Plato’s view, the arts might be troublesome in the absence of logical laws, or social responsibilities. By contrast, when art takes into consideration moral ideals, then it enhances wisdom and will be a most useful tool for education.

Ruskin defines art as the expressionist happiness of mankind in the work of God, and not the work of humans (Reynolds, 1940). He further suggests that the best thing about art is the way of expressing one’s soul when it connects us to another one. For Goethe, the worrying thing about any kind of art is its appearance as an illusion of a higher reality (Lemkow, 2011). On the other hand, Henry James thinks that ‘art is not found in copying’. Nature provides varied materials and the role of the artist is expressing beauty that is not seen in nature, the artist transcends nature more than any other people (see Laird, 1963). Definitions of art are broad and could change, according to different variables.

Philosophers are more likely to use the term ‘beauty’ rather than the use of the usual term of ‘art’ or ‘aestheticism’. According to the Encyclopaedia Britannica³, aestheticism can be defined as the investigation of the nature of sense and perceptions. However, this definition has been narrowed here to include only the experience of beauty, and sometimes artistic beauty. Therefore, the three

³ <https://www.britannica.com/art/Aestheticism> (Accessed 27 Apr 2018).

requirements of Thomas Aquinas for 'beauty' include Wholeness or Perfection, Due Proportion or Harmony, and Clarity, which all facilitate 'correct awareness' (see Laird, 1963, for further explanation).

'Beauty' is often used as a factor for evaluating the quality and fineness of art. Kant epitomised the enlightenment tradition, where an object's beauty is judged by logical independence subjects. i.e. the intellectual and philosophical heritage of the Age of enlightenment is diverse and encompasses all fields of knowledge, and the text of Kant highlights the critical importance of the condition of individual autonomy in enlightening one's mind (Danto, 2014). Whilst this opinion differentiates art and nature, it appears to agree with the closure of this junction in modern art, as well as the borders between the virtual and the real (or natural) in postmodernism. Furthermore, it removes the issue of the cultural relativity that the nature of the art holds. It renders art as being irrelevant because it infers that everything is, in some manner, art, and thus everything is liable to be judged for its beauty in a uniform, common fashion. However, the opinion of enlightenment has other issues, such as those developing from the presumption of mind-body, and subject-object duplicity. These matters are frequently cited in consciousness studies (Goguen, 2000).

From one point of view, although there are many definitions of the term 'beauty', the fundamental one is that it is the formal unity of relationships between the senses and perceptions. Based on this viewpoint, a theory of art can be developed. However, one must proceed with caution regarding the extreme relativity of the term 'beauty'. Alternatively, one could say that art is not necessarily connected with beauty, especially in reference to the notion of 'beauty' which the Ancient Greeks had established, and which Europeans pursued in the classical tradition. Another perception is to consider the concept of beauty as a changing phenomenon, with a confusing existence in the path of history. Art, therefore, can contain those manifestations as a whole, and then, the real test of a serious student of art would be to concede the realm of art as a genuine manifestation of that sense in other people at other periods, regardless of the level of their own sense of beauty. Art does not perfectly express any specific notion in an artistic form, but the *expression* of any ideal that the artist could understand in an artistic form. Every work of art has some principle of form or coherent structure, as the continuous studies of works of art rely on their direct and instinctive appeal. It is more difficult to reduce them to simple and explicable formulae. That 'there is no excellent beauty that hath not some strangeness in the proportion' was evident even to a Renaissance moralist (Laird, 1963).

Therefore, it can be concluded that psychological values, such as those emerging from the known sympathies and interests of humans, or those emerging from Man's subconscious life, might exist. Furthermore, there are several philosophical values beyond those psychological values, which may develop from the range and depth of the artist's genius. More simply: all other things being equal in technical efficiency, economic opportunity, and psychological insight, the greatest artist will be the one whose intelligence is widest; someone who sees and feels passionately not only the object immediately before them, but also sees this object in its universal implications, and sees the one in the many, and the many in the one. It cannot be too strongly emphasised that the plastic arts are visual arts, received through the eyes, expressing and conveying a state of feeling. If there are ideas to express, the proper medium is language.

“The artist is impervious to ideas at his peril, but his business is not with the presentation of such ideas, but with the communication of his emotional reaction to them” (Read, 1972, pp.17-48).

Many professional artists, museum managers, and art historians tend to think about art in relation to their profession. However, when non-professionals think about artworks, it is more common for them to think about their previous experiences and perceptions of artworks and whether these are from the past or present or projections of the future (Gerwen, 1996).

Eisner (2002) adds that engagement with the surrounding environment is a process formed by the predominant culture, and is impacted by different factors, which include shared language, thoughts, and values. Such a process is moderated by what ‘individuality’ evolves the unique features of one’s personality. Any definition of art comprises entities, such as artifacts or performances. These might have no function in an aesthetic, religious or promotional sense. However, in traditional works of art, there are specific features that are globally created. They also have a considerable level of aesthetic values, mostly exceeding that of common objects in daily life. Thus, art likely has a complex heritage (Adajian, 2012). Imagination, for example, is a form of thinking that generates intangible pictures. It also has a crucial and necessary job for cognition which has the function to perform the creation of the impossible world (Eisner, 2002).

In the past, philosophers have placed much importance on the understanding of art. For example, Schopenhauer was described by Bertrand Russell as someone who was interested more in meeting artists and literary people in search of the philosophy they believe in, rather than to debate with professional philosophers (Adajian, 2012). This suggests that the aesthetic expertise allows for pure contemplation. This is when one becomes so engrossed in the characteristic quality of art and allows one to escape all knowledge of the life force. These short insights allow for a relaxation from the oppression in a wish for achieving the whole act of fleeing (see Laird, 1963).

In Kant and the German Idealists writings, one can see the noticeable impact of the thoughts of Plato. However, they see ‘beauty’ as a subjective issue. This subjectivity involves the subjectivity of introspection, and Aristotelian subjectivity of the artist that externalises him. Many scholars tend towards this thought and see it as closer to the truth. This is found again in Hegel’s lectures on beauty in 1835 (Adajian, 2012). According to the Encyclopaedia Britannica (cited in Laird, 1963), Hegel supposed, in his metaphysical ideology, that the idea of the definitive certainty appears in history in a progressive way, especially in a human being and clearly in philosophy, where one becomes completely aware of one’s own nature when alone. However, the creation of ‘beauty’ and its appreciation belong to religion and philosophy as a spiritual sphere (Laird, 1963).

Heidegger further explored Kant’s philosophy of art. He explained that Kant’s opinion of ultimate art relies on the aesthetic which cannot be attributed to something else (Adajian, 2012). Therefore, for Kant, art presents some form in a beautiful manner, and through such form, it is also a presentation of an idea which is aesthetic, and which lies beyond the boundaries of concepts and categories. By ‘beautifully presenting’ an ‘aesthetic idea’, the artist goes on to expand a certain, given concept and, thereby, encourages one’s mind to play and soar freely.

This asserts that art is beyond the limits of reason, and since it is beautiful, it is an incomprehensible concept.

According to Young (2001), Heidegger states that ‘the origin of something is the source of its nature’. This suggests that, despite the fact that any work of art originates from an artist, the creator is not the origin of its status as an artwork and therefore, not the rational origin of its ‘nature’ as a work of art. Thus, an ‘origin’ is a rational or conceptual origin.

Therefore, answers to this question; what is art? have typically taken the approach of concentrating on the artist himself (the approach of Nietzsche) or on the audience (the approach of Kant and Schopenhauer) and then reasoning deductively, the nature of that work of art according to the chosen viewpoint. However, Heidegger remains in favour of focusing on the artwork itself justifying this by the fact that both the artist and the viewer’s approach regard the essence of artwork as converting into a psychological situation where one’s philosophy of art will then degenerate into aesthetics (Young, 2001). Thus, the main question about the ‘origin’ which must be investigated and requires an answer is what is an artwork?

Hegel perceives the meaning of beauty by stating that art in different ways helps understand the divine and expressing it consciously through the deepest interests of man, includes the foremost inclusive truth of spirituality. However, art must introduce a full and explicit truth of philosophy as it may fade away. For Hegel, all aesthetics partake in something higher called ‘mind’. From this perspective, the natural beauty shows itself as a reflection of that beauty which belongs to the mind (Laird, 1963).

Art is a universally analysed concept by philosophers. A work of art allows the higher skills of mind to think, discuss the aesthetical values, rather than just to be attractive. The confusing question, however, about the origin of the artwork, turns into a question about the nature of art (Laird, 1963). This prompts the common questions about the nature of art as a great activity: What is merely a [functional] ‘thing’? What is art? Or the notion of, “It’s pretty, but is it art?”⁴

Understanding art within the context of its history and culture is a rather two-way process comprising both ‘reflection’ and ‘interpretation’. On the other hand, art is a reflection of the past via the recording of thought and behaviour. Moreover, art facilitates the expression of judgments and opinions which can be positive or negative. Art, in other words, expresses ideology (Understanding Western Art through Western Culture, 2009).

The sensory system and imagination can also be enhanced by the arts. Indeed, the arts allow someone to pursue a qualitative experience in an absorbed way and to engage in what the imaginative process may engender (Eisner, 2002).

Thus, there are many similarities between the Heidegger’s philosophy of art and interpretations by Nietzsche and Hegel.

⁴ This is a reference to a poem by Rudyard Kipling: that I thought might be of interest; Available from: <http://www.bartleby.com/103/50.html> (Accessed 27 Apr 2018)

The Preface to Oscar Wilde’s ‘The Picture of Dorian Gray’ also offers a fascinating idea of ‘What is Art’ and ‘What is it for’, but Wilde was a playwright not a scholar.

There are two contemporary definitions of art. One is conventionalist, and focuses on institutional features, emphasises the evolution of time, and the shared features of artworks, which rely on the relations between such artworks and the history of art, the type of art, and the materials used. The other definition is more modern, and considers using a broad concept of the aesthetic values, rather than the traditional definition. This definition includes more than just mentioning the relational properties of artworks, but it focuses on the pan-cultural values, as well as the trans-historical features of art (Adajian, 2012).

The perception of Heidegger about 'truth' suggests non-concealment; whereas this is contrary to the notion of truth in science. He states (1960) that the genuine incidence of reality is not the science but is a permanent way to opt for a cultivating truth, particularly by capturing and supporting what is seen and found to have a possibility of being correct in that domain (Goguen, 2000). Typically, people have both an imprint of their own personality and the culture in which they live; the two cannot be separated. However, these factors basically depend on the sensory system to personalise and nominate expertise in a perfect way (Eisner, 2002). The approach to art by Heidegger permits culture. This involves artist and audience alike. Furthermore, representational and non-representational art, such as conceptual art, installation art, and earth art⁵, is also utilised equally in Heidegger's approach. However, the abstract philosophical views of this kind, though beneficial to clarify and deconstruct other theories of art, fail with in the appreciative understanding of specific works of art, which may be a disadvantage (Goguen, 2000).

2.2.3 Summary

It is clear that the concept of 'intuition', when viewed historically and traditionally, is not really defined by its connection to the tangible form. Modern thinking has lost its way by making 'concrete verification' as a starting point, which is not the basis of all arts. However, this is what Kant called the 'representation of imagination', the process of the flexibility of intuition (Kant, 1996). The subject of aesthetics as a theory of art can, therefore, be aptly labelled as 'imaginary'.

Hegel's philosophy of 'beauty' and art was based on the assumption that the absolute spirit is the fundamental base of philosophical analysis. 'Absolute spirit' is a term used in philosophy to show the eternal, infinite, unconditional and complete subject (Hegel, 1988). However, Hegel believed that all things in the universe, either natural phenomena, physical, or intellectual, are ultimately a manifestation of the absolute spirit. The principles guiding these phenomena form the debate: the target of spirit is the consciousness, and its manifestations in art, religion, and philosophy (Lemkow, 2011). Thus, the Hegel's idea of 'beauty' is the manifestation of the idea in a sensual manner. It is the inevitable result of beauty expressing the absolute spirit. Hegel, therefore, stressed that artistic beauty is higher than natural beauty because it is the creation of the absolute spirit and the beauty of any idea exists in the human mind. Beauty, however, differs from one person to another because of different levels of consciousness.

2.2.4 Art in Islamic societies

Unlike Christian art or Buddhist art, 'art in Islam' (as a label used by the Western world during the 19th century) is not specifically a reflection of religious imagery.

⁵ An American movement that uses the natural landscape to create site-specific structures, art forms, and sculptures (Boetzkes, 2010).

“Most western works of art have some kind of narrative content or subject matter – a story from history or literature, symbols referring to religious or political beliefs, or people simply doing something” (Understanding Western Art through Western Culture, 2009, p. 17).

Actually, art in Islam has fewer private religious symbols in comparison to their equivalents in Christianity. As an alternative, the word-phrase ‘Islamic Art’ represents the different types of art including religious *or* secular, which was created in Muslim-led societies. It makes no difference whether its makers, and its patrons, are Muslim or not (Islamic Art and Culture, 2005). Godard (1965) states that in its origin, Islamic Art is typically

“A simple aggregate of constructional procedures and decorative formulae adapted by Islam from the techniques of the people under its domination” (p.254).

Blair and Bloom (2003) explain the global approach to Islamic Art is a reflection of Islam as a religion, just as the indescribable unity of God surrounds unlimited varieties of human beings. According to Nasr (1987):

“it is in ‘reality’ to the inner dimension of Islam, to the batin (inward) as contained in the manner and elucidated by the truth that one must turn for the origin of Islamic art. This inner aspect is beside inextricably interrelated to Islamic spirituality” (pp.5-6)

This, therefore, emphasises that the spirituality in Islamic Art is the most important part in its history (Nath, 1976).

Generally, a work of art consists of a sensual and communicative basis where its regulation is its composition. However, this is the opposite of the spiritual and religious considerations that are highly exaggerated as to what makes art and thought, starting from this base (Saeed, 2011).

Nasr (1987) agreed that it is the spirituality which drives the Muslim artist. However, art, in his opinion, expresses an external manifestation of Islam as well. This is with agreement to Burckhardt, the scholar who became a Muslim. Burckhardt (1970) thinks that the artworks of Muslim artists uncover an implicit common language rooted in the religion of Islam. Some writers have also aligned themselves with these ideas, because they set Islamic Art apart from other art traditions by maintaining that God’s revelation to the Prophet Muhammad in 17th century Arabia affected all aspects of human existence (Blair and Bloom, 2003).

The concept of art in Islamic philosophy is linked to the need to awaken the concept of Monotheism by visual stimulation to be able to ‘read the content’ of the artwork. This is what is seen in the Islamic artworks prevalent in the Islamic world. It is also a combination of art and religion, and this is what makes Islamic Art different from other kinds. Islamic Art took from religion its vision to comprehend supernatural existence. This is what Muslim artists translate into a language of art, in terms of controlling calligraphy, colour and space and the relationships between them. It is generally inferred that Islamic Art is as what Muslims *believe in* rather than what they *see* (Al-Asqah, 2011).

In other words, according to Nasr (1987), who alternatively mentioned the universe as an inspirational factor, Islamic Art escaped from embodying elements. Islamic Art expresses the Islamic spirit, the spirit that completed its elements of quality and made its symbols charged to

exceed the limits of the senses and the mind to hold a close connection with the absolute. Thus, the uniqueness of the Muslim artist has come from the deepest understanding of spirit and the desire to draw onlookers towards the sacred world through the work. Such artworks have become great manifestations of the spirit for awakening the spirit of the viewers.

The concept of Tawheed monotheism is the base of the conceptual framework for Islamic spatial arts, including architecture. Monotheism simply means declaring the oneness of God; Allah the Almighty. Monotheism is the Islamic concept of God's oneness or Tawheed (Omer, 2010). However, in the broad sense of that term, holy art does not necessarily include pictorial elements or representational imagery. Instead, it may be the external representation of contemplative situations, which, therefore, reflect the spiritual ideas through a specific framework. They qualitatively convey the atmosphere through their views to an integration of spiritual balance. This makes it easier to realise that this is the nature and basis of art in Islam. It means that the object of Islamic architecture hovers above all the human ambience where the main and dominant role of architecture as well as its quality is certainly meditative (Burckhardt, 1970).

Nasr, 1987, p.34 concludes that the esoteric doctrine:

“concern[s] the nature of calligraphy combined with the beauty of its immediate presence which touches all who are sensitive to the saving and liberating grace of beauty provide the key for understanding the central position of this art in Islam and the reason for its privileged position in the hierarchy of Islamic art as well as its significant role in Islamic spirituality itself” (Nasr, 1987, p. 34).

2.2.5 Islamic ornament

One of the noblest accomplishments of ancient Muslims, be it artists, calligraphers or craftsmen in the Islamic world including the Middle East, India, Turkey, Iran, Spain, and North Africa, is the Islamic decoration. The decorations are broadly used to adorn buildings, whether religious, secular or civil, as well as books and furniture alike (Majewski, 2011).

Islam, as a religion, has been the stimulator and the source of energising for Muslim artists and aestheticians in different eras. This is not surprising, as the religion determines that it is the point of changing a person's demonstration of his onward civilisation. Many different forms of art have been deeply encouraged by the inclusion of religious awareness. Music, painting, decoration, architecture, poetry, calligraphy and, lately, sculpture, are clear examples of those artistic forms. In any era, and at any stage, religion has had a fundamental impact in helping artists to generate new creations in the light of spiritual and idiosyncratic approaches. Like art, faith and religion also stimulate the emotional facets of humankind. While the physical universe or nature gives us superficial feelings, religion enhances the spiritual ones. Thus, religion and art have shown a vital influence inside human civilisation along the prehistoric, medieval and modern era (Saeed, 2011).

The discouragement of using images and pictures in Islam, especially in the religious applications (which was a broad feature in Christian art), helped Muslim artists to develop their own artforms. It resulted in a rich 'vocabulary' of geometric, figural and non-figural decorations, besides calligraphy and Arabesque ornaments, that became a hallmark of Islamic Art. Such complex geometric forms and arabesques were known outside the Islamic world typically as 'scrolling leaves'. The figural patterns were firstly developed in the regions of strong pre-Islamic

traditions, like those where the Roman and Byzantine empires had dominance. The stylised patterns generated from animals and plants were subjected to development in the places which had been controlled by the Persian Sassanians (in the area that is modern-day Iran). Thus, the artistic traditions were affected by those forces because Islam at that time had little art, which meant Persians and Romans affected Islamic Art and helped shape it (Kaptan, 2013).

Islamic religious ornament, unlike much Western religious art, is based on abstract patterns (arabesques and geometric designs) and calligraphy. It nevertheless conveys deep spiritual meaning. However, abstract patterns of decoration, that are magnificently developed in Islamic Art, were not an inevitability to fill a void (as is commonly stated). Instead, it enriches the spaces with a continuous rhythm with endless forms of weaved decorative elements. For the Muslim, instead of enticing imagination, spiritual decorative elements are capable of detaching the consciousness from its idols that reside inwardly (Burckhardt, 1970).

Highly intricate geometric ornaments are often found in medieval Islamic mosques and palaces. Modern artists have been inspired by these decorations in particular, by the way in which they associate with modern mathematical concepts such as crystallographic groups and periodic tiling (Hogendijk, 2010).

“The ornament can best be defined as a relationship between forms rather than as a sum of forms. This relationship can most often be expressed in geometric terms”
(Grabar, 1987, p. 187).

Ornaments were exclusively represented as the imperial decorations of the Roman Byzantine and royal decorations of Persians, or as the elements shown in Byzantine art of Christ, saints and the Virgin Mary in their religious places. Therefore, those indicators show the holy symbols, richness, power and dominance in the formal art of the Persian Empire and the Byzantine one (Grabar, 1987).

There are two principle styles of Islamic decoration, the arabesque, which is basically generated from plants, flowers or vegetable motifs in spiral forms and zig-zag shapes, and the geometric decorations which employ shapes like stars, plates or basic shapes in interlacing compositions. Philosophically, the former denotes an air of harmony and motion and constant melody, while the latter represents crystal lines in the nature, that express quietness and freshness, invoked by the multiplicity of geometrical forms (Burckhardt, 1970).

Historically, the arabesque seems to have been generated from the imagery related to the vine, wherein the entangled leaves, branches and foliate scrolls are depicted with a natural appearance, but stylised in waves and spiral shapes with strict geometrically connected forms. Decoration, therefore, is known as a perfect, practical, visual transcription of rhythm. From this, it can be discovered that the two main defining points of that artistic expression in Islam are geometry and rhythm (Burckhardt, 2009). It is important that one must ‘read’ the geometrical interplay that constitutes the interlacing motif, to fully enjoy it (Burckhardt, 1971).

Grids and multiple sub-grids are essential for constructing Islamic geometric decoration. Usually, shapes are built on a base of these grids. Knowing the grid and its style, eases the process of building the geometric patterns. However, some designs with hexagonal and pentagonal cells do not allow for ease of construction of decoration. Evidence shows that the

square or rectangle in decoration was typically used to cover large areas. This method was known as 'repeating units'. However, some decoration styles cannot be constructed from repeating rectangular units. Many need more-complicated techniques (Majewski, 2011).

In general, Islamic architecture is clearly separate in its nature, features and philosophy from art until the finalisation of the building design. Art develops from the Islamic faith via philosophical beliefs. It has its own dimensions, either intellectual or deeply philosophical, which still has been little studied, and research that detects and reveal its components and implications is yet to be developed fully (Kaptan, 2013).

Decorating the building's surfaces using the repeated and extended shapes is intended to indicate timelessness and infinity, something which Islamic artists have excelled at doing. The sparkling surfaces, which include intensive and highly controlled patterns, are intended to make the audience contemplative. These patterns exist in architecture, as well as in rugs, calligraphic compositions and books. This configuration of decoration distances the cultural depth of the Islamic civilisation. However, it is a sort of pure abstraction and organic form. This abstraction is important for Muslims, because it can help to release the mind from the thinking of the materialistic things as well as opening the contemplation of the enormity of the divine presence (Kaptan, 2013).

However, ornamentation is not always complex and 'busy'. The simplicity of the architectural whole is observable in a manner that is not decadent. This architectural whole allows for a manifestation equilibrium, calmness and serenity (Burckhardt, 1970). The standard strength of the Arabic language has a role in shaping some Islamic Art, such as calligraphy, as it is the sacred language of Qur'an and because it is featured as old. Furthermore, while those two features are related, Archaism preceded Arabic in the role of the sacred language (Burckhardt, 1971).

Muslim artists have also applied the art of calligraphy as a substantial decorative element for decorating a variety of religious, secular and non-religious buildings, including the aesthetics of many items, such as rugs, clothes, sheets, plates, wooden pieces, rubber and glass materials. On these, the verses or words of the Holy Qur'an were written, engraved and embossed. By doing this, artists aimed to show their enthusiasm towards the unique supreme reality and enrich their own spiritual power. This ornamental writing is another branch of Muslim decorative art which is often used in the adornment of mosques and palaces. Within these Muslim buildings, one can find the complete chapters of the Holy Qur'an carved or inlaid around the domes, arches, doors and minarets. Thus, presenting such religious seriousness in a purely monotheistic spirit is similar to the images of religious people of saints and martyrs that decorate Christian churches (Saeed, 2011).

The style of calligraphic verses reflects the sacredness and the majesty of the Holy Qur'an, without which the need to thoroughly define the nature of such an analogy would be difficult. However, as calligraphy serves and represents the word of Allah, it is seen as the greatest sort of Islamic Art, and it is globally declared as the most typical form of Arabic Art (Burckhardt, 1971).

Calligraphy, whether written on paper, painted on clay, or carved in stone, is one of the high achievements of Islamic culture. Arabic writing was formalised and embellished out of the need

to transcribe the Qur'an, which, until shortly after the death of the Prophet, had been passed among believers through an oral tradition. While copies had to be accurate, they also had to be worthy of the sacred verses. It is not surprising, therefore, that a beautiful rendering was encouraged, and calligraphers aimed to bring elegance, harmony and balance to their calligraphic work, sharpening their skills and pursuing art with dedication for the whole of their lives. In Muslim lands, master calligraphers achieved an even higher status than painters (Schimmel and Rivolta, 1992).

Arabic calligraphy is the noblest art for Arabs and Muslims of Far East, and is broadly, known as a representation of the highest peak in the art of writing. Typical calligraphy is represented by precise and often interlacing lines of the pen, often with joining up of the letters and stress on contrasts. Arabic calligraphy when read horizontally rather than vertically, reads from right to left, and features the interlinking and uniting of the letters with one another, whereas in the vertically oriented calligraphy, the letters are distinct and allow for the continuous 'melody' of the lines to be punctuated (Burckhardt, 1971).

The art of calligraphy and the symbolic writing have a similarity to the art of weaving; and both refer to the interlacing of cosmic axes, just as it may be compared to a knitted piece of cloth. This weaving, either horizontal or vertical movement inside the script, indicates deep meaning. The former is a rippling movement which allows for 'alteration' and 'becoming', whereas the latter is a representation of the dimensions, which can be either the essence, or the fixed core.

It is important for each of the two dimensions to separate and unite in a constant relation with the other. For instance, the aspect of 'becoming', shown in the horizontal movement, tends towards confusing and levelling out the essential shapes of the different letters. Moreover, the horizontal shafts of the letters transcend and interrupt the circulation of writing. Therefore, the function of the vertical is uniform, in the sense that it confirms the homogeneity and essence, while the horizontal creates a sense of splitting.

Every religion gives art an exceptional place and a crucial character so as to engage in the importance of the given religion's true spirit. There is close correlation between religion and art, and an analogy can be seen between the development of such correlation of religion to life and the advancement of art (Saeed, 2011).

"It may well appear that these considerations have gone beyond the subject-matter; but actually, they show the basis of all graphic symbolism and thereby permit all the various styles of Arabic script to be given their due place" (Burckhardt, 2009, pp. 52-54).

Art has the opportunity to move us and satisfy us emotionally. For example, this emotional response can inspire appreciation of the profundities of human existence and the appearance of the universe. One universal explanation is that producing art is a creative process which expresses the frame of the mind, the feelings or the spirit of the artist (Saeed, 2011), that can satisfy emotions.

Regarding the spatial axes, which hold an inherent position in the art of weaving, for example, the letters' vertical elements that transcend the flow of the writing also correspond to their essence. While the horizontal movement is a representative of the material continuity of their

forms, the upright is more like a ray of the one essence, which can be distinguished by its very unity; on the other hand, the horizontal movement that proceeds in continuous waves is perceived as the image of coming into existence or of life itself (Burckhardt, 1971).

2.3 Development of Writing

2.3.1 Introduction

This section discusses the stages in the development of writing in ancient civilisations, such as Hieroglyphs, Phoenician, Aramaic and Nabataean writing. It provides some descriptions of the semantic glyphs. Bhattacharjee (2012) states that a review of historical events is best shown in a chronological order from the earliest to the latest. But the present review of historical events makes it easier to draw the attention to the notion of sacred writing specifically without discussing those stages, otherwise tracking the appearance of sacred writing could be complicated. Such arguments provide better understanding to build up the first step in introducing Arabic calligraphy as sacred writing.

2.3.2 The phases of development

There are three fundamental phases in which writing can be developed (Figure 1):

- The systems of writing that depend on pictures (picture-based).
- The alphabetic and syllabary writing systems (phonetic-based), i.e. the form of the utterances and corresponding spoken words.
- Printing, which made large-scale distribution of written works possible (Linell, 1982).

Writing could be defined as a system used to transcribe linguistic statements. However, pictographs are also mentioned as the second set of descriptive requirements. Therefore, these allow for a distinction between writing, by definition (Drucker and McGann, 2008).

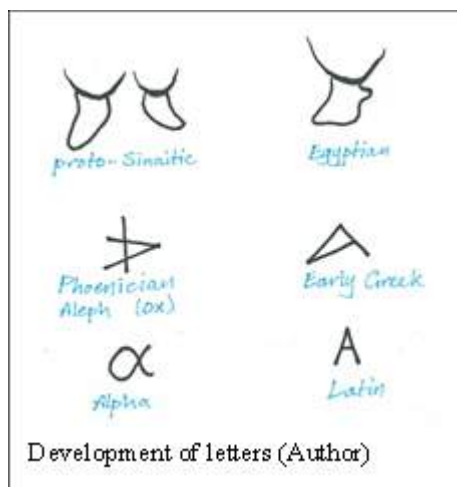


Figure 1. The development of letters, in this case 'A'.

A written text and the parts that comprise it (letters, words, sentences, paragraphs etc.) have object-like characteristics; they show static and persistent characteristics (spatially but not temporally organised) (Linell, 1982).

“It may be that the visual mode is generally stronger in imagery, than any other sense of modality, including the auditive one” (Linell, 1982, p. 33).

The theories of visual perception are typically inspired through living imagery and pictorial representation, i.e. static things such as representations made on stone, wood, leather or paper. These pictures can depict the same exact fragment of reality in numerous ways (Linell, 1982, p. 135).

A true pictograph functions in its visual form, a picture that allows for communication by involving symbols for language. In pictographic writing systems, one symbol or image represents one idea or referent (Drucker and McGann, 2008). On being activated as a classifier, a pictogram may provide an inclusive category concept on the vertical taxonomic axis, on which the word has been placed (Figure 2).

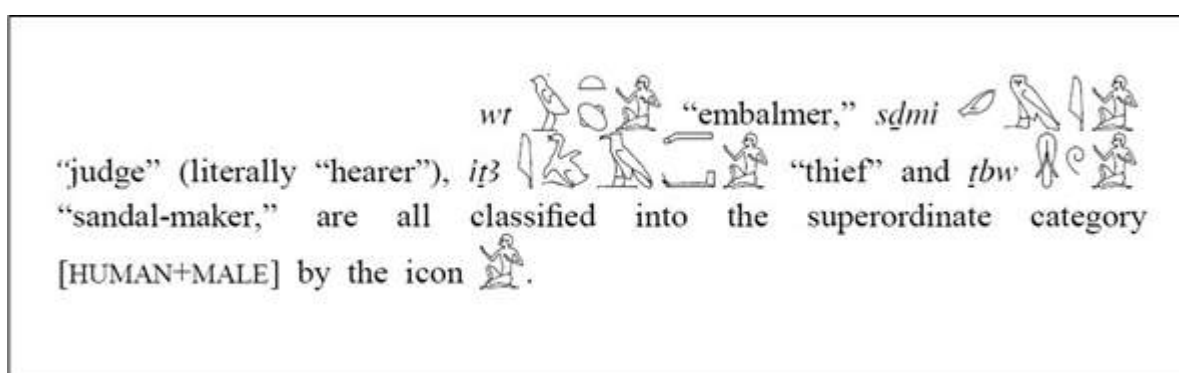


Figure 2. Pictogram. (From Goldwasser, 2006.)

There are very few fully developed pictographic systems, for example, Babylonian pictographic precursors to cuneiform, Egyptian hieroglyphics, Hittite hieroglyphics, as well as other scripts in the ancient, near East, tended to use pictorial forms. However, these forms were usually in what were known as ‘mixed systems’. These mixed systems show a pictographic representation of an animal, object, or person which functions as a sign in a system that also uses ideographic⁶, logographic, syllabic, and phonetic principles to represent concepts, words, or sounds. As a result, mixed systems form new languages and writing systems, such as those in Mesoamerican cultures, such as the Mayan and Aztec glyphs. Signs can be used in multiple ways, for example, a rebus that depicts an eye, which has the concept ‘to see’, could be readable as ‘I’ in the sense of a homophone⁷ (Drucker and McGann, 2008).

There is a notion that the higher order of graphic representation is unique to all the systems, and that this order brings about logical relations between the elements of the system. For example, the sign placement in columns, and the order in which they could be read, or the usage of a graphic surface (including clay, stone, paper, clay, papyrus, bark etc.) as a space in which the said order gets articulated: all of these have an involvement of conventions which rarely receive a formal set of principles. One can describe these conventions as the elements of a pictographic logic. Typically found to be diagrammatic in nature, this pictographic log lies on the foundation

⁶ Representing notions in graphic symbols.

⁷ Words with the same pronunciation but different meanings, origins, or spelling (e.g. new and knew).

of two fundamental principles: an entity's description and articulation of the relations between the entities. In writing systems, these principles are critical, including those that are pictographic. They also form the underlying foundation for the structure of graphs and logical diagrams of vivid types. Moreover, they can also be used for the creation of explicit logical structure of the inscribed or printed texts in their embodied, visual terms (Drucker and McGann, 2008).

Text and image presentational forms usually tend to mask their logical operations in a surface rhetoric, which ends up dominating and controlling the conscious attention. Therefore, by coercing one to read text, they are kept from attending to the graphical features and codes. The physical of textual shapes and marks withdraw in the act of reading, which allow for the highlighting of certain types of conceptual references (Drucker and McGann, 2008).

Hieroglyphic writing or hieroglyphs employ a system that is best-known, and also the most elaborate, that was used by the Pharaonic Egyptians. The words originate from the sacred writing of the Greeks (Knight, 2009). Somewhere around 3000 BCE, the Egyptians developed a mixed writing system, whose phonographic component was essentially consonantal (avoiding vowels), hence segmented.

One hypothesis as to why they did this is that Egyptian – like the distantly related Semitic – had a root-and-pattern-type morphology (Knight and Sproat, 2009). Ancient Egyptian uses different scripts, which depend on the media and the time period. Hieroglyphs appeared from the earliest times when writing emerged in Egypt and came in the form of pictographic signs. These hieroglyphic signs signified the most formal script of symbolic importance for all monument texts, both religious and mortuary. Indeed, these texts were carved onto the walls, ceilings, and columns of stone temples, and on many types of artefacts. The walls within tombs also had hieroglyphics painted or carved onto the walls, and often had many religious texts recorded on papyrus (Bard, 2007).



Figure 3. Egyptian Hieroglyphs consonantal symbols. (From Knight and Sproat, 2009.)

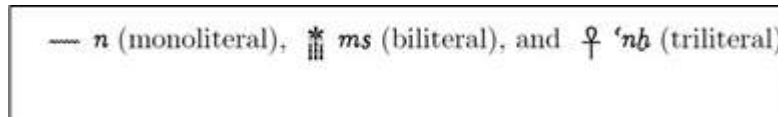


Figure 4. Monoliterals, biliterals, and triliterals. (From Knight, 2009.)

In Hieroglyphs, depending on the variety of consonants or semivowel sounds that the glyph is capable of representing, the phonetic glyphs can be subdivided into monoliterals, biliterals and triliterals (Figure 4) (Knight, 2009).

2.3.3 Monoliterals

The hieroglyphic alphabet is made up from the glyphs, which represents a single phoneme or sound. They are similar to an alphabet but are not in correct order (as far as has ever been discovered) and are not a complete inventory (Figure 5) (Knight, 2009).

SIGN	TRANSLIT.	EXAMPLE	SIGN	TRANSLIT.	EXAMPLE
	<i>t</i>	(see below)		<i>h</i>	Ahmed
	<i>i</i>	(see below)		<i>b</i>	loch
	<i>y</i>	yellow		<i>h</i>	ich (German)
	<i>'</i>	(see below)		<i>z, s</i>	zebra, soap
	<i>w</i>	water		<i>s</i>	save
	<i>b</i>	bill		<i>s</i>	ship
	<i>p</i>	pump		<i>k</i>	Qur'an
	<i>f</i>	fill		<i>g</i>	gun
	<i>m</i>	man		<i>t</i>	top
	<i>n</i>	name		<i>t</i>	cheese
	<i>r</i>	run		<i>d</i>	dance
	<i>h</i>	happy		<i>d</i>	jump

Figure 5. Monoliteral hieroglyphs. (From Knight, 2009.)

2.3.4 Biliterals and triliterals

Numerous biliteral and triliteral glyphs comprise Egyptian 'writing'. These show a characteristic feature of combination of two to three consonants, some of which are frequently used, as can be seen in Figure 6.

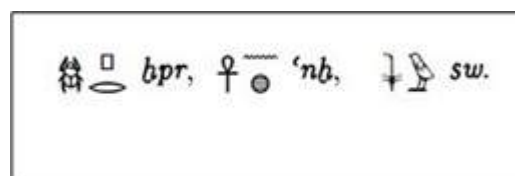


Figure 6. Biliterals and triliterals. (From Knight, 2009.)

In text, additional monoliterals are often included; these monoliterals are also known as ‘phonetic complements’. The multilateral glyph reminds the reader through such phonetic components. This helps to represent either the last sound in a bilateral, or the last sound or two of a trilateral (Figure 7).

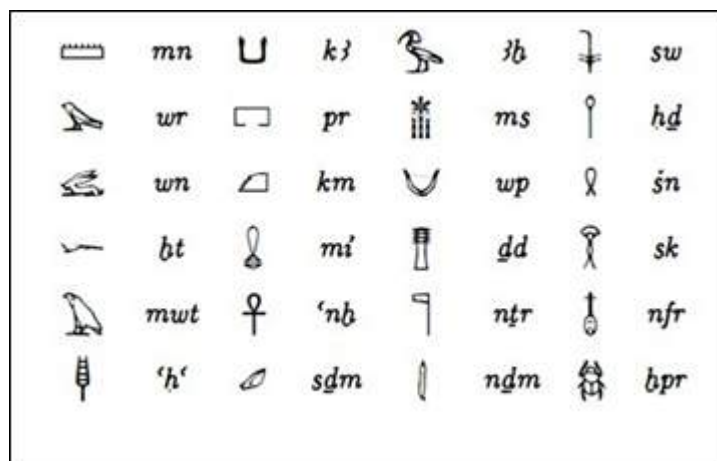


Figure 7. (From Knight, 2009.)

2.3.5 Semantic glyphs: Determinatives

Determinatives help clarify the meaning behind the preceding group of phonetic glyphs, which is important, since hieroglyphic writing is deprived of vowels (see Figure 8; Knight, 2009).

GLYPHS	MEANING	DETERMINATIVE
	"rejoicing"	a man holding up his hands in a gesture of joyfulness
	"neighbors"	a man and woman over the three strokes which signify plurality
	"hin-unit"	a jar for holding beer

Figure 8. Semantic glyphs. (From Knight, 2009.)

The hieroglyphic script represents many words that receive no determinatives, but as an iconic pictogram that merely repeats the meaning of the word that it follows in the pictorial (Knight, 2009). Somewhere around 2000 BCE, Semitic speakers living in Sinai, apparently influenced by Egyptians, simplified the system and devised a consonantal alphabet.

In hieroglyphic, no matters lessons or using consonantal symbols to represent long vowels as in later Semitic scripts. Phoenician (and other Semitic scripts) evolved from this script (Knight and Sproat, 2009).

The Phoenician alphabet, which was written from right to left (Figure 9), emerged around 1100 BCE. Before this, there was variability in the writing direction, including the both the orientation and shapes of the characters. The alphabets constituted of about 22 letters that were named after things. For example, their first two letters were called aleph (ox), and beth (house) (Wilson, 2006).

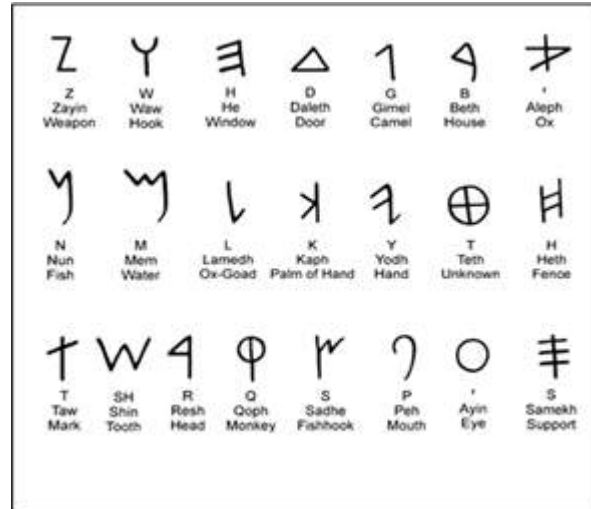


Figure 9. The Phoenician alphabet. (Source: http://www.phoenician.org/alphabet_phoenician.gif.)

This Phoenician alphabet is interpreted today as a 22-letter abjad, with a one-to-one letter to phoneme relationship. It is known as the world's first alphabet and template for modern alphabets. It has been suggested that its inspiration was the older hieroglyphics system from around Egypt and/or the syllabaries of Crete, Cyprus, and/or the syllabary of Byblos, from which the Phoenician alphabet happens to appear as a graphical subset (Elias, 2010).

The Phoenician alphabet was spoken by Aramaic speakers during the early years of the 8th and 9th century BCE, in the areas of southern Anatolia and northern Mesopotamia. By the mid of 8th century BCE, these speakers developed it into distinctive distinct Aramaic script (Figure 10).

	Aramaic	Nabataean	Arabic		Aramaic	Nabataean	Arabic
a	Ⲁ	ⲁ	ا*	l	Ⲍ	ⲍ	ل
b	Ⲃ	ⲃ	ب	m	Ⲏ	ⲏ	م
g	Ⲅ	ⲅ	ج**	n	Ⲑ	ⲑ	ن
d	Ⲇ	ⲇ	د	s	Ⲓ	ⲓ	
h	Ⲉ	ⲉ	ه	r	Ⲕ	ⲕ	ه**
w	Ⲋ	ⲋ	و	p	Ⲗ	ⲗ	ف
z	Ⲍ	ⲍ	ز	q	ⲏ	Ⲑ	ص
h	ⲏ	ⲑ	ح**	q	Ⲑ	ⲑ	ق
t	Ⲓ	ⲓ	ط	r	Ⲕ	ⲕ	ر
y	Ⲗ	ⲗ	ي	s	Ⲓ	ⲓ	س
k	Ⲙ	ⲙ	ك	t	Ⲙ	ⲙ	ت

All Arabic letters are isolated forms, except * denotes final form, and ** denotes initial form

Figure 10. The Aramaic alphabet. (Source: <http://www.ancientscripts.com/images/nabataean.gif>.)

“Following the founding of the Achaemenid Empire in the mid-6th century, this Aramaic language and script became the official tools within Egypt to Central Asia and India. This was known as Imperial Aramaic” (O’Connor 1996, p.96).

Several years later, Imperial Aramaic stopped being an international standard. This was due to the Arabic-speaking Nabateans, centred on Petra, developing the local offshoot of Aramaic script in the 3rd century BCE. However, they continued using Aramaic as their written language (Daniels 1996; O’Connor 1996).

Initially, the Nabataean Kingdom’s boundaries were restricted to the areas around the city of Petra, north of the Red Sea. However, they eventually succeeded in annexing the territories from Transjordan to Damascus and extending south towards Hijaz (to Hegra, modern Madain Salih). Regarding language, they spoke using either Aramaic or Arabic; however, they developed a cursive Aramaic writing script that is today known as ‘Nabataean’. This was used from the 4th century BCE through to the 2nd century BCE. With little development, the script continued to be used until the 3rd century AD in Sinai (Everson, 2009).

Nabataean script’s glyphs have a more-ornate style, in comparison to other Aramaic scripts. They include circles, loops, and flourishes. However, throughout the development of the script, there was an introduction of ligatures and final forms (Figure 11), which allowed for faster writing, and therefore, was better for business transactions (Everson, 2009).

2.4 Origins, Characteristics, the Rise and Types of Arabic Calligraphy

2.4.1 Introduction

This section discusses the history of Arabic scripts, their characteristics, major styles, and the evolution of Arabic calligraphy. Yin (2003), in describing case-study research, claims that history deals with the interrelated circumstances between phenomenon and context, but usually with non-contemporary events. Since this study includes a broad discussion about traditional thought, it is essential to introduce historical information. Archival records can be used in conjunction with other sources of information to design case studies. However, the importance of these archival records, unlike the documentary evidence, tend to vary from one case study to another. Yin (2003) stated:

“Constantly trying to identify these objectives, you are less likely to be misled by documentary evidence and more likely to be correctly critical in interpreting the contents of such evidence. At the same time, many people have been critical of the potential overreliance on documents in case study research” (p.13).

Other conditions that could affect the historical information collected for a case study are either caused by the researcher himself or because of differing circumstances.

“This is probably because the casual investigator may mistakenly assume that all kinds of documents including proposals for projects or programs-contain the unmitigated truth” (p.13).

However, one component of culture regards the manner in which its components express themselves. This expression can be via spoken word, text, art, or music, or even in actions or gestures. Further, it can also combine these artefacts, as is seen in the Arabic or Islamic (the terms are used interchangeably) calligraphy.

2.4.2 What does ‘calligraphy’ mean?

The word ‘calligraphy’ comes from two Greek words ‘kallos’ and ‘graphos’ meaning ‘beauty’ and ‘writing’.

“This refers to the harmonious proportion of both letters within a word and words on a page. Although, some premier examples of calligraphic writing appear to be effortless, each letter and diacritical mark is the result of painstaking measurements and multiple strokes” (Sood and Fitzgerald, 2012, p.56).

Calligraphy has been compared to music. For example, Khan (2001) stated that it ‘has its own rules of composition, rhythm, harmony, and counterpoint and elements that bring joy to the eye of the experienced beholder and to the lover of beauty and form’.

One of the oldest languages in the world today, Arabic, is spoken by over 300 million people. Apart from a stable orthographic representation system, it also has a unique system of the Holy Qur’an’s diacritical (Alshahrani, 2008).

Arabic writing belongs to the Semitic alphabetical scripts, wherein mainly the consonants are represented. The Arabic script was developed relatively quickly and its use became frequent to

the point that today, it is second in use only to the Roman alphabet (Origins of Calligraphy, 2003).

2.4.3 History of Arabic scripts

Sacks (2003) published a family tree of the alphabets⁹ from around the world. This family tree demonstrated that the origin of the foremost scripts of living languages can be found in the first Semitic language, in Egypt, around 2000 BCE. Around 1000 BCE, this language paved the way for the Phoenician alphabets in Lebanon and propagated quickly. Two centuries later, it was found that the letterforms of the Phoenicians had been copied and modified for use as Aramaic letters. These Aramaic letters acted as the roots of the Nabataean alphabets in the northern region of the Arabian Peninsula, in Saudi Arabia (Alshahrani, 2008).

In the 4th century CE, Arabic scripts were adopted from the Nabataean alphabets. There was an alteration made in them by copying, deleting and introducing newer alphabets to eventually transliterate the language that would be newly born: Arabic. The development of the Arabic script over time from its earliest form to the script that was used for the Holy Qur'an in the 7th century can be mapped via four important inscription discoveries. The first of these was the discovery of a famous Arabic epitaph inscription, which was written using the Nabataean alphabets in Namarah to the south-west of Damascus, and which was regarded as the origin of the Arabic script. The second important inscription was dated 328 AD and was on the tombstone of Likhmid dynasty's second king of al-Hirah (Jensen, 1986); this was written purely in Arabic except for a few words that were derived from Aramaic. The third inscription of note was a trilingual (Greek, Arabic and Syriac) inscription dating back to 512 AD discovered in Zebed near Aleppo in 1879. This included personal names in the Arabic portion (Diringer, 1985). Finally, in Lejā in Haarān, situated to the south of Damascus, a bilingual Greek and Arabic transcription was found, which dated back to 56 AD. According to this inscription Sharāhil, the son of Zālim, built the martyrium, one year after the Khayber destruction (Bellamy, 1989).

Contrary to the alphabetic scripts of the Greeks and the Romans, Arabic and Hebrew have consonantal scripts (Cook and Bassetti, 2007). The origins of the Arabic alphabet can be traced to the writing of the seminomadic Nabataean tribes, who inhabited southern Syria and Jordan, Northern Arabia, and the Sinai Peninsula.

“Nabataean script shows some surviving stone inscriptions in which there have been strong similarities to the modern Arabic writing system. Similarly, to Arabic, written texts include mostly consonants and long vowels, with variations on the same basic letter shapes used to represent a number of sounds”, (Sood and Fitzgerald, 2012, pp. 56-57).

A number of historians claimed that prior to the rise of Islam, the Arabs had no transliterated works. However, the Arab tribes tried to preserve their special heritage by focusing on poetry. The seven poems compiled by Hammad the Rhapsodist are considered to be some of the best works of the pre-Islamic poets. The Arab tribes decided to put them up for display on the walls of the Ka'ba in Mecca (Alshahrani, 2008).

⁹ ‘Alphabet’ is derived from ‘alpha-beta’; the first two letters of the Greek alphabet (alpha to omega) (Al-Shahrani, 2008)

It can be said without a shred of doubt that Prophet Mohammed's (Peace Be Upon Him) message of Islam, and his revelation of the Holy Qur'an, made significant contribution to the development of the Arabic scripts, which then helped establish a new era in the nomadic societies of the Arabs. In the book, *Ministers and Writers* ([undated], cited in Zayed, 2004), alleged that the Prophet (Peace Be Upon Him) assigned a few Muslims to write down the Qur'an soon after the revelations in Mecca and later in Medina.

Around this time, two types of scripts were formed: regular scripts, which were used to record the daily needs of the people in Medina's new Islamic state, and the script that was used while writing the letters of the Prophet to different kings and emperors of the Roman and the Persian empires (Alshahrani, 2008).

Despite Arabic writing existing prior to the Prophet Mohammad receiving Allah's words, the spread of Islam accelerated Arabic calligraphy. During the caliphate of Othman, the Qur'an, the Holy Book of Islam, was compiled. One way in which the followers could demonstrate their devotion towards Allah was to exalt the verses and the Surahs of the Holy Qur'an. A great importance was placed upon the written word in Islam by beautifying it and turning it into a form of art that could serve as a way to honour Allah. Thus, calligraphy began to thrive throughout the caliphate, and in fact, the fourth caliph Ali was himself a calligrapher. As Islam grew in popularity and spread throughout the Middle East, North Africa, and Spain, an increased necessity to read and write Arabic was observed (Origins of Calligraphy, 2003).

Calligraphy became competitive in deciding who had the ability to create the most beautiful mosque, and so 'beauty' became a form of measurement for this. Arabic calligraphy, including both angular and cursive scripts, applied directly on buildings was very popular in the 8th century AD (Khatibi *et al.*, 1976).

In a similar manner to other art forms, calligraphy appears on both religious and secular objects in every media: architecture, paper, ceramics, carpets, glass, jewellery, woodcarving, and metalwork. Additionally, it also provided substantial information regarding the adorned object, such as maker, patron, function, and date and place of production. Further,

“a number of factors, such as the prospective audience, content of the text, and the shape and function of an object, are able to inform the type of script employed”
(Sood and Fitzgerald, 2012, p.56).

The Arabic language underwent many changes during the Umayyad (661-750 AD) and Abbasid dynasties (750-1258 AD), for example, the introduction of short vowels (diacritical markings) during the Umayyad rule. The dots above and below the modern Arabic letters were first used in conjunction during the Abbasid era. As the alphabet evolved, so did calligraphy. Court papers were written in early cursive scripts. Abu Ali Muhammad Ibn Muqlah (885-940 AD), a calligrapher and wazeer (advisor) to three caliphs of the Abbasid dynasty, set six styles of calligraphy and established the concept of 'proportion'. Prior to this, the specific proportions of letters were never considered. However, Ibn Muqlah created a set of rules that the Arabic calligraphy was supposed to follow and which included suggestions like the height of the letter alef (ا) is the same size as the diameter of a circle in an Arabic letter. Further, a standard size of dots on the Arabic letters was set and decided. Altogether, this led to a uniform style of writing (Origins of Calligraphy, 2003).

Arabic calligraphy flourished under many Arab dynasties. In particular, decorative art noticeably expanded during the time of the Mamluks. As a result, simple everyday objects had calligraphic designs, and with the increase in calligraphic designs, so was the need for experienced Arabic calligraphers. As it began reaching a larger audience, a deeper appreciation appeared for calligraphy throughout the population (Origins of Calligraphy, 2003).

In 4th century Persia, in the reign of the Timurid dynasty, written materials were emphasised. Significantly, following the reign of the Safavids, extensive development and use of the Ta'liq and Nasta'liq (two Persian scripts) took place. This coincided with the time that the Taj Mahal was built by Shah Jehan in Agra, India. This massive mausoleum shows Qur'anic sayings written in the cursive format and spread throughout the exteriors and interiors of the building (Origins of Calligraphy, 2003).

There was a resurgence in Arabic calligraphy in the Ottoman dynasty (1444–1923 AD), for example, many new styles developed, such as Tughra and Diwani. Jali Diwani, a highly intricate style of calligraphy that is still used in royal circles today, has its roots in the reign of the Ottoman Empire – a period when Arabic calligraphy was considered paramount (Origins of Calligraphy, 2003).

Today, in the Middle East, Arabic calligraphy continues to enjoy its status of a treasured art form. It has continued to evolve since the Ottoman period; however, it still continues to be a mixture of a traditional art and the new, modern approach.

2.4.4 Characteristics of Arabic scripts

A typographer must keep in mind the various characteristics and rules of the Arabic script. If one is well aware of all these characteristics, they can create a professional design in Arabic type (Azmi and Alsaiani, 2009).

2.4.5 Direction of writing

Arabic writing reads from right to left, a unidirectional script (Figure 13). However, Arabic mathematical documents use Latin alphabetic symbols, indicating that Arabic became bidirectional as a result of the mixture of Arabic strings with Latin based expressions (Azmi and Alsaiani, 2009).



Figure 13. A composition in Diwani shows writing direction from right to left. (Source: author.)

Further, no distinction is seen between the upper and lower-case letters. However, the shapes of the letters generally vary according to their positions in a word. Punctuation marks were introduced in the language as late as the 20th century. Short vowels, which are depicted by a set

of marks either below or above the letters, help the reader to pronounce the words. They occur most notably in the Qur'an, where it is important to recite the words correctly, and in texts for novice readers (Sood and Fitzgerald, 2012).

2.4.5.1 Cursivity

While independent characters form the basis of Latin-based writing, the cursive style is allowed in Arabic. This cursivity offers four different and distinct forms for the same letter, depending on its position in the word: final, middle, initial and/or isolated (Elyaakoubi and Lazrek, 2005).

2.4.5.2 Ligatures

The Arabic script is rich in ligatures, thanks to the cursive nature that is mandatory. Few of these ligatures are mandatory, some are optional and exist only for aesthetic reasons, legibility or justification (Figure 14) (Azmi and Alsaari, 2009).



Figure 14. A calligraphic composition in Diwani showing ligatures. (Source: author.)

2.4.5.3 Diacritical dot

Diacritical dots are a unit of measurement and are generally marked by the feather of the calligraphy pen (Elyaakoubi and Lazrek, 2005). Diacritical dots display a semantic role, where certain letters are characterised by the number, position and presence of these dots (Azmi and Alsaari, 2009). There are eighteen shapes in the Arabic alphabets, which represent the twenty-eight phonetic sounds, using diacritical marks. This is complicated because:

“the same letter shape can form a ‘ba’ sound when one dot is placed below (□), a ‘ta’ sound when two dots are placed above (□), or a ‘tha’ sound when three dots are added above (□)” (Sood and Fitzgerald, 2012, p.57).

2.4.5.4 Diacritical signs

Diacritical signs (also known as short vowels) are markings which are added above or below the letters and aid the reader/speaker with the correct pronunciation of the text. These signs are different heights, these are not only relative to the basic glyphs, but are also in accordance with other contextual elements. The diacritical marks in the Arabic letters can be compared to a magnet (Elyaakoubi and Lazrek, 2005).

Campell (1997) states the following as the main signs that are used in the Arabic scripts:

- Shadda (◌ّ) is used to indicate the germination of a consonant. The consonant, instead of writing twice, is placed over the letter form as in (حَذَّرَ), ‘warn’.
- Sukun (◌ْ) specifies that a consonant does not contain any vowel. For example, (هَدَوْءٌ) ‘quietness’.

- Tanween (ُِّ) indicates an indefinite noun by adding either -on, or -un in the oblique cases or -in in the nominative case (Alshahrani, 2008).
- Hamza ◌ is used to indicate a glottal stop. It exists with alif in the initial place, with fatha, kasra or damma as required (أَسْمَاء), 'names'. Hamza can be written on an alif (سَأَلَ), 'asked' or waw (شُؤُون), 'affairs' or carried by ya (نَائِم), 'asleep' in the middle of the word or on the line as a word-final position (سَمَاء), 'sky'.
- Madda (ـ) is said to occur when a glottal stop is followed by a long alif, hamza is removed and madda is written as superscript above alif. Madda is a word that may be positioned initially (أَل تَمَام), 'A'al Tammam' (my family name), medially (الْقُرْآن), 'the Holy Qur'an' but finally as (فَضَاء), 'space' the hamza stays behind the long alif (Azmi and Alsaiani, 2009; Elyaakoubi and Lazrek, 2005; Alshahrani, 2008).

It is worth noting that there are special diacritical marks that are used specifically in the Holy Qur'an to ensure the accuracy of recitation.

2.4.5.5 Allographs

Allographs are different shapes that a letter may form, in accordance with the neighbouring letters and on certain occasions, in accordance with the presence of Kashida (Figure 15). For example, the initial form of 'ba' can take three allograph shapes according to its left neighbouring letter (Azmi and Alsaiani, 2009).

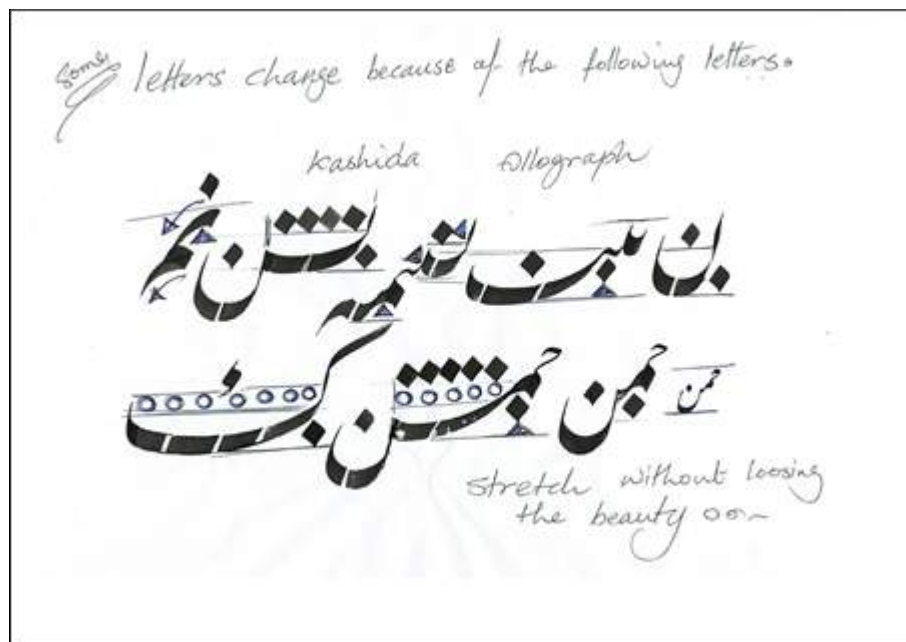


Figure 15. Allographs and Kashida in Arabic calligraphy. (Source: author.)

2.4.5.6 Kashida

The connection between Arabic letters is known as 'Kashida'. It does not form a separate character but allows for a stretch of the previous letter. This has various functions: aesthetic reasons, legibility, justification, and emphasis (Elyaakoubi and Lazrek, 2005).

2.4.6 The Arabic punctuation system

Arabic has a similar punctuation system to the English language. However, the Arabic comma's direction (،) is opposite to that of the English comma (,), and there is no hyphen (-) in Arabic. It is generally substituted by brackets or commas (Ghazala, 2004).

2.4.7 Major styles of Arabic calligraphy

Calligraphy is a buoyant form of handwriting. It is the first art in Islam that can supposedly give pleasure to the eye, fragrance to the heart and joy to the heart (according to Imam Ali (599-661 AD), the fourth Caliph). Ever since the first edition of Holy Qur'an that was published in Makkah, writers worked incredibly hard to correct manuscripts to properly propagate the honourable words of God. Due to this, today many museums from around the world have become home to the numerous masterpieces of the manuscripts of the Holy Qur'an (Alshahrani, 2008).

A number of different scripts, with various different styles are known in Arabic calligraphy. These styles made an impression of the Middle East, Persia, and northern Africa. These scripts all vary in cursive/straight lines, the amount of slanting, and in letter creation.

Numerous cursive scripts were developed from Kufic and Naskh scripts, to further elevate the words of Allah. Therefore, this resulted in calligraphic reformation. Ibn Muqlah, the Abbasid *wazeer* (minister) who was also a calligrapher, invented a calligraphic system on the basis of the rhombic dot (formed by pressing the pen diagonally), the standard alif (five or seven rhombic dots long) and the standard circle (its diameter equal to the alif's length). Only six cursive scripts can use this system successfully, which was the so-called 'sittah' ('six' in Arabic). These scripts are the Naskhi, Thuluth, Muhaqqaq, Rayhani, Riq'a and Tawqi (Coulmas, 1996; Gaur, 1987). Although, the Daiwani and Taliq scripts are not among these six, they are still major styles.

Arabic calligraphic styles derived from the two scripts: The Kufic and Naksh scripts. The Kufic script is the script that the Arab calligraphers used to originally write the Holy Qur'an. This style was developed in Kufa in Mesopotamia (modern-day Iraq) in the 7th century AD. The Kufic script is bold, squat, and square, and has straight, vertical and horizontal lines meeting at ninety-degree angles.

“These omit the diacritical marks of vowels. These characteristics allowed Kufic to be written on stones and the walls of mosques and metals” (Diringer, 1985, pp. 271-272).

2.4.7.1 Kufic script

One of the earliest scripts is the Kufi or Kufic script, purportedly originating from Hira (Figure 16). For each letter, which takes on a squarish form, this angular script uses bold and short strokes. In manuscripts, while the letters often appear in the form of black and bold characters, the diacritical marks, which were often in red, offer a contrast. The thickness of the script lends itself well to stone carvings and architecture. Further, it was also used on coins. For three centuries, the copies of the Qur'an primarily used this script and it is still in use today. There are various forms of Kufic script, including foliated, plaited, and Qarmatian Kufic (Khatibi *et al.*, 1976; Khan, 2001).



Figure 16. A verse of Qur'an in Kufic script. (Source: author.)

2.4.7.2 Naskh script

The Naskh script developed early in the 7th century in Hijaz (Makkah and Medinah). Words from this script are present in a rounded shape, and are mostly found on papyrus. The Naskh script is in contrast with the Kufic script in that it lacks structural complexities and is used for the correspondences of the daily life (Jensen, 1986).

Naskh, the literal translation of which is 'copying', was one of the earliest forms of cursive script, and is accredited to Ibn Muqlah. It was often used during the Abbasid dynasty for two reasons. First, it was used to support classical work; in other words, classical literature was rewritten into additional copies using the Naskhi script. Second, Naskh was written on numerous administrative documents during the Abbasid reign. Children are usually first taught Naskh, and many computer fonts also use a derivative of Naskh to print Arabic script (Khan, 2001).

2.4.7.3 Thuluth script

Thuluth is another common form of the cursive scripts. Its origin can be traced back to the 4th century AD, and it is credited to Khaleel Ibn-Ahmad al-Farahidi from Basra. 'Thuluth', in Arabic, translates as the fraction 1/3, which relates to the calligraphy slants approximately 1/3 of each letter, which can be identified by the elongated vertical letters, such as alef (ا) and lam (ل). Thuluth is a large and clear script and can be often seen in everyday settings (such as on money). Furthermore, this style is often used in the form of decorative ornamentation on buildings, titles and headings in the books, such as in large-print copies of the Qur'an (Khan, 2001).

Three events resulted in major changes to Thuluth calligraphy, known as the 'calligraphers' revolutions'. While the first of these events took place in the 15th century, the second revolution during the Ottoman's reign occurred in the 17th century; the last upheaval, which finally resulted in the formation of Thuluth that the world is familiar with today, occurred at the end of the 19th century (Khatibi *et al.*, 1976).

2.4.7.4 Riq'a Script

Riq'a or Ruq'ah (small sheet) script is recognised by having letters that are small, more curved and simplified (Figure 17). These structural styles are derived from the Naskh and Thuluth scripts. Riq'a became the Ottoman rulers' official script and was used for both communication purposes and writing the government documents. Due to the formation of simple circles and straight lines, with short and crisp strokes, Riq'a is a handwriting known for its clarity and readability and is widely used in the Arab world (James, 1988).

In fact, Riq'a is often used in the modern style of printing books and magazines. It has small, neat lettering in straight lines or curves. Due to this, after Naskh, Riq'a is the second script taught to Arabic children. The Riq'a script is used by both the Turkish and Arabic people (Khan, 2001; Khatibi *et al.* 1976).



Figure 17. A calligraphic composition in Riq'a. (Source: author.)

2.4.7.5 Diwani script

In the 16th and 17th centuries, the Diwani script was specifically designed for the use of the state departments, known as the 'diwans' of the Ottoman Empire, and was also used for the decrees and resolutions of the Empire (Alshahrani, 2008).

Both the Diwani and its variant, Jali Diwani, developed during the Ottoman Empire. This style may possibly be the most ornamental form of Arabic calligraphy. To showcase the skills of the calligrapher, Diwani calligraphy is often adorned with the most minute of details. For example, the letters are very close together, which makes it difficult to read. Initially, it was a secretive elite way for a group of a handful of talented people to communicate and was used as a form of royal calligraphy. There was much elegance in Diwani calligraphy, and it required great skill to produce beautiful and stunning works of art (Khan, 2001; Khatibi *et al.*, 1976).

Hafiz Uthman (1642-1698 AD) developed the Jeli style, also known as the 'clear Diwani style', which is an ornamental script and has intertwining letters, and uses diacritical marks and dots heavily. The spaces that are left between the letters do not necessarily possess any orthographic value (Alshahrani, 2008).

2.4.7.6 Ta'liq/Nasta'liq script

Both Ta'liq and/or Nasta'liq styles are Persian, and developed during the 14th and 15th centuries. The Ta'liq style is known for its elongated letters and rounded forms: exaggerated horizontal strokes are derived from the Riq'a script to make the letters rounded, and the complicated and sloping characteristics come from the Tawqi script. Frequently used for Persian royal correspondence, the Tali'q was used extensively during the Mughal Empire. Nasta'liq is the

product of the combination of Naskh and Ta'liq, and in Persian scripts, it is considered to be the most ornamental. These scripts continue to be used today to write Persian (Farsi), Urdu, and Pashto (Khan, 2001; Khatibi *et al.*, 1976).

In the 10th century, Abdul Mali Buk developed the Ta'liq; however, in the 14th century the Naskh and Ta'liq scripts came together to form the Nasta'liq. Nasta'liq comprises elongated horizontal strokes, flowing lines and exaggerated, rounded forms of neglecting diacritical marks. This style was preferred by the Turks, Persians and Indians due to their native calligraphic style. However, despite the fondness of Arabs for the Nasta'liq script, the Holy Qur'an was not copied using it (Alshahrani, 2008).

2.4.7.7 Muhaqqaq script

In the 11th century, Ibn al-Bawwab and Yaqut al-Must'asimi developed the Muhaqqaq script. It is characterised by its extended mid-line curvatures that are extended in a horizontal manner, and its shallow, sub-linear curves, in combination with its compact word structure, gave it a leftward sweeping impetus. It varies in design from a somewhat rugged script to being a script with delicate outlines and soft curves and a bolder type, having characteristics of both Thuluth and Naskh (Al-Said, 1988). Due to its regularity and powerful flowing form, Muhaqqaq was one script that was favoured for writing the Qur'an.

2.4.7.8 Rihani script

Of the scripts used by Ibn al-Bawwab in the 11th century, the Rihani script is the most beautiful and innovative. During the Abbasid dynasty, it was used to copy the Holy Qur'an. It is similar to Muhaqqaq, albeit smaller, and derived from Naskh with Thuluth scripts' features. The accuracy and precision in line drawing as well as the control of the pen are some features that are decisive factors in its elegance (Alshahrani, 2008).

2.4.7.9 Tawqi Script

The Tawqi (signature) script is also known as Togra'a. This script, one of many produced by Ibn Muqlah, (885-940 AD) which was derived from the Riyasi script and was used by the caliphs to sign their names and titles (Alshahrani, 2008).

2.5 Arabic Calligraphy; The Literature and The Art of Civilisation

2.5.1 Introduction

Despite the development of writing techniques, Arabic calligraphy remains one of the most important sources of artistic knowledge. Graphics and literal text help to form meaning in spoken or audible words. Language and writing are two distinct systems of signs. Saussure says that 'the only purpose that justifies the existence of writing is to express the language' (Al-Said, 1988). However, the goal of linguistics is not just to create a written picture and form an orderly image of the words, but the operative form is closely related to the written image, which dominates the first image (the spoken word). In general, people are more interested in the written image of the vocal signal than in the reference itself (Derman, 2000).

Perhaps the first beginnings of Arabic writing, the return to its roots and origin, the extent of development, and the image of circulation and circulation among people, are not the cornerstone. However, it is imperative to consider the evolution of it that touches an important aspect of this bright art (Al-Said, 1988).

Many studies indicate that Arabs in the pre-Islamic era knew writing, although, it was used only for political and commercial purposes. As for writing in the aesthetic sense, it was not marginalised or absent, but it began early. It is at the core of the Arab society, which is framed by artistic tastes that establishe the aesthetics (Derman, 2000).

2.5.2 The first words

When Islam emerged, the first divine word was revealed to the Prophet (Peace and Blessings Of Allah Be Upon Him). Reading about it can be troublesome. Reading can only be carried out by decoding the writing, drawings, or colours. Therefore, the sequence of the verses increases the disclosure and clarification. The act of reading/learning depends cognition, and the pen is only a means to achieve that (AlKurdi, 1939).

In his introduction, Ibn Khaldun (2004) claims that calligraphy is a drawing, and a literal form that indicates the spoken words that represent what is in the soul. It is a second level of linguistic significance. Thus, Arabic writing continued to transform into a cultural and civil phenomenon, and people began to believe in one thing: that writing is a science (Ibn Khaldun, 2004). At the beginning what occupied the Arab calligrapher was manifested in his handling of the initial concepts of problematic and alternative creation. He went beyond the traditional style without violating the essence. He went on to look at what is around him, and to connect an intimate relationship between the object/man and the rest of the assets. Then, a finer taste emerged that made the character formally shift to take into account the accuracy, proportion, weight, size and shape, and realised evolution in the transitional sense that evolved from static movement to dynamic action (AlKurdi, 1939).

Writing was a second area of interest for Arab Muslims after poetry. This is because such sacred project, as long as everything that comes down to the Prophet is writing-inspiring, where the task of noble men in this area - the Writers of Revelation - including the four caliphs and a number of companions of the Prophet (Sayegh, 1988).

The written accumulations of calligraphy were recorded by the creative copyists throughout history in various ways. Various instruments confirm that the essence of the artist is directed towards creativity by religious, philosophical and cultural dimensions, which makes the spirit of Islam, in all its manifestations, dominate art (Derman, 2000).

Calligraphy gradually infiltrated life as a necessary element. In houses, mosques, schools, the offices of the princes and ministers, and in thousands of copied documents, it became an urgent necessity. Thus, love of calligraphy spread to become part of worship, which made followers consider it to be a link to holy matters, denoting their love of the creator as a pioneer, living with time, space, nature and creatures. This is a reaction to the worship of idols; the Islamic artist wanted to harness his art and creativity to serve Islam, to give God his sanctity (AlKurdi, 1939)

2.5.3 The Art of Civilisation

Ibn Khaldun (2004) points out that calligraphy strengthens the power of civilisation and weakens its fallibilities. Thomas van Arnold states:

“the art that Muslims themselves put supreme value on is the art of calligraphy, they were proud of their commitment to this art and refined it for themselves, and they did not feel the help of foreign artists” (Ibn Khaldun, 2004).

The rhythm of the flow between the creator and the creations on the blank page is the apex of beauty. It instils a meaning of the greatness of the creator, as the honour of man with the hand that holds the pen, which allows him to stamp the word 'beautiful' on the void (Derman, 2000). For the Arab artist, calligraphy is a practice of worship, by which the miracle is completed by conveying the Word of God to the hearts of the faithful. It is worship, a special spiritual style that is unique, united, and conscious and taste to be creative. There is a history of a group of spirituals who were impressed by the majesty of the craft, so they wrote letters and essays about the secrets of this silent speaker, the written work of AlHasan Al-Basri, Muhyi Al-Din ibn Arabi, Malik bin Dinar, Yahya Al-Sufi and others (Bahnasi, 1998).

For the calligrapher, to pursue his artistic work, a special ritual associated with the practice is required. This is manifested when the calligrapher is completely pure, comfortable with the time and place, in receipt of the qibla, the prayer of two rak'ahs and taiman, reciting special verses before the writing and at the conclusion. This is only possible for those who are bestowed with His grace in a humble and responsible manner, as long as it is intended for a noble purpose, while at the same time seeking a kind of cleansing. The writing is similar to the spiritual surface, and any calligraphy errors are related to the inner scars of the calligrapher. The name of the Majestic (God) cannot be omitted from a distinguished presence. It is the point of light from which to start and return back to. It is the great aura that gathers around the rest of the slaves as the nucleus/centre/foundation.

2.5.4 The calligrapher and spirituality

There are some unique rules found in calligraphy, especially for the name of Allah (Glory be to Him) and the name of Prophet (Peace and Blessings Of Allah Be Upon Him). With God being the light of the heavens and the Earth; the calligraphy and the spirituality are shared, as they are drawn from one spring. Al-Kindi argues that calligraphy is inherent in the spirit and it appears in the senses of the body (Sayegh, 1988).

It has been mentioned that Arabs knew of writing in the pre-Islam period [Jahiliyah], but only used it briefly due to factors such as lack of resources (paper, ink, etc.) and then the dominance of authority. Islam revolutionised these factors. The efforts of Abu Al-Aswad Al-Dawali accelerated the conception that calligraphy is not just a means of writing, but one of the characteristics of Arab civilisation (AlKurdi, 1939).

In the light of the modernistic facts in which social consciousness is formed, and their connection with other influences (philosophy, ethics, science), Arabs had to pay attention to the grace of the sacred Almighty. The efforts of another group also accelerated this distinction to affect the unity of beauty. Beauty in communication and separation contribute to the crystallisation of new and important schools of art that have added sophistication and refinement and have made lettering attractive and an entity in its visual form (Bahnasi, 1998). Between the producer/calligrapher and the connoisseur/recipient, Arabic calligraphy is a key factor in the formation of civilisation. The decisive development occurred when the aesthetic aspects of both dynamic and static elements were combined with the fusion of geometric and religious forms (AlKurdi, 1939).

The synthesis of Arabic calligraphy has had an intertwined history and setting. It has an attractive splendour, and its patterns are woven into a series of models that have become the cornerstone of an aesthetically pleasing system: Kufic calligraphy, Diwani calligraphy and

Persian calligraphy. Several types of calligraphy evolved (Al-Said, 1988). The King Faisal Center for Research and Islamic Studies in Riyadh has compiled a catalogue of one hundred and thirty-seven types of Arabic calligraphy, divided into eleven class families belonging to names, places, persons or jobs.

The calligrapher is not limited to manufacturing a painting using Arabic letters, but creates many depictions, with each one demonstrating proficiency in the manufacture of such artefacts. Therefore, it is the creative calligrapher who makes his talent in painting speak through the agility and consistency of the calligraphy, including its symbolic gestures and movements. One can observe the ability of the calligrapher to master the profession while viewing the paintings and finding the ink conjoining the beginning of the first letter to the end of the word (Almasraf, 1984).

Today, the calligrapher uses a brush in most paintings, whereas traditionally a pen (the Kasbah) was used. When the metal Kasbah was created, it was received negatively, because the iron rod does not offer what the plant can give. In conclusion, the calligrapher is a creative artist, worthy of adapting and honouring his drawings for future generations.

2.5.5 Favour of Calligraphy

Calligraphy and normal writing are intricately linked; it is in the essence of human thought about creativity, eternity, and immortality (Al-Said, 1988). People have seen the English alphabet pervading the world in the last three centuries due to colonialism and military interventions, while the Arabic alphabet spread throughout the world almost 13 centuries ago, because of the spread of Islam. People accept the Arabic language because it is the language of the Qur'an and the language of Islam, and the means of communication among Muslim people (Derman, 2000).

The calligrapher, for example, that writes Qur'anic verse, such as the Prophet's Hadith or the Great Wisdom, intends to magnify its beauty by the splendour of its calligraphy and its creative meanings. If the manuscript moves people's hearts in its text, the calligrapher is able to move the viewer's feelings with the beauty of the lettering (Al-Said, 1988).

The art of calligraphy is the most difficult of the Islamic arts to create because the artist does not have anything other than the simple pen, which must perform all the functions used by artists working in other media. Therefore, the calligrapher has two main requirements: capacity and effort. In addition to being an art, calligraphy continues to be a source of livelihood for many. Ibn al-Muqaffa said, "calligraphy is a beauty for the prince and a perfection for the rich and for the poor one" (Sayegh, 1988).

Both Arab and Muslim calligraphers combine the aesthetic of the read word and the creatively written one, in the sense that they are choosing the most beautiful word and imbue it with the most beautiful aesthetic calligraphy to produce visual masterpieces. This is to increase the beauty of the verbal meaning of calligraphy, that assists creativity in making the image (Derman, 2000). Al-Qalqashandi describes beautiful calligraphy as being created both in form and content. If the calligraphy is beautiful, people will want to read it even if it is useless in content. If it is complicated and ugly, it distracts contemplation of what is included, even if its content is very useful (Al-Qalqashandi, 1963).

2.5.5.1 Calligraphy - In the era of the Prophet (Peace Be Upon Him)

Islam came with the rapid development and qualitative transition of a nation where illiteracy prevailed. The ‘ego spread’, occurred during the period (Before 610 AD; the year of Revelation of Islam) described by historians as “the last ignorance of the Arab civilisation and civil life before Islam” (Bahnasi, 1998). The inception of Islam was the starting point that returned the nation to awareness (Derman, 2000). It is true that the Holy Qur’an described the Arabs as ‘the illiterate nation’ and further described the Prophet Muhammad (Peace Be Upon Him) as “the illiterate prophet”. However, this description of the Arabs is not universal (Sayegh, 1988). The ‘illiteracy of the Prophet’ (Peace And Blessings Of Allah Be Upon Him) means that one should be proud of, and praise, someone who cannot read or write, and should not help them to improve, as this status is common to many Arabs and the people of Makkah (Bahnasi, 1998). This is because despite ‘illiteracy’, described in the Qur’an, a nation could still be considered educated, and even create scientists. The Prophet (Peace And Blessings Of Allah Be Upon Him) used to call upon him (Prophet Muhammad) to take up the reins of knowledge. He urged his companions to learn, so that a researcher in the Holy Qur’an would find that the word for ‘science’ was repeated hundreds of times, thus calling for scientific advancement (Sayegh, 1988).

Following this period, the Arabs entered a world of progress and creativity, and presented the world with innovative art. For example, although ancient societies composed art in pictures and statues, the Arabs, through Islam, made Arabic calligraphy an art form. This is shown in the effort exerted by the calligrapher and the accuracy that was reached through painstaking effort (Derman, 2000).

It is known by Muslims that the descent of Al-Alaq (the first verses in the Qur’an) is the beginning of the wonderful journey from which Arab calligraphy started, through the call of Islam for science, and urged all men and women to take their own journey (Sayegh, 1988). The effect of urging the Arabs to read the Qur’anic verse is based on scientific progress. For example, the skill that Islam and the Prophet (Peace and Blessings Of Allah Be Upon Him) encouraged in reading and writing, and the development of writing in art, including whether it is more beautiful to write calligraphy on a bone or a palm tree or stone. It is easy to evaluate the scientific or technical value included in that calligraphy. It was a significant effort, suffered by the companions of the Prophet (Peace Be Upon Him), to codify the Qur’an during harsh conditions (Bahnasi, 1998).

The Qur’an urged the Prophet (Peace And Blessings Of Allah Be Upon Him) to write in the same way as he urged reading. Since the beginning of the establishment of Islam, the efforts of the first preacher were focused on all aspects of spreading the call among the people in Makkah, and then circulated to the Arabian Peninsula and other countries (Sayegh, 1988).

The creation of calligraphy began in the era of the Prophet (Peace And Blessings Of Allah Be Upon Him). From that modest beginning, the calligraphers steadily developed their art. This era has left us with a number of valuable historical messages sent by the Prophet (Peace Be Upon Him) to the Negus in Abyssinia, Al-Muqawqisin in Egypt, the King of Bahrain, and the Roman King in Damascus, which are of great historical value (Bahnasi, 1998).

2.5.5.2 Calligraphy - In the era of the Caliphs

The development of the Arab-Islamic society in the time of the Caliphs was a tangible development and a radical change, with the state rule instead of rule by tribal leaders. Laws

replaced customs. As a result, it encouraged the improvement of the calligraphy and its proficiency (Sayegh, 1988). This is due to the stage in which they called for the strength of the young state of Muslims, the renaissance of the science of research and codification, and the display of Islamic Art through Arabic calligraphy, which instils confidence that Arabic calligraphy will grow, with the growth and extension of Islam. No other calligraphy has reached this status in the history of humanity (Al-Said, 1988).

When the Caliphate ended (660 AD), calligraphy emerged as both a science and art. It began in the Arabian Peninsula to the east, west and north, and spread with the Islamic conquests in the time of Umar ibn al-Khattab (579-644 AD) (may Allah be pleased with him) and further expanded during the Umayyad period (660–750 CE) (Bahnasi, 1998).

It was the beginnings of the Arab Renaissance in the time of the Caliphs who laid the rules of the young state and began change to embrace modernity. With the mixing of Arabs, controls for the Arabic language were needed. Prior to this, they did not need standards for the safety of their pronunciation and purity of their primitiveness (Sayegh, 1988). Therefore, Imam Ali instructed Abu Al-Aswad Al-Dawali to put these fixed rules to form a grammar. This development in Arabic writing was essential for unification of writing (Al-Said, 1988).

2.5.5.3 Calligraphy in the Umayyad Period (660–750 CE)

In the Umayyad Period, calligraphy made significant progress in the era of the Prophet (Peace Be Upon Him) and the era of the Caliphs. It was the first time professional calligraphers existed. However, although the letters lacked diacritical marks, the famous calligrapher Qutbah al-Tahrir, who invented a new calligraphy, introduced a mixture of the Hijazi and Kufi styles. This calligraphy was called the ‘Galilee calligraphy’, which was used by Qutbah and contemporaries, but perhaps followed later on the writing on the doors of the mosques and its niches (Derman, 2000).

Aljaleel calligraphy created a number of other styles, which continually improved until around 758 AD. The calligraphy of Altumar is smaller than its predecessor, and Qutbah invented the ‘third’ and the ‘two thirds’¹⁰ system. (AlKurdi, 1939).

The calligraphers in the Umayyad era, for the first time, drew beautiful calligraphy which decorated the palaces, mosques and wrote in the records of the young state and its modern dynasties (Ibn Manzoor, 1955). They won favour with the princes and caliphs and made them sit at the forefront of their councils. The beautiful calligraphy of this era adorned the domes, minarets, mosques and palaces that were decorated with mosaics, engraved wood, silver, metal and glass, not only in the capital Damascus, but also in the farther away cities. This can be seen clearly after more than fourteen centuries later in the mosque Umayyad Mosque in Damascus, Qasr al-Hier al-Sharqi, and the ruins of Hisham, the mihrab of the al-Aqsa Mosque and its dome (AlKurdi, 1939). In the Umayyad Period, calligraphers wrote in the state records with the ‘two-thirds’ system, and called for a substantial number of books and records to be written in

¹⁰ Styles of early simple Arabic calligraphy. The calligraphy of Altumar means the calligraphy of the newspaper and the collection of queues, which the Turks called calligraphy (one third).

calligraphy. The successors of illiterate sons wrote Altomar and Shami calligraphy (Ibn Manzoor, 1955).

The following calligraphers in this age played a crucial role in helping calligraphy advance as an artistic movement: Khalid bin Abi Hayaj, who wrote a copy of the Qur'an; Malik bin Dinar (Died 748 AD), who was known for asceticism and wisdom and was mentioned among the scholars and modernists of his era; Alhasan Albasri (Died 728 AD) and Mahdi Al-Kufi (Almasraf, 1984). There were other calligraphers, who became famous and scattered in places far from the centre of the caliphate like Abu Mohammad and Abu Al-Faraj Al-Asfahani, Ibn Abi Fatimah and Ibn Al-Hadrami (ibid).

The Umayyad caliphs played a crucial role in the renaissance of Arabic calligraphy and pushed it forward to keep pace with the comprehensive renaissance of the Islamic state to create solid foundations on which to build (AlKurdi, 1939).

2.5.5.4 Arabic calligraphy in the Abbasid Period (750–1258 CE)

The calligraphers were key in Damascus until the Abbasids swept away the Umayyad caliphate. The calligraphers and artists, as well as the writers and scientists, receive rewards for their creativity from the caliphs, princes, and masters, and others turned to Baghdad, the capital of the Abbasid state and the city of the great caliphs, al-Rashid (766-809 AD) and al-Ma'mun (786-833 AD) (Almasraf, 1984). If the Umayyad era was an era of establishment and building, the Abbasid era was a period of prosperity and generosity. In this age, every artform flourished. The famous calligrapher Aldahhak bin Ajlan was famous in the period of Abu Abbas Asaffah (721-754 AD) and the calligrapher Ishaq ibn Hammad in the caliphate of Al-Mansur (714-775 AD) and Al-Mahdi (745-785 AD). The calligraphic styles in their era reached eleven in number (Sayegh, 1988).

The calligraphy in the era was so plentiful that it became striking in characterising the kingdom in the Arabic script. The calligraphers before the end of the century developed more than twenty calligraphic styles. Abu Ali Muhammad bin Muqlah al-Wazir standardised Arabic calligraphy. He set the calligraphy of the third Thuluth until it reached its peak. He also established the calligraphy of Almuhaqiq. Further, he created the calligraphy of the Rik'ah, and distinguished the calligraphy to create Naskh and presented it in the offices of the caliphate (Almasraf, 1984).

It is said that when the Caliph was angry with Ibn Muqlah, he cut off his right hand. However, he did not abandon calligraphy but tied his pen onto his stump to write. Ibn Muqlah continued to lead calligraphy until the 5th century. Ali ibn Hilal (known as Ibn al-Bawab), became famous for his style. He established a school for calligraphy and invented the calligraphy known as 'Rihani' (Sayegh, 1988).

The Qur'anic texts that were written in the Abbasid period, date back to the 9th century, and were written on vellum in blue, purple or red, and black or gold; the Kufic characters are thick, rounded and long (AlKurdi, 1939).

In the late Abbasid period, calligraphy reached more than eighty calligraphic styles, and saw the progress of art and decoration alongside the development of calligraphy. A calligraphy called 'the patterned font' emerged in this era, until the calligraphers began to recite the Qur'an in spite of the small size (Sayegh, 1988).

2.5.5.5 Arabic calligraphy in the Andalusian Era

The peninsula of Iberia (modern Spain and Portugal) was not mentioned prior to the Arab Islamic conquest, and researchers did not travel there merely to study the arts and decorations. Iberia forms the gateway to the Mediterranean which helped to reach ancient art derived from the Middle East. This arm of Europe extends to Africa, the Arab world and Europe (Bahnasi, 1998).

The region of Andalusia became a focus for art, which encouraged the Spanish to abandon their mother tongue. This helped the Arabic language to evolve there, and it became the language of science and the language of the time. They found people were keen to learn because it became the language of world culture (Derman, 2000).

They considered Latin as a second language, whereas Arabic was the mother tongue. The Torah and the Bible were translated into Arabic and read in the churches. The entry of Muslim Arabs into Spain was a radical coup in the world of culture and thought, and with the entry of Islam, a new form of civilisation dawned (Sayegh, 1988).

The Arabic alphabet entered all facets of life in Spain; in the calligraphy of books, the decoration and the paintings of houses, mosques and state centres, and the palaces of the rulers, princes and sultans, the churches and cathedrals as well as in mosques in which the Muslim recites the Qur'an in prayers. Andalusian Kufic calligraphy entered the mosques, the Christian churches and the Jewish temples because non-Muslims found in it a means of culture, and source of fine art (Derman, 2000).

Andalusia flourished, and the community for several centuries forgot the language that prevailed in Andalusia before the Muslims entered. This led the kings of Europe to send their children to the universities of Andalusia to learn science and to return to their homeland after mastering them. This is what made the great thinkers and historians recognise the Arabs in Andalusia and the release of the feelings experienced in those days, as quoted by Ziegfried Honke, where she said "on a carpet of musk and amber plant, and the wind whistles, our feet were moving" (Sayegh, 1988).

The Arabic alphabet continued to be used in Andalusia for eight centuries, during which it was an example of the wonderful scientific renaissance left by the Arabs in Andalusia (Al-Said, 1988). Later, it became the model of the ideal Islamic society for those who wanted to work in the spirit of Islam; many innovations, and miraculous inventions were created.

Book markets also flourished in other Andalusian cities. Every city had a bookshop and a bazaar. The Arabic manuscripts had become collectible antique masterpieces for the wealthy, and a basic material for science students, who created their own libraries at home (Almasraf, 1984). This is in addition to dozens of public libraries in each city, frequented by scholars, writers and poets.

The Arabic calligraphy in Andalusia still, in spite of the passage of more than a thousand years, tells the story of Arab and Islamic Art and creativity, which was reached by calligraphers and the Muslim artists in Andalusia in an environment for creativity and nobility (Bahnasi, 1998).

2.5.5.6 Calligraphy in the Fatimid Period (909–1171 CE)

The Fatimids in Egypt took great care with the Arabic script. They wrote it on minarets, domes, palaces, palaces of the caliphs and the shrines of the scholars. They decorated the façades of the

baths, public libraries, the horse tracks, prison facades and public places. Fatimid calligraphy and Fatimid Kufic calligraphy in Egypt differed from other calligraphy (Bahnasi, 1998).

Egypt flourished during the Fatimid Period culturally, and production of books revived the calligraphic industry via their decoration, binding, gilding and marketing. During the Fatimid era, the innovators invented a fluid ink pen distinguishable by a small ink tank, much like modern fountain pens (Al-Said, 1988). The inventor presented this pen to the Fatimid caliph, but he did not circulate it or make other pens and sell it to other people. Egyptian society was surrounded by various kinds of finely wrought calligraphy (Sayegh, 1988).

The period of the Fatimid Caliphate lasted more than 200 years (359-566 AD). The era of the Mu'izz of Fatimah was a 'golden age' of ink calligraphy (Derman, 2000). The palaces of the Fatimid caliphs and princes demonstrate the state of calligraphy and sculpture at that time. The minarets built during this period are considered masterpieces of Islamic construction (Sayegh, 1988).

The pilgrimage of the Egyptian and the Fatimids was one of the first to invent the chariot. It was adorned with magnificent golden calligraphy and beautiful Islamic motifs, so that the one who leads the camel becomes more honourable, carries a title that is inherited (Derman, 2000).

Before the collapse of the Fatimid state in Egypt, the great libraries were scattered as a result of sectarian fanaticism. Al-Maqrizi spoke about the great Fatimid libraries that disappeared after Salahudin's takeover of power in Cairo, and that the books were piled outside the city (ibid).

2.5.5.7 Calligraphy in the Ottoman Era (1290–1923 CE)

The Ottomans inherited calligraphy from the Tabriz school, which thrived not only in calligraphy, but also in the book industry, and was active with respect to books from the manufacture of paper, cardboard, calligraphy, embossing, binding, painting and gilding. The Turks became an outstanding independent school and were renowned in the Thuluth calligraphy, with many examples of Turkish calligraphy preserved in Turkish museums, such as the Museum of Awqaf in Istanbul. They added beautiful decorations and elegant adornments to this calligraphy (AlKurdi, 1939).

The Turk calligraphers created the calligraphy of small Qur'anic books which could be placed in the pocket. Since the Ottoman state was a Sunni Islamic caliphate, it encouraged the spread of Arabic calligraphy. Thus, it also easily spread the language of the Qur'an (Bahnasi, 1998). The calligraphers received the respect of the caliphs. They received favours and gifts from them, became close to them and assigned them work in the state offices at high salaries. However, despite this respect and honour, they did not know what the Arabs brought to them when they were appointed to positions, as was the case with the calligrapher Ibn Muqla (AlKurdi, 1939).

The mosques of the Ottoman Caliphate were filled with magnificent calligraphy and beautiful decorations by the Turkish and non-Turkish calligraphers who were attracted by the Ottoman Caliphate to work in the state. In the late period of this caliphate, a number of calligraphers developed their fame in the Islamic world produced wonderful paintings (Bahnasi, 1998).

The calligrapher of note in this context is Sheikh Hamdallah Amassi (1429-1520 AD), who is considered the Imam of the Turkish calligraphers. Second, the calligrapher Hafiz Othman (1642-1699 AD), also known as Jalal al-Din, wrote twenty-five books, which have been printed in

many other Arabic and Islamic countries, especially in Damascus. His calligraphy has been adopted by two different printing presses Al-Malah and the Hashemite Printing Press. For over half a century dozens of editions have been printed, some of which are marginalised by the Jalalis. The calligrapher Rasa, whose calligraphy can be found on the plates in the Turkish mosques and in the mosques of the Levant, and many others still have their paintings on metal or numbers upon the plaster walls or carved into the marble (Sayegh, 1988).

The Ottoman Era was the age of maturity for Arabic calligraphy, and it is often called ‘the golden age’ of the Arabic calligraphy for a number of reasons, which include:

1. The Ottoman Empire was a large realm, which brought together various nationalities, different tongues and various human races under the umbrella of Islam.
2. The reign lasted nearly six centuries.
3. Photography was considered haram¹¹; so calligraphy, decorations and inscriptions were encouraged in the absence of filming.
4. Caliphs approached scientists, writers and innovators, and drew them to the capital and involved giving them various gifts. Therefore, some caliphs were taught by the calligraphers and took on the principles of calligraphy.
5. The private calligrapher of the Sultan received four hundred Ottoman liras in gold per month.
6. Turkish people enjoyed luxury, which involved creative work in their palaces, such as engravings, decorations and drawings.
7. Turkish calligraphers, under the honour of the state and the bestowal of gifts on them, were encouraged to devise new calligraphy such as Riq’ah, Diwani and others (Bahnasi, 1998).

It is not surprising that the Turkish calligraphers demonstrated in the streets of Istanbul in 1492 AD, to condemn the bringing of the first printing press of the Ottoman Empire. They walked with their heads covered in a coffin in the streets of the city of Istanbul because they were convinced that printing machines would destroy the creativity and individual effort of the calligraphers.

Among the names of the calligraphers in Turkey, two names stand out: Sami and Abdullah Al-Zahdi. But there are other names of master calligraphers including Ibrahim Alaeddin, Mustapha Nazif, Hamed Al-Amadi, Mustafa Arqam, Isma'il Zuhdi, Mustapha Ezzat, Mohamed Shawki, Ahmed Kamel, Mahmoud Yazer and Abdel Aziz Rifa'I (see AlKurdi, 1939).

Turkish calligraphers had a long journey with Arabic calligraphy, but demonstrated their artistic ability to accompany the ancient Arabic calligraphy with their own. Arabic calligraphy rendered by the Turks is highly regarded in the history of this magnificent art (Sayegh, 1988).

2.5.5.8 Calligraphy in Iran

Iranian artists were able to copy the art of the contents of the Persian and Arabic manuscripts, and succeeded in improving the font and developing it. The Iranian calligraphers mastery was often creative in the paintings, innovative in production and demonstrated genius in their foregoing research (AlKurdi, 1939).

¹¹ Against Islamic law (Shari'a)

Iranian calligraphers invented Persian calligraphy in the 12th century AD. They then invented calligraphy Nstaalik from Persian calligraphy and researches of it, which was mainly from the efforts of the calligrapher Imad al-Din al-Shirazi al-Hassani, as he established a base, later named base 'Emad' (Sayegh, 1988).

The city of Mashhad was famous for Nostalic calligraphy until it reached almost all the Iranian cities, and overtook other types of calligraphy in this city, especially in the Imam Reza mosque with golden domes (AlKurdi, 1939).

The creations of Iranian calligraphers surpassed that which others have presented. The calligraphy engraved on domes and minarets tell the story of perfection and quality. The calligraphers inscribed and decorated many pieces of ceramics in the streets of the city of Isfahan, so that one can see it as an open museum of the Arabic calligraphy (Derman, 2000). The city of Isfahan, whose people say it is half the world, is the capital of the Safavid state. This city has calligraphy, paintings and decorations that every Muslim cherishes, and thus, this city has a prominent place in Islamic Art evidence and examples can be seen in numerous museums (Sayegh, 1988).

Some of these archaeological sites containing wonderful calligraphy include:

1. The Great Mosque in Isfahan (Imam Mosque).
2. Mosque of the Kindness of God.
3. The many bridges over the great river (Zindh Road), such as bridge Khajo. It shows the skill of the Iranian calligraphers before they decorated domes, minarets, bridges, huts, and schools, enabling the researcher and visitor to this historic city witness this art and creativity (Al-Said, 1988).

Shahat Fares and its princes took care of the calligraphy and the Mughal Minister Rashid al-Din established the suburb of Samaha (Rasheed quarter). Herat also became the capital of the calligraphy and photography, with Kamaluddin Bahzad (1450-1535 AD) as the teacher of photography and the guide of calligraphers (Almasraf, 1984).

Calligraphy and creativity were not limited to professional calligraphers, but also to the princes, rulers and sultans, who found honour, blessings and glory in copying calligraphy (Al-Said, 1988). They were proud of the copies of the Holy Qur'an guided by the great calligraphers, such as the Ba'athist state and the Shah Tahmasib (1514-1576 AD), but the Persian princes struggled to help the calligraphers and retain them, for example, helping by putting pillows in place or by holding a candlestick, to show extra respect and thereby they could imitate the sons of the kings of the Arabs (Almasraf, 1984). Indeed, the Iranian calligraphers were enriched with more favours and gifts from the shahs and the princes, because of the respect for the calligraphers' work and outlook.

2.5.5.9 Calligraphy in Europe

Arabic calligraphy entered Europe from several areas, and each had a different character, because the conditions of the introduction varied in time and place (Derman, 2000). The introduction routes are as follows:

1. Through Central Asia and after the entry of the Ottoman city of Constantinople (now Istanbul).
2. Through repeated crusades on the Arab world and Maghreb, by land and sea from countries with different languages.
3. Through Andalusia after the Arab Islamic conquest and the spread of major universities. Also via the sons of the kings of Europe and the transfer of Islamic civilisation to Europe.
4. Through Sicily, where Arab Muslims entered Italy and besieged Rome, and overtook many cities of the Roman state (Almasraf, 1984).

Thus, Europe became overtaken by the Arabs, who brought their culture, knowledge and science along with calligraphy, painting and, even the system of modern number notation, in particular the concept of the number 'zero' (which had not been used in the Roman numeral counting system) (Sayegh, 1988).

The French writer Marcé called for thanks to be given to the Arabs' contribution to calligraphy and the arts of Europe; the Arab Islamic civilisation penetrated 'deeply throughout Africa, the Middle East and Europe' (Bahnasi, 1998). Even at the end of the 11th century, Islamic elements overwhelmed the facades of the Roman churches and were later seen mixed in Gothic churches with elements from France (Almasraf, 1984).

The Ottoman conquests extended to central Europe but deepened in the west. They arrived in what is now Switzerland, praised the castles and fortresses, and left traces of Arabic tongue and craftsmanship (Sayegh, 1988). However, they were Ottoman Turkish origin, and those who visit European museums and view calligraphy are in fact viewing the antiquities brought there, sometimes illegally, were originally from Damascus, Baghdad, Cairo and Iran (Bahnasi, 1998).

The German orientalist Ziegrid Honka saw the greatness of Arabic calligraphy and art in her book 'Shams Al Arab, shining on the West' (Almasraf, 1984), in which every character speaks of the ability of the Arab and Muslim man to continue the artistic offerings through drawing Arabic letters (Bahnasi, 1998).

2.5.6 Summary

The development of Arabic calligraphy has been a long and convoluted journey. It grew from a simple origin and developed over time. In analysing the history of Arabic calligraphy, it is clear that the initial pre-Islamic development was very slow. However, it gained speed after the advent of Islam and reached high levels of creativity. The calligraphers dealt with the improvement and adornment and added to it an aesthetic that did not occur to former artists (AlKurdi, 1939). Calligraphers must adhere to set rules to be successful.

Arabic calligraphers were able to devise new types of calligraphy from other calligraphic forms. For example, Ibn Makla, who invented the third calligraphy (see above), derived it from the 'first calligraphy' of Aljaleel and Al-Tumar (Al-Bidaya calligraphy) (Al-Said, 1988). He was able to improve it to the point that it was not be surpassed by others. To that point, the calligrapher did not dare advance the craft; therefore, later calligraphers considered him an engineer of Arabic letters. This is because he determined its dimensions by points (dots), with each character of fixed dimensions (AlKurdi, 1939).

Turkish calligraphers were excellent in creating the calligraphy of the Riq'ah from Diwani calligraphy. The calligrapher Osman excelled in Diwani calligraphy and was an innovator during the days of Sultan Muhammad al-Fatih (1429-1481 AD) (Al-Said, 1988). Thus, the journey of the quality and development of calligraphy continued until modern calligraphy emerged that has now appeared, with many models free of rules and controls (Bahnasi, 1998).

The Arabic fonts were named after the cities or people writing them. These types of calligraphy overlapped in style, and some forms were derived from each other. The many drawings of calligraphy may constitute an art such as Kufic calligraphy (Almasraf, 1984). The creativity of those interested specialists in each area reached a peak; although, the early calligraphers were at forefront as displayed on the walls of Baghdad, Damascus, Cairo and Andalusia (Bahnasi, 1998).

2.5.7 The aesthetic references of Arabic letters

With the doctrine of monotheism (Tawheed) in Islam, which opposed polytheism, the Arab nations witnessed a great revolution in cultural thought and behavioural orientation. This was a revolutionary movement concerning the beliefs and traditions and the status of the Arabs of the time (AlKurdi, 1939). Therefore, Islam came to build a cohesive, balanced and integrated system of knowledge that laid the foundations for the lives of both individuals, and religious, intellectual, political, social and economic groups (Bahnasi, 1998).

Islamic thought was a new point of inspiration for change and achievements in culture, the arts and in various aspects of daily life. Islamic Art began with the training of the principles of faith, which were no longer religious 'teachings', but become a new philosophy. The principal source is Islamic law which forms the orbit of Islamic philosophy (Almasraf, 1984). Thus, in the light of his new faith, Arab artists were characterised by a personality that was compatible with Islamic thought. The Arab artists began to absorb the principles of the doctrine of monotheism, its philosophy and its way of seeing life and the universe.

Islamic Art in this sense descends from religion and is linked to and inspired by religion. But it is not a missionary or propaganda art serving the Islamic religion; it explains religion without language by using art embodied in architecture inspired by the system of nature (AlKurdi, 1939). Islam has its characteristics, and characteristics of the arts can stand-alone. Art does not perform a specific religious function and it is not obligatory in following the duties of religion (Almasraf, 1984). It is a symbolic expression in the case of calligraphy, with the spirit of the Islamic faith reflected by the Muslim artist in his work through his adoption of a variety of methods in the embodiment of his departure from reality (Bahnasi, 1998). It also enables Islamic Art to achieve two basic principles: the first, as well as a spiritual art, aims to raise the higher self, and the second, for the human to always think about the greatness of the creator, his full right and his ability. It is also a material art capable of performing the functions of daily life in society. Therefore, every material activity in the Islamic civilisation has an ethical purpose and a spiritual aspect (Sayegh, 1988).

The Islamic Art that spread in the Arab regions was not a continuation (new formulation) of the ancient Arab art (pre-Islam), it introduced a new spirit, and special character and gave it a clear personality (Al-Said, 1988). The apparent differences in the two artforms can be noted, but there was some real change to the substance and content of pre-Islamic Art, and there is no doubt that the Islamic Art was influenced by the essence of the Islamic doctrine of the Qur'an and Sunnah (Sayegh, 1988). To differentiate any artwork piece produced in the light of Islamic civilisation,

there is a common unity despite the stylistic differences between the various regions of the Islamic world. Islamic Art transcends the limits of individual features produced by each country, and its age, with common themes such as plant, engineering and animal forms, as well as artistic literature. This can be interpreted as supporting the aesthetics of the Islamic arts emanating from the comprehensive knowledge structure (Al-Said, 1988).

2.5.8 Aesthetic views in Arabic calligraphy

Arab Islamic Art is one of the forms of human and social activity and its importance is fundamental. It is crystallised in its entirety in the culture of human civilisation, in its emotional interactions and as a social entity that changes its cultural and natural reality and transforms it to suit its growing needs in terms of the value and importance of science and philosophy (Bahnasi, 1998).

There is no nation or nations dealing with authorship in Arabic calligraphy (the lettering) and the development and improvement of architecture and its beautification, apart from the Arab nations, because it is an art linked to the Islamic faith first and foremost. Recitation of the Qur'an encouraged it to be copied for Muslims in all the regions to which Islam extended (Derman, 2000).

The sacred message of Islam is what made the Muslim artist interested in the improvement of writing and calligraphy. It took a key place among Muslims, which occupied the forefront of the Islamic arts as the language of the Holy Qur'an. Abu Hayyan al-Tawhidi prepared the criteria for the creation of beautiful calligraphy in detail, to prescribe the appearance and processing of lettering that is the aesthetic foundation of calligraphy (Bahnasi, 1998). Those criteria for the characteristics of beautiful writing include conditions, proportion, and quantity. However, a condition for writing proficiency requires certain foundations with respect to two aspects:

1. The validity of character forms, depending on the following conditions:

- a) To present all the calligraphy characters and components the prescribed formal characteristics including curved, flat, and horizontal lines.
- b) To give each character the right dimensions concerning length and size.
- c) To make the characters accurate and convey gravitas.
- d) To acquire skills in transmission, such that the flow of pen is carried out without interruption or hesitation (Al-Said, 1988).

2. The validity of the letters, including:

- a) Ensuring that all the letters are clearly connected to each other.
- b) Attending to the convergence between the letters that are not connected to each other.
- c) The choice of recommended extension locations of the connected characters. Thus, the writing became three-dimensional (calligraphy, angles and surfaces) and abruptly refers viewers to the calligraphy by reading the written text according to the modal systems whether a point or circle (Bahnasi, 1998).

2.5.9 The aesthetic values in the formation of calligraphy

2.5.9.1 Balance

'Balance' is a condition that the calligrapher seeks to achieve by harmonising natural interacting forces. This represents one aspect of the total inclination of nature towards equilibrium (Riad,

1974). All that the balancing process carries is a binding condition for any process of calligraphic formation, as it is a general principle of existence (Al-Obeidi, 2004). Therefore, art and the field of Arabic calligraphy became a necessity required by the psychological sense in humans because of the imbalance of the effects of anxiety or psychological tension (Al-Ghanim, 1998). Since it is a relationship with the aesthetics in calligraphic composition, and the need to exist, to achieve the objective of the work of art, the composition and their communication relationships need to be combined in a homogeneous calligraphic structure to create balance. The process of mastering the distribution of letters, shapes and white spaces, and their logical use, suggests or verifies the equation of weights for forms on both ends of the visual or virtual axis (Al-Qalqashandi, 1963). The calligraphic formations in their independent form cannot tolerate the lack of balance except in rare cases. For example, when the spaces that contain them are also balanced, such as when in a square, rectangle, or a circle.

2.5.9.2 Dominance

‘Dominance’ is the assertion or distinction of a particular element on a set of elements surrounding it in design, which can be achieved by vector calligraphy, including colour, shape, size, texture, location or space, or by the motifs of elements. It may be a positive element of form or space, which in art is the first to draw attention to it (Rushkin, 1971).

It is derived from the nature of the existence of mankind and the universe in the transfer of the Creator Almighty or to go to the unified Qibla, and life is full of examples that require the existence of the sovereign element. For example, in design aspects the importance of the role of the sovereign element in being the focal point in the design and from the eye to the rest of the design elements (unnamed, 2006)

Qualitative sovereignty is the use of the third calligraphy with other calligraphy, such as copying and Diwani. Diwani gives sovereignty and prominence over other types because of its structural qualities and space work (Graves, 1951). By contrast, it can be caused by the variation of the measurement of one of the characters in the word within the calligraphic configuration or the word in the calligraphic structure. This results in the amplification of the proportions of some characters at the expense of other characters, while the contrast in colour in the calligraphic configuration appears through the colour of the ink used for composition (Sayegh, 1988).

2.5.9.3 Rhythm

‘Rhythm’ is one of the aesthetic relations that indicate a number of expressionist concepts whose philosophical justification derives from its manifestations in nature and life. The repetition in Arab Islamic Art may have been a reflection of the phenomenon of repetition. For example, in the religious life of a Muslim, five daily prayers are repeated (Rushkin, 1971). Repetition in art (duplicates) interspersed with intervals or interruptions can mirror this (Almasraf, 1984).

It should be noted that ‘repetition’ in this sense refers to important aspects and concepts in the process of calligraphic configuration, such as extension, integration, and sequencing, which are related to the movement of the two-dimensional calligraphic work surface, which is one of the most important manifestations of repetition (Sayegh, 1988).

2.5.9.3 Unity

‘Unity’ is one of the most important aesthetic relations. It contributes to spreading the spirit of organisation among all the constituent units within a calligraphic composition, if placed correctly, thus giving a collective explanation for the formal ‘closure’ of the calligraphic composition (Rushkin, 1971).

Perhaps one of the most important theories that played a role in the concept of unity is the theory of constellations. This theory focuses on the process of perceiving form through determining the relationship between the faculties and the parts of the structure (Graves, 1951). Gestalt scientists have viewed design as the factor associated with ‘closure’ or completion of work. Incomplete activity creates a stressful tension, that is, towards the formal closure of calligraphic configuration. This tension and incomplete structural relationships, or aesthetics, create a state of imbalance and tension (Noble, 1987).

2.5.9.4 Layout (Format)

Layout is one of the organisational aesthetic relations of calligraphic configuration in which the constituent units (letters and words) follow the meanings of the text structure of the ‘third calligraphy’ (see above), to achieve the functional aspects connected with the aesthetic side (Rushkin, 1971). Therefore, good distribution in the placement of characters and sections in the direction are essential to the task and lead to the integration of calligraphic configuration and the consistency of elements. In Arabic calligraphy, consistency converges within an influential relationship for the purpose of producing an integral unit, and each may vary according to its suitability within the context of the text or purpose. There are directional, scale, formal and spatial relations (Noble, 1987). The trends of consistency in the structure of the calligraphy vary and depend on the design as dictated by vertical or horizontal reading, slanted, and contrasting patterns, with added aesthetic relationships to create a format (Bahnasi, 1998).

2.5.9.5 Contradiction and contrast

Contrast is one of the most important aesthetic relations in calligraphic work, through which the written vocabulary can be displayed in composition and content in such a way that it makes the important elements clear and distinct (Graves, 1951). This helps with guiding the recipient to his goal and create unity. The idea is within the general framework, and this is confirmed by Jerm (Rushkin, 1971). When elements are exposed to each other through the balance of correspondence or contradiction, it is easy to identify and understand them. The variance takes a more-flexible dimension than what is commonly known from the knowledge of contrasts, where the concept ranges from a maximum variance to a wide range to a minimum degree of contrast. Therefore, the contrast can be a kind of comparison, similar to, or compatible or consistent with, certain aspects, and different or opposite in other aspects (Bahnasi, 1998). On this basis, the variation and its manifestations constitute an important aesthetic relationship in the structure of all arts and their basic design principles. In every calligraphic work, there is a process of creating harmony and a slight or apparent opposition to the public space, but there is work that has the apparent predominance in harmony (Graves, 1951). It is important to say that perfect harmony is negative and does not attract the recipient, while the antagonism is considered to be the most common type of organisation, as confirmed by David (cited in Bahnasi, 1998) (as it is agreed that design is a source of diversification and vitality and gives it a balance between opposites).

This explains the unity of the conflicting forces, which in turn gives the recipient more sensory pleasure (Rushkin, 1971).

2.5.9.6 Proportion

Proportion is an organisational means that refers to the relationship of each part of the composition with another part, and with the design as a whole in terms of size and area but is not determined by a fixed measure or rules of its own (Graves, 1951).

The standards that have been developed for Arabic calligraphy can be used to achieve technical writing (although the application of calligraphy standards may make it practical, but this application requires excellence and skill, and allows for creativity) (Rushkin, 1971).

‘Harmony’ is the state resulting from the participation of letters and formations in the calligraphy of one or more thuluth (Graves, 1951). By the interconnection of a similar or different group of calligraphic work-units and elements, the harmony of the work can achieve an aesthetic relationship in the calligraphic configuration vocabulary (Bahnasi, 1998). The harmony of Arabic calligraphy can have different forms:

- a) Functional compatibility: this occurs between similar units that combine the function and become compatible, such as the compatibility of the characters of the ‘third calligraphy’ by performing aesthetic function or compatibility of Arabic letters for reading (Sayegh, 1988).
- b) Symbolic compatibility: this is the consensus that combines similar units linked by the meaning, symbol, mental or intellectual conclusion, such as iconic structures in the ‘third calligraphy’. The content reflects the implications on the external body of the general form (Al-Said, 1988).

Harmony can exist between letters, words and formations in calligraphy. There can be homogeneous characteristics between the content and the general form to create harmony in the final composition of the manuscript. Homogeneity is a feature that appears through the shape, function, or phenotypic characteristics of forms (Rushkin, 1971).

2.5.10 Summary

1. The revival of Arabic calligraphy came mainly because of the writing of the Holy Qur’an in Arabic lettering, which stimulated the Muslims to change calligraphy by repentance and worship to feel the importance of the character as a measure of the degree of love.
2. The writing of Arabic letters is transformed from a functional method of codification and the translation of the phonetic characters into a written artistic reality based on a calligraphic structure of functional and aesthetic performance.
3. Drawing Arabic letters and learning Arabic calligraphy offers direct benefit or indirect, derived benefits, i.e. the traditional origins led to the spread of the Arabic calligraphy widely among the Arab countries.
4. Encouragement and constant appreciation for each artist who were moved to draw the characters of the Arabic calligraphy according to the rules passed down through generations, led to rapid development.
5. The calligrapher who has relative freedom to express his artistic ability to move from one technique to another, whether imitating the style of other calligraphers or with the aim of developing skill and knowledge is a rewarding exercise.

6. The calligrapher seeks to reach the full meaning behind the objects to try to understand the secrets of beauty through meditation and regarding Arabic calligraphy in a continuous artistic and aesthetic way.
7. Attribution of the improvement of the Arabic calligraphy from a moral perspective shows that it can lead to virtue and purity through the texts and the meanings they carry.
8. The goal of the Muslim calligrapher is to reach the integrated beauty and simulate the vocabulary of nature through the texts that he carries.
9. The Muslim calligrapher stresses that Arabic calligraphy holds the characteristics of the abstract beauty found in the intangible, which raises it in the calligrapher's eyes to the highest levels of creativity.
10. The flexibility of formation of Arabic letters helped the Muslim calligraphers to transfer the written text (verses, conversation or poetry) from the meaning to the building i.e. to extract the inner meanings and present them on buildings.

The Islamic Arts occupy a prominent position in the history of the world art. From the outset, it ushered in an important turning point in aesthetic formulation, which includes all the creative fields of art, including Arabic calligraphy. This includes different formations and compositions of different types of calligraphy, especially on paper. It is one of the arts that shows the level of the development of the Muslim artist and one of the means of dialogue in Arab societies that is linked to the spirit of the Islamic nation emanating from the teachings of the Qur'an and the Prophet's Hadith. This is where the virtue of writing and the Arab character show great importance (Al-Alaq 3:5), as it is where the Qur'an became the fundamental pillar of Islam and the civilised structure of the Muslims. Hence, Arabic lettering has a sacred status in the soul of Muslim artists.

Prophet Muhammad (Peace Be Upon Him) urged his followers to write, read and publish. This was linked to virtue and the right to speak; Ali bin Abi Talib said that the good calligraphy increases this clear right (Ibn Manzoor, 1955). Therefore, the Arabs have singled out the art of Arabic calligraphy, which raised it to the highest levels of Tajweed, creativity and beauty, as well as its philosophical dimensions represented in the abuse of Arab thinkers and philosophers from the aesthetic point of view. There is a variety of decorative products that prevailed in all Islamic ages, which witnessed much artistic and aesthetic development; thus, reflecting the accumulation of expertise and skills on a creative and aesthetic level.

One of the features unique to the Muslim artist, which can be inferred as 'beauty', is the growing awareness and cohesion with the manifestations of nature, which appear in Arab Islamic Art in general and the art of calligraphy in particular. There is an underlying existence of a pattern of aesthetic thinking. Arabic calligraphy was adopted on the basis of the individual taste of the Muslim artist (calligrapher), derived from the thought of the Islamic religion and its uniqueness aesthetically within the foundations and the calligraphic rules. Its output in formations and calligraphic structures are characterised by the types of Arabic calligraphy in general.

2.6 Linguistics as an Input for Understanding Spiritual Interpretation

In conjunction with the previous section and because of the length of the Islamic period, some related theories are discussed in this section.

“In fact, you need to remember that every document was written for some specific purpose and some specific audience other than those of the case study being done. In

this sense, the case study investigator is a vicarious observer, and the documentary evidence reflects a communication among other parties attempting to achieve some other objectives” (Yin, 2003, p.13)

The section highlights the traditional methods of interpretation for Greek, Arab and contemporary philosophers such as Chomsky, Saussure and Pierce. This section also includes some details about the theory of ‘signifier-signified’. Such discussion help explain a new methodology of understanding the interpretation of spiritual space and sacred writing; for this, the theory of Al-Ghazali is introduced.

Philosophy includes the early developments in linguistics, such as pedagogy, religion, poetics, rhetoric, psychology, biology, and logic. This means that the separation of the history of linguistics from intellectual history is quite difficult. As a result of this, the work in linguistics’ history has contributed to the general history of ideas. However, scholars look to interpret the past on the basis of the modern linguistic thought, which has the ability to distort their view at that time. Therefore, it is very important to take into account and comprehend the developments in linguistics without their historical or cultural contexts (Campbell, 2002).

In antiquity, numerous linguistic traditions arose, often as a result of religious concerns and linguistic transformations. For instance, in the Old Babylonian tradition, Sumerian (the language used for both religious and legal texts), was replaced by Akkadian. This tradition of grammar rose in 1900 BCE and went on to last for 2500 years. This enabled Sumerian to be learned and the people thus continued to be able to read the texts. A large number of these texts were lists made for administrative purposes: rosters, inventories, and receipts. Further, some texts also involved lists of nouns in Sumerian and the Akkadian equivalents of these nouns. Evolving from this, grammatical analysis advanced in the 6th and 5th centuries BCE. This meant that more verbs and different forms of a given word were listed, such that they would represent the grammatical paradigms, and matched them between the two given languages (Gragg 1995; Hovdhaugen 1982).

Later, schoolmasters developed the Greek grammatical tradition, which has its roots in the phenomenon of language change. However, Homer’s works (c. 850 BCE) were the basic parts of the early Greek education, whereas the development of Greek from the 5th to the 3rd centuries BCE resulted in so much change that Homer’s language required increasing explanation within the school curriculum. As a result, the themes that the ancient Greek tradition considered important have continued to exist throughout the history of linguistics; these themes include parts of speech, the origin of the language, and the relation between language and thought. One question that was asked repeatedly, was whether ‘nature’ and ‘convention’ could account for the relationship that words and their meanings share, which has implications on the origin or words and the history of language. Plato, in his work titled ‘Cratylus’, had contrasting opinions on the matter. For example, one argument was made whether language had its origin as ‘nature’ (phusis), with the initial words representing an imitation of the things that they name, or in ‘convention’ (nomos or thesis), which can either be of human or divine invention, or a synthesis of both. Aristotle (384–322 BC) preferred convention over nature, because the Stoics held that language originated in nature (Campbell, 2002).

The word ‘structure’, or ‘morphology’, was a historical matter, and was in relation to the creation of the structure of words (part of ‘etymology’). While the matter of syntax was not fully

defined; there was rhetorical and logical treatment provided for the aspects of syntax. Similarly, with parts of speech, such as those seen in Plato's division of the sentence into *ónoma* ('name') and *rhêma* ('utterance'), an instance can be drawn from where the interpretation is too dependent and based on the current understanding. Therefore,

“Plato's terms can be both equated to the modern categories ‘noun’ and ‘verb’, respectively, but in the same manner had shades of ‘subject’ and ‘predicate’ and ‘topic’ and ‘comment’ or even entity and relation. However, the Stoics developed parts of speech (grammatical categories), as understood in traditional grammar”
(Hovdhaugen 1982, pp. 41-48).

Following Aristotle, roots from the Arabic grammatical tradition were drawn from Greek grammatical traditions. This Arabic language, in its nature, was sacred and unchangeable due to its presence in the Qur'an, and it concerned the Arabian grammarians as to how could they explain the perfection of their language. For instance, they believed that the system of inflectional endings made an implication of symmetry (Figure 18) and logicalness of the language. Linguistic change promoted the desire to preserve the integrity that the language of the Holy Qur'an had about itself. While no specific or formal change was acknowledged after the 8th century, the realisation of this change in spoken Arabic led to the stimulation of the development of Arabic grammatical study. Notably, Abū'l-Aswad ad-Du'alī (died c. 688 AD) is presumed to be the inventor of this grammatical tradition, which would later go on and commence seriously in the written works of al-Khalīl (died 791) and Sibawayhi (a Persian, died 804) (Owens, 1988).



Figure 18. A symmetrical composition in Kufic script. (Source: author.)

About 1000 AD, logic became dominant over linguistic thinking. Before 1100 AD, most of the scholars adhered to return to dialectics were seen from the beginning of the 12th century. A main reason for this was the recovery, by Arabic scholars, of the lost writings of Aristotle, which resulted in a plethora of Arabic commentators (Campbell, 2002).

Everyone is biologically capable of acquiring languages. Strikingly, it has been seen that children that are developmentally normal are able to construct the grammar of their own native languages in a natural manner, without taking any help from others. However, to do so, two conditions exist: “(1) they must recognise the language-encoded social and physical events and (2) they must be able to process, organise, and retain linguistic information” (Slobin, 2004). To put it differently, the child needs to be capable of comprehending both the meaning and form of the syllables so as to be able process them internally, which would eventually lead the child to the construction of grammar (Nelson, 2013).

Children often tend to learn words by relating them to familiar objects. For example, unless a child actually sees a cat, the word ‘cat’ would have no meaning. Such recognition (cognition) helps the child to gradually go on and obtain more vocabulary, and also helps them to gain the mental acuity that is needed to use the words (Nelson, 2013). To simplify, one can break down spoken language into syntax, morphology, pragmatics, phonology, and semantics. When interacting with experienced users of a language, such as fluent adults, one is able to learn conventions of that language. However, this is difficult, because there are chances that the linguistic interchange could be either false or deceptive without the prior knowledge of semantics. As stated by Hockett (1966) “Linguistic messages may refer to things remote in time and space, or both, from the site of the communication”. Children are able to learn and acquire spoken language but have to go through rigorous training sessions to be able to read and write (Slobin, 2004). Once the spoken language has been realised significantly, nativism helps a child grow linguistically in an exponential manner (Nelson, 2013).

Language acquisition gives humans the capability to repeat knowledge while conversing with other people. However, vocabulary is not finite. For example, there is a constant process of coining new words and phrases, particularly within the scientific and technological fields. Despite this, scientists tend not to pinpoint the ways in which native and any second languages are acquired (Nelson, 2013).

The syntactical units, which have been assigned specific usage, or word order in a given sentence, comprise all sentences. However, Chomsky suggested that native speakers have a cognitive sense of the language which is why they have an innate ability for developing the language. It can be said that, “In a fairly obvious sense, any native speaker of a language can be said to know the grammar of his or her native language” (Radford, 2004).

Although, language can be considered to be natural component of the human mind, its physical representation is in the brain and part of the species’ biological endowment (Chomsky, 2002). Pre-Chomskyan linguistics were mostly thought of as a sign-system, wherein words, also known as morphemes, are the most important (Saussure, 1916).

Ferdinand de Saussure gives a description of the linguistic difference between a signifier (significant) and what is signified (signifié). He proposed retention of the word sign [signe] to designate the whole. He also suggested the replacement of ‘concept’ to ‘signified’ [signifié] and ‘image acoustique’ to ‘signifier’ [significant]. These latter two terms are useful because they can indicate the opposition which separates them (Figure 19) (Stratil, 2014).

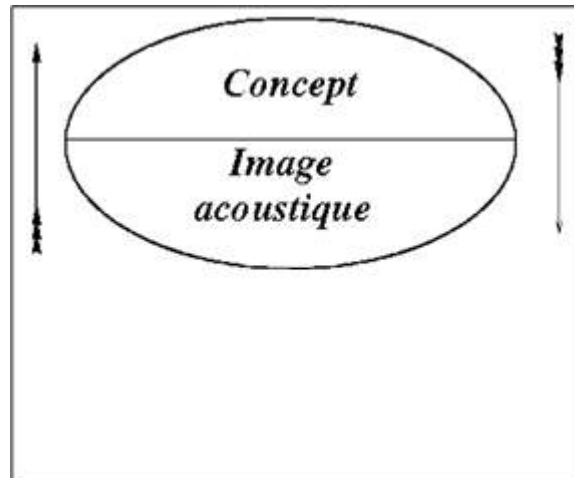


Figure 19. Opposition of concept and image acoustique designating one language term. (Source - http://courses.nus.edu.sg/course/elljwp/CIGL2_files/image002.gif.)

Although, Saussure rarely uses the word 'structure', his theory in fact helped form structuralism's foundation. According to Saussure, language can be defined as a system that consists of members. These members are not necessarily defined (Stratil, 2014).

The triangle of reference (Figure 20) displays the most basic concept on which communication is based, like words being symbols placed on an imaginary layer (signifier), and objects as the referents, found only on the actual layer of the real life (signified) (Stratil, 2014).

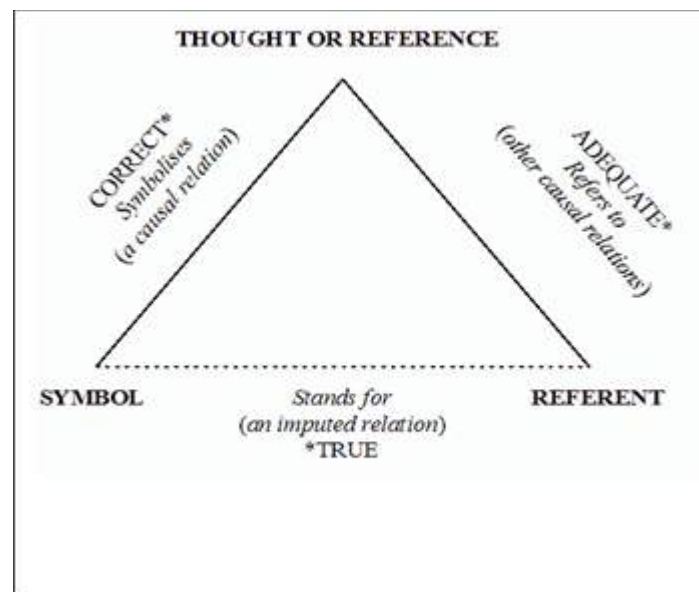


Figure 20. The triangle of reference (semiotic triangle). (Source: http://cfaculty.chuou.ac.jp/~rhotta/course/2009a/hellog/lib/semiotic_triangle.png.)

“Two well-known features of the Saussurean linguistic sign are the conjunction of a concept and a sound image. Further, this sound image and concept combine and make

a further entity, the sign itself, known as a double entity or a two-sided psychological entity” (Saussure, 1974, p. 65.)

Concept, sign and sound image share relationships that are part of the whole. To be specific, the ‘concept’ happens to be the semantics of the sound and its phonology is represented by the sound image. Semantics and phonology share a ‘part-part relationship’. Mereology is known as the formal study of ‘part-whole’ as well as ‘part-part’ relationships.

A semiotic relation is the second characteristic feature of the Saussurean sign, known as the signifier–signified relationship. While the ‘sound image’ attempts at signifying the concept, the mereological relation (part-part), and the semiotic relation are different in their nature. One can relate things in a number of ways; it may appear that sound and image concepts can also be related in numerous ways, in the same way as Saussure assumed (Stratil, 2014).

Saussure found it important to understand the language structure’s synchronic study and the way in which linguistic elements were organised into each language’s system; this was particularly important because his theory of signs had been quite influential. For example, his linguistic sign depicts the unification of the significant (‘signifier,’ which is the form and sound) and the signifié (‘signified,’ which is the meaning, and function); the specific form (sounds) and also underlines the fact that the meanings in these individual signs have arbitrary associations with each other. As a result, the connection they share is of a purely conventional nature, which is a proof that the sound-meaning association seen in signs cannot be predicted from one language to another. What is signified, for instance the notion ‘tree’, has an arbitrary association with the sounds (the signifier) that are responsible for signalling it. A direct example of this would be the sounds of ‘kwawitl’ in Nahuatl, ‘tree’ in English, ‘rakau’ in Maori, ‘Baum’ in German etc. Therefore, in the view of Saussure, members of a system were formed by these linguistic entities and were thereby also defined by their relations with one another within the confinement of that system (Campbell, 2002).

Whilst Saussure chooses to define the sign in a static manner, Pierce chooses to situate it within the social context of dynamic evolution. Pierce asserts that the sign consists of a representer (which happens to be the sign itself), an interpreter (which is the idea that the sign points to), the ground (which defines characteristics of the object) as well as an object (Figure 21). It can be concluded that there is less clarity in Pierce’s terms. For instance, the reconstructions of Pierce are likely to ignore the ground as Pierce’s sign’s defining element (Engle, 2008).

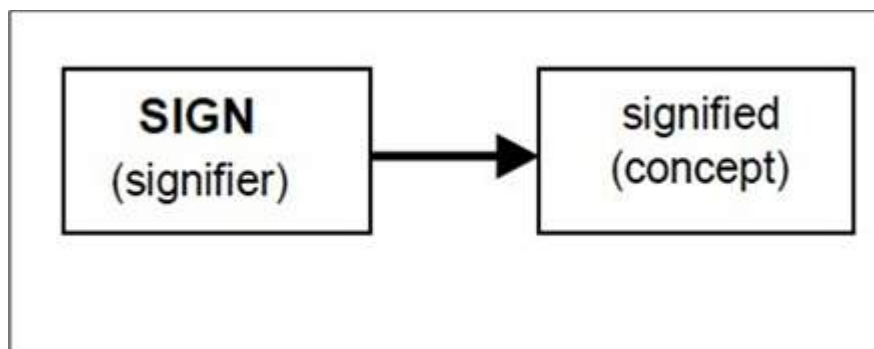


Figure 21. The purely semiotic (Piercean) sign (Source: Burton-Roberts, 2011.)

“These terms may not be clear due to the multiple terms Pierce utilises. However, it is claimed that although the most popular of Peircian classifications is the icon-index-symbol one. There are dozens of others in his original proposal, many of which overlap, leading to a labyrinth of types and criteria” (DeSouza, 1993, p. 761).

The symbol is a representation of the signification, which one may establish conventionally: “The symbol signifies by virtue of a ‘contract’ or a rule. The tenuous, conventional relationship between sign-vehicle and object characteristic of the symbol relies upon an interpreter who knows the rule”. In the same manner, the mind is thrust with a dependence of intrinsic nature for any relation to exist at all (Engle, 2008). Therefore, it can be concluded that the symbol is arbitrary as it has signification, but only due to convention.

“A symbol is a sign that may be completely arbitrary in appearance” (Marcus, 1992, p. 52).

Chomsky defined the structural description as an initial algebraic-linguistic structure of an abstract nature generated by the syntactic component (Rao, 2005).

With regard to its linguistic function, it can be characterised in the following two ways:

- i. The structural description is an abstract structure moving between the phonetic representation (unit of the PR level) and semantic interpretation (unit of the SI level) of any generated sentence. This is a direct result of the syntactic component mediating between the phonological and semantic components.
- ii. The structural description is an autonomous functional unit, independent on external representation. This is a direct result of the syntactic component constituting a central, generative component that is functionally independent on both interpretive components (Sova, 2006).

In the sense of ii, the structural description is an abstract functional unit consisting of a surface structure and a deep structure which are interrelated by a sequence of singular transformations. Hjelmslev (1966) adds

“A closer look at the linguistic relation of both abstract syntactic structures will further reveal that the opposition of the surface and deep structures can on no account be attributed a semiotic nature and be identified with the signifié vs. signifiant dichotomy, and that the sequence of singular transformations, deriving surface structures from their respective deep structures, can on no account be reasonably likened with a semiotic function” (p.60).

2.7 Panofsky Theory and the Iconological Approach

2.7.1 Introduction

This section is an extension of the one preceding, and it offers an in-depth discussion about the iconological method, and art as a symbolic form. Panofsky’s method as a structuralism and iconology and the formalist position is linked to modern Arabic calligraphy in the discussion. This section brings a wider understanding of the phenomenon and supports the research in focusing deeply on the case studies (Bell, 2002). It leads to generating five categories of calligraphy in contemporary discourses.

One of the stresses of 20th century art has been the duality of form and content. Whereas, Panofsky's method suggested favouring content over meaning, much of the art from the 20th century seemed to favour form. Panofsky viewed the relationship between form and content to be indivisible, such as word and meaning (sabdartha). The argument of the formalists remains strong and thereby contests Panofsky's position (Rao, 2005).

When, in 1913, Warburg first used the term 'iconology', Clive Bell (1881-1964) was promoting art of the impressionist and post-impressionist nature, which had been covered in his book 'Art' (Bell, 2002).

He argued that to have an aesthetic experience, one essentially had to have sensibility about such experience. For example, aesthetic experience results in a unique emotion which can be elicited by works of art. Art can differ significantly in terms of its medium as well as content; however, what it has in common with other works of art is that it can produce a common response, known as 'significant form' (Rao, 2005). Therefore, lines and colours which are combined in a particular way, allow certain forms and relations of forms to stir the aesthetic emotions (Figures 22 and 23).



Figure 22. A composition of dots, lines and colours. (Source: author.)



Figure 23 A composition of calligraphic forms, lines and colours. (Source: author.

“These relations and combinations of lines and colours may be known as ‘Significant Form’. ‘Significant Form’ is the one quality common to all works of visual art” (Bell, 2002, pp. 17-18).

However, Bell insisted that it was art’s pure formal properties rather than the representative content that was important. Moreover, he denied that content was relevant and paved the way for its elimination in order to promote the abstract message (Rao, 2005). One could claim that value is in a piece of art’s form, rather than its representation. Although art’s representative element could potentially be harmful, it always appears to show irrelevance. For one to appreciate a work of art,

“nothing material is required and no knowledge of its ideas and affairs or familiarity with its emotions it invokes” (Bell, 2002, p. 27).

The position of Susan Sontag (1933-2004) was also rigid in nature. She was resentful of the fact that a work of art is primarily about its content and denied the very idea of content, calling it “a hindrance, a nuisance, and a subtle or not-so-subtle philistinism” (Sontag, 1961). She felt that by putting too much emphasis on content, the perennial is promoted and is never a consummated project of interpretation. In the eyes of Sontag, translation invokes interpretation and is likely to appear when myth’s power and credibility breaks down and interpretation is invoked to reconcile the ancient views in relation to the modern demands. The manner of interpretation helps to conserve old texts which may be too precious to repudiate (Rao, 2005).

Despite this, Panofsky and Gombrich are not the only people who considered interpretation; particularly when a fidelity to the ‘text’ prompts their motives (Bell, 2002). In fact, unlike the interpretation of Panofsky, that goes on to build layers of meaning one above another, modern interpretation allows the excavation, destruction and search behind the ‘text’ to find a subtext (Sontag, 1961). To Sontag, who admired Freud and Marx, there was an actual culmination in hermeneutics’ elaborate systems, aggressive and impious theories of interpretation (Rao, 2005).

2.7.2 Panofsky’s method as Structuralism

Structures, such as language, allow mediation of feelings and perceptions of the world and experience, instead of an external world’s objective entities. It implies that meaning or significance can be taken from the outside, rather than being a core essence. Therefore, meaning may be attributed to things within the mind. Claude Levi-Strauss (1908), Roland Barthes (1915-1980), and Ferdinand de Saussure (1857-1913) largely defined the Structuralism approach (Barry, 1995). This approach essentially ignored the art object and instead asked the bigger and abstract questions about history, philosophy, genre, and so on. This generated a movement that was centrifugal in nature and moved away from the art object. However, by denying reality’s existence and pushing the hermeneutic circle beyond control, the later post-Structuralism/Deconstructionism position succeeded in challenging Structuralism (Figures 24 and 25) (Rao, 2005).

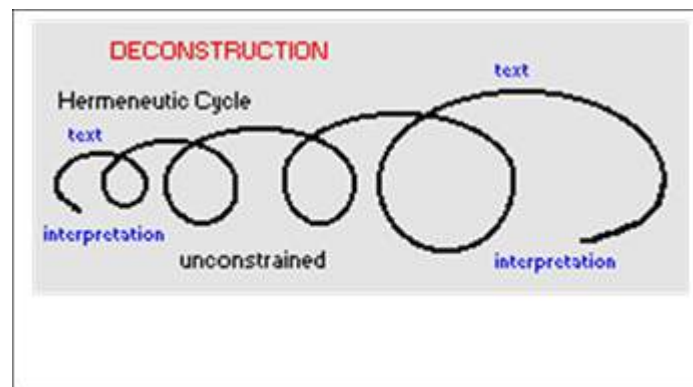


Figure 24. The Hermeneutic Cycle out of control. (From Rao, 2005.)

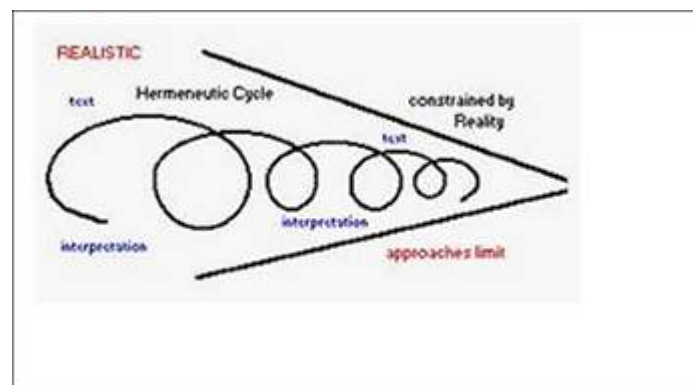


Figure 25. The Convergent Hermeneutic Cycle. (From Rao, 2005.)

The structuralism field of semiotics and contrast could help examine signification, such as Barthes's third order signification (See below) with the third level iconological interpretation put forth by Panofsky. In the words of Saussure "the linguistic sign does not unite a thing and a name, but a concept and a sound image" (Figure 26) (Rao, 2005).

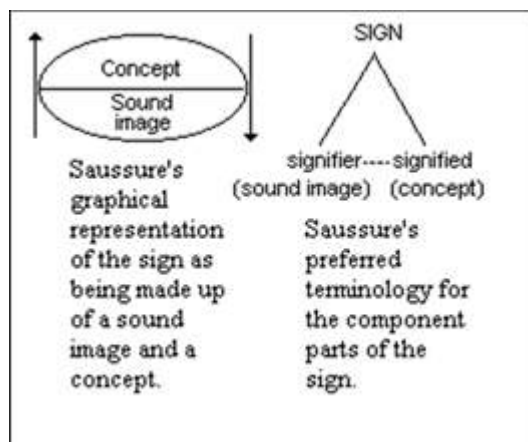


Figure 26. Saussure's 'Sign'. (From Rao, 2005.)

When referring to the 'sound image' as the 'signifier' and the concept, 'signified', both the signified and signifier can be merged into what is termed a 'sign' (Chandler, 1994).

An alternative theory of semiotics was developed by Pierce (1839-1914) (Bell, 2002). In his opinion, the nature of a sign is triadic, defined as "something which stands to somebody for something in some respect or capacity." Therefore, every sign is capable of having three divisions "the sign in itself, the sign as related to its object, and the sign as interpreted to represent an object". Regarding the elements of Pierce's semiotics, the triad icon, index, and symbol are used. Therefore, all signs, in part, are iconic (they denote by showing a resemblance with their objects), indexical (their objects really affect them), and symbolic (the virtue of a law denotes them) (Rao, 2005). In spite of this, Barthes manages to distinguish between what is referred to as the 'different orders of signification'.

The iconic sign is the first order. Thus the picture of a car leads to the comprehension of a car. However, there is a full range of connotations in the second order of signification. For instance, the mechanical reproduction process denotes the meaning in photography. Human intervention leads to the introduction of the connotative (second order) meanings: camera angle, lighting, pose etc. These connotations activate the meanings that have been deeply rooted in our culture. The second order signification is then called the 'connotation'.

Whatever the photo displays is referred to as the first order of signification (Figure 27), whereas the second order evolves into the signifier of the cultural values. Following this, Barthes calls the second order signification the 'myth' (mythology, in the opinion of Barthes, is that set of myths which operates as organising structures within a culture, thereby organising the meanings that connect with the sign and imparts legitimises bourgeoisie ideology). This myth causes the sign to become a second-order signifier. Finally, the third-order signification represents the cultural meanings of signs. This is the manner in which the society tends to use and value both the 'signifier' and 'signified'.

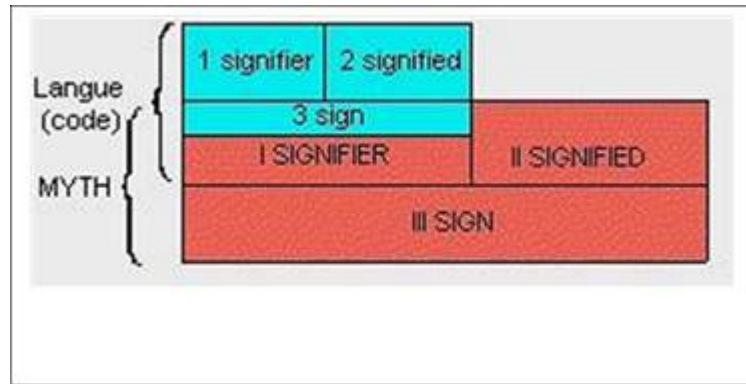


Figure 27. Barthes Signification. (From Rao, 2005.)

A more-generic system and a more-contemporaneous iconology are allowed by the process of signification. It represents a shift in the emphasis from the reason behind the signification (why) to the way the signification comes to be (how) (Rao, 2005).

Shannon, a mathematician, produced a formula which defined the entropy of data transfer and postulated 'A Mathematical Theory of Communication' (Shannon, 1948). Defining a basic model for the transfer of data, showing the communication process on the basis of signals between a source and a destination; this theory of communication goes on to define a basic model for the purpose of data transfer (Figure 28).

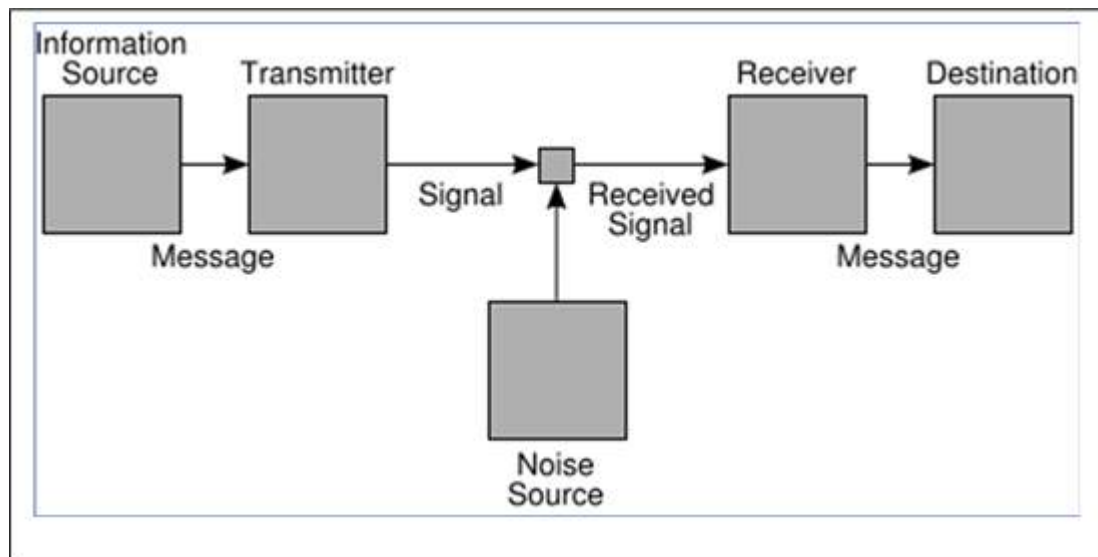


Figure 28. Schematic diagram of a general communication system. (From Shannon, 1948.)

'Noise source' tends to characterise anything that is associated with the transferred data and appears on three levels of succession:

- Technical level: system parameters, signal transmission etc.
- Semantic level: language selection, representation etc.
- Effectiveness level: alternatives, effect at destination etc.

Any ‘noise’ which operates either on the level of semantics or effectiveness can manipulate information when it is being transferred. This influences the data model that controls the complex system. However, even if the interventions on the noise level are small, they can exert an advantageous influence to organise the layer in a favourable manner. Noam Chomsky, who is attributed with having continued the differentiation between the signifier (significant) and the signified (signifié), also introduced the dichotomy of competence. In ‘Aspects of the Theory of Syntax’, it is noted that it is very important to have generative grammar where competence of having the deal with a finite number of elements forms the basis for the knowledge of a language. Since this competence is based entirely on skills, experience or the presence of some kind of knowledge, it is not observable (Stratil, 2014).

Noam Chomsky explains:

“By making the issue analogous to a part of a chemical theory dealing with the possibility of structural compounds, perhaps the issue can be clarified. One can use this theory to generate all the compounds that are physically possible, in the same manner that grammar is capable of generating all utterances that are possible in a grammatical sense.”

“It would serve as a theoretical basis for techniques of qualitative analysis and synthesis of specific compounds, just as one might rely on a grammar in the investigation of such special problems as analysis and synthesis of particular utterances” (Chomsky, 1957, p. 48).

Panofsky preferred positivistic objectivity and was in favour of sacrificing the cultural judgement to eventually facilitate the recreation of artistic intentions from the past, intentions that had a validation in archaeological investigation; with all these ideologies, he proved to be quite influential. Up to now, contemporary art history has been capable of only evaluating and criticising his methodological concepts of ‘iconography’ and ‘iconology,’ both of which were main active players within-discipline (Panofsky, 1939). However, the fact that there was prosperity in this subtle and effective method of historical interpretation has yet to be recognised and explored, since it obliterated the questions in relation to the historian’s subjectivity.

It appears that the bias Panofsky has against the insertion of concerns of the present into narratives of the past, is a part of a certain sort of historical tendency, which also seems to have affected the literary studies in the 20th century.

When Panofsky relegated the question of artistic excellence to the self-evident realm, it effectively became an integral part of the tradition. To tell what is self-evident, one would have to essentially consult the things that other humans, in the past, have considered to be artistically exceptional. One can infer the thing that seems apt in the present by reading the past and thereby can also avoid the need to project contemporary judgement in the process (Howard, 1996).

Interpretive objectivity comes at the cost of abdicating the responsibilities of historically finding a means to articulate the cultural dilemmas of the present. There is a conservative nature to the principle of self-evidence and this nature is dedicated to the support of the status quo and ideally, is suitable for the provision of scientific respectability to art history (Howard, 1996).

Thus, the work of art (in Panofsky's view of iconology) requires the onlooker to interpret, first of all, the meaning, before engaging in it as a composition of 'allegories, stories and symbols'. Lastly, it should be seen as a situational symptom in the history of ideas and culture wherein the basis for such interpretation should be the knowledge of historical development and tradition.

Iconology may thus stress either of the ideas (i.e. symbolism of the conscious or unconscious type) in practice. Ideally however, the postulated form is both most general and most unified and embraces everything for art's historical interpretation. Notably, it aims to comprehend mankind's artistic achievements to the farthest limits (Bialostocki, 1963).

2.8 The Changing Forms of Ornament from the 7th to the 17th centuries in Islamic architecture

2.8.1 Introduction

This section reviews the common patterns of ornaments and calligraphy during Islamic history. It includes Abbasid, Mamluk, Umayyad, Seljuk, Fatimid, Safavid, Mughal, Umayyad, and Ottoman architecture, and the Islamic architecture in Spain. It investigates the changing patterns (geometric and floral).

2.8.2 Umayyad architecture (660–750 AD)

The influence of one civilisation on others is common. It is thought that the Sassanid and Byzantine architecture are sources of the floral and vegetal patterns. By the end of the 7th century and the dawn of the 8th century, such patterns became common in Islamic architecture. There are many examples of Umayyad architecture. The Dome of Rock in Palestine, built in 688–691 AD, could be considered as a popular surviving building from this period (Grube and Michell, 1995).

In 705 AD, there was a conversion of large parts of the Damascus Christian Temple into the Great Mosque of Damascus. Although, this structure is lavishly decorated with floral and geometrical motifs alike, most of its ornaments, and its geometrical motifs in particular, are later additions and may not be classified as products of the Umayyad era. Some repairs and refurbishments were made a number of times. It included the floor finish of the courtyard; its geometrical designs were later added and therefore not original (Flood, 2001). Generally, Umayyad buildings' finished surfaces are shaped from mosaic, wall paintings, and stucco, with geometrical and vegetal motifs. The main ornamental patterns were vegetal, representing the richness of nature, gardens and landscape of Damascus. By the end of the Umayyad era, however, there were limitations on the figural patterns in the mosques.

2.8.3 Abbasid architecture (750–1258 AD)

The Great Mosque of Kairouan (Tunisia) is one of the best examples of Abbasid Aghlabid buildings. It is originally constructed in 670 AD and rebuilt in 836 AD. The decorations on this building primarily seem to be designed with floral and vegetal motifs, but one can also observe a few elementary geometrical shapes. These isolated geometrical shapes (Figure 29) are among the earliest attempts to apply geometrical ornaments in Islamic architecture.

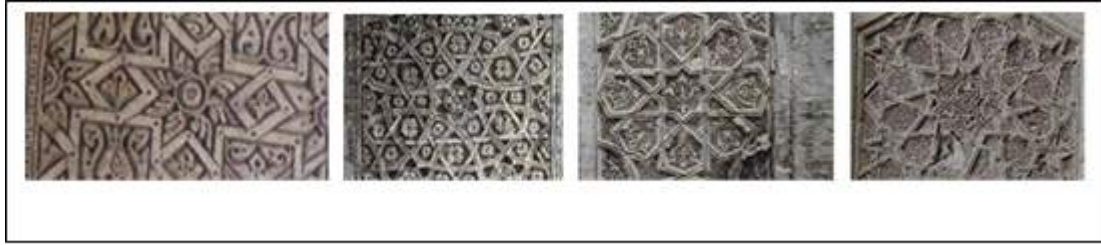


Figure 29. Ibn-Tulun Mosque in Egypt (first two panels from left); Abbasid Palace in Baghdad (last two panels). (From Abdullahi, 2013.)

The 6-point and 8-point patterns, seen in the Mosque of Ibn-Tulun (876–879 AD) display one of the most initial examples of woven geometrical patterns in Muslim decorative arts (Figure 30).

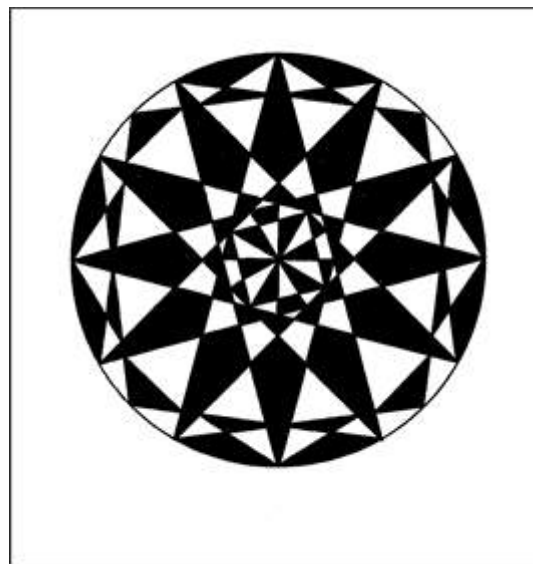


Figure 30. A 12-point pattern. (Source: author.)

This mosque is considered to have played a large role in Islamic architecture by introducing geometrical patterns. By the end of the 9th century, Muslim architects and artisans welcomed geometrical motifs into their works, thus showing the influence of geometry affecting various aspects of Islamic architecture. For example, the geometry on floral ornaments (Figure 29), demonstrates the process of how the early Islamic ornaments were transformed into new levels of abstraction. Similarly, this era also produced the Samarra vegetal motifs. The application of these motifs from stem scrolling of volutes that seemed to run continually, shifted to tangential and circular grids (Figure 30).

The Abbasid Palace in Baghdad (1230 AD) and the Madrasa of Mustansiriyyeh (1233 AD) are adorned with Muqarnas decorations and detailed as well as geometrical patterns made of terracotta and carved brickwork. These structures are excellent representatives of the architectural traditions and techniques of the late Abbasid and the early Seljuk eras.

From such structures, one finds some of the earliest examples of rosette petals introduced to 8- and 12-point star patterns. Architectural decorations and ornaments like stone, brickwork, wall paintings, terracota, stucco, and carved wood, became highly popular in the Abbasid era. By the

end of the 8th and beginning of the 9th century, geometrical shapes were introduced to surface decoration. However, woven geometrical patterns (6- and 8-point patterns) began dominating Islamic architecture only during the late 9th century.

2.8.4 Fatimid architecture (909–1171 AD)

The earliest mosque to be built by the Fatimids in the city of Cairo was the Al-Azhar Mosque (970–972 AD). Parts of the original stucco panels (with floral motifs) as well as window screens (having geometrical designs) survive. However, the stucco works on the walls and above the windows (with an abstract and geometrical 6-point design) were added during the era of Caliph al-Hafiz (1129–1149 AD).

Another Mihrab, having geometric decorations of a significant kind, was constructed during the Ottoman restoration in the 18th century (Behrens-Abouseif, 1992). Cairo's Al-Juyushi Mosque (1085 AD) is a relatively small structure, whose most significant surviving element is its Mihrab's stucco carved in a lavish manner, with patterns of the floral and geometric kind. The abstract 6-point patterns over the spandrel of the Mihrab are similar to Seljuk style. One example of mature Fatimid architecture is the Al-Aqmar Mosque (1125 AD) in Cairo. Its façade bears elaborate calligraphic, vegetal, and geometrical decorations. However, the previously introduced designs have been applied to create the motifs.

Another remarkable building of the Fatimid era is the Mosque of Al-Salih-Tala'i (1160 AD), which is closely similar to the Al-Aqmar Mosque in terms of structure and decorative techniques (Fletcher and Cruickshank, 1996). As with the Al-Aqmar Mosque, 6- and 8-point star shapes can be seen in the form of projected sculptural decorations over the walls. A perfectly proportioned pattern of 12 points is carved over the Minbar, as an addition during the Mamluk era in 1300 AD. The carved wooden door, which dates back to 1303 AD, is also decorated with 8- and 12-point geometrical rosette patterns. The early Fatimid decorative ornaments are often isolated elements, instead of entire surface covering patterns. These geometrical patterns came about due to the heavy influence of Seljuk architecture in the late Fatimid era.

2.8.5 Seljuk architecture (1038–1194 AD)

For their first artistic movement, the Seljuks sought to courageously transform their decoration of ornaments from the floral and figural nature to the geometric kind, and similarly, their architecture is strongly characterised by geometrical patterns. Seljuk architects proudly designed sophisticated patterns such as the abstract geometrical patterns of 6- and 8-points. The 6-point patterns (Figure 31), based on Tetractys motifs, were extensively used by Muslim architects in both Seljuk and in late Fatimid buildings, such as the Al-Juyushi Mosque.

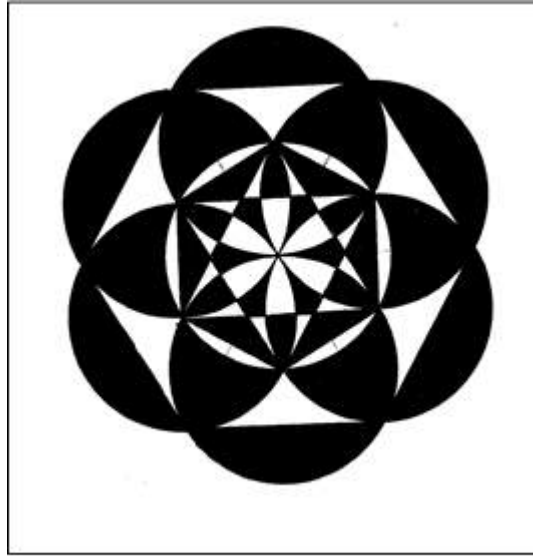


Figure 31. A 6-point pattern. (Source: author.)

The Tomb Towers of Kharraqan (Figure 32) were constructed between 1067 and 1093 AD in Iran's Qazvin province.



Figure 32. Tower of Kharraqan in Qazvin, 12-point, 6-point, abstract 6-point, and 8-point geometrical patterns. (From Abdullahi, 2013.)

These are specific examples that depict the early Seljuk architecture. The Towers show extensively decorated facades adorned with fine ornamental panels, with each having different patterns, including stars and abstract geometrical motifs. Constructed almost at the same time as the Abbasid Palace in Baghdad, Madrasa Al-Firdaws (1236 AD) in Aleppo, Syria, features a Mihrab crown over which rosette petals adorn the star patterns. The marble Mihrab is decorated with geometrical patterns that have remarkably detailed 8-point rosette arrangements. Much development of the Friday Mosque of Isfahan occurred during the Seljuk era. It shows the example of a structure adorned with detailed, decorative patterns of the Seljuk style made of brick (Grube and Michell, 1995).

Figure 33 shows that during the end of the 11th century and the rise of the 12th century, the frequency of using 5-point and 8-point star concepts increased the invention of techniques to integrate these decorative concepts with existing structural elements. Apart from the common 6- and 8-point geometrical patterns, other amazing patterns can be seen on the walls of the southern domed area, which dates back to 1086 AD.



Figure 33. Great Mosque of Isfahan in Iran (left); Barsian Friday Mosque, 9- and 13-point patterns (center-left). (From Abdullahi, 2013.)

The first wall features the rarest examples of patterns containing a heptagon, and another wall is adorned with what can be considered to be one of the earliest examples of the 10-point geometrical patterns. Geometrical patterns were developed to a significant extent by the Seljuks. A survey of the decorative patterns of this era, from the early stages to the time at which the Friday Mosque of Isfahan was constructed, leads to the revelation of an artistic movement which drove radical change in the application of conventional geometrical patterns (e.g. the introduction of highly complex and sophisticated 10-point geometrical patterns, and also the abstract 6- and 8-point geometrical patterns). There was a continuation of this movement on the Barsian Friday Mosque (1098 AD), to the early 13th century when unique 7-, 9-, 11-, and 13-point patterns were used (Figure 33).

2.8.6 Mamluk architecture (1250–1517 AD)

A second artistic movement can be seen at The Mosque of Baybar (1267 AD), one of the earliest buildings built by the Mamluks in Cairo. The only noticeable geometrical ornaments in this building are window grilles with the same 12-point patterns as those found in the Kharaqan tombs in Iran. The Qalawun Complex in Cairo (1283–1285 AD) has attractive finishes with geometrical motifs. Its window grilles, doors, walls, and ceilings are adorned with repeated 6-, 8- and 12-point patterns, which make this monument one of the most outstanding representatives of Mamluk heritage.

The mausoleum's Mihrab is decorated with 10-point geometrical patterns, which may be the earliest of their type. Aside from these patterns, all the other ornaments are replicas of Seljuk and Fatimid styles. Highly advanced 6- and 8-point geometrical patterns similar to those in the Qalawun Mosque adorn the Mosque of Al-Nasir Mohammad (1318–1334 AD). An almost identical 10-point geometrical pattern also appears in the hood of its Mihrab (Figure 34).

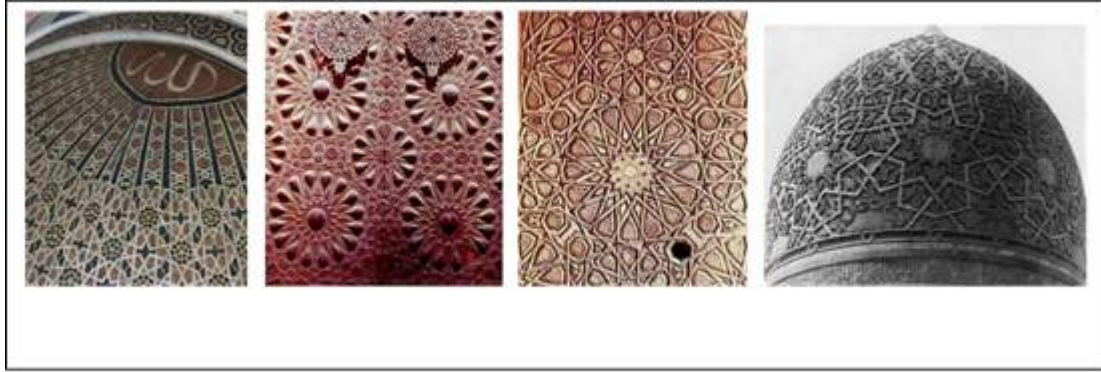


Figure 34. From left: hood of Mihrab in the Mosque of Al-Nasir Mohammad; Sultan Hassan Complex in Cairo; 16-point geometrical patterns on the entrance doors; carved wooden Minbar and dome of Qaybtay Mosque. (From: Abdullahi, 2013.)

The Sultan Hassan Complex (1356–1361 AD) has brilliant floral decorative patterns, but its most striking features are the most advanced types of 6-, 8-, 10- and 12-point patterns and the 16-point patterns' earliest examples, found in the panels of its wooden Minbar (Figure 34).

Although, 16-point stars adorn the dome of the Hasan Sadaqah Mausoleum (1321AD in Cairo), the 16-point patterns in the Sultan Hassan Complex are surprisingly complex and combined with 9-, 10- and 12-point stars and rosettes. Surprisingly, signs of a 20-point star can be found on the suspended grand bronze lantern of the sanctuary. The Sultan Hassan Complex was built during the earliest stages of IGP history's second artistic movement; during this period, Muslim architects and artisans began combining multiple types of patterns (such as 6-, 8-, 9- and 10-point patterns) in a single decorative arrangement.

Similar examples of 6-, 8-, 10-, 12- and 16-point patterns characterise the decorative elements of the Khanqah of Sultan Faraj-Ibn-Barquq (1399–1411 AD) and the Muayyad Mosque (1415–1421 AD), both located in Cairo. The external decoration of the Sultan Qaybtay Mosque's (1472–1475 AD) dome is a carved geometrical pattern, one of the earliest examples of its type in Cairo (Yeomans, 2006). The building also shows numerous examples of complex geometrical patterns, and combinations of 10-, 9- and 16-point (over the apex) patterns embellish the carved patterns of the dome.

Another design element is the combination of 10- and 16-point patterns over the carved vertical panels of the mosque's wooden Minbar (Figure 34). The same styles were repeated in the buildings constructed during the next decades. These buildings include the Amir Qijmas Al-Ishaqi Mosque (1480–1481 AD), Sultan Qansuhal- Ghuri Complex, and Wikala of al-Ghori (1505–1515 AD). All three are demonstrations that during the late 15th and early 16th centuries, the Mamluk architects and artisans found the 16-point and geometrical patterns very useful. Thus, leading its popularity to soar. A few examples of 10-point patterns are also evident in the Amir Qijmas Al-Ishaqi Mosque and the Wikala of al-Ghori.

2.8.7 Ottoman architecture (1290–1923 AD)

When the early Ottoman buildings, such as the Yesil Mosque of Iznik (1378–1392 AD) and Ulu-Cami or the Great Mosque of Bursa (1396–1400 AD) are surveyed, they show that they were

characterised by moderately decorative patterns and that by the end of the 14th century, geometrical patterns were less popular among Ottoman architects and artisans.

Except for the extensive 6-, 8- and 10-point patterns on the walls, ceilings, and doors (Figure 35) of the Yesil Mosque of Bursa (1421 AD), geometrical ornaments are generally only secondary decorative elements in Ottoman buildings. For instance, only a few attractive 6- and 10-point patterns can be found over the main entrance doors, portal, and Minbar of the Bayezid II Complex (1501–1508 AD) (see Figure 35).



Figure 35. - From left: Yesil Mosque in Bursa (first two images); Minbar of Bayezid Complex; wooden doors of Shezade Complex; window crown of Selimiye Complex. (From Abdullahi, 2013.)

The same approach was applied to the Shezade Complex (1544–1548 AD), designed by Sinan, the master architect of the Ottoman period. Despite this mosque being one of the most ambitious architectural masterpieces of the Ottoman Empire (Blair and Bloom, 1995), the application of geometrical patterns was limited to only a few 10-point patterns over the mosque's Minbar and wooden doors.

Some other striking buildings, such as the Suleymaniye Complex (1551–1558 AD), Sokollu-Mehmet-Pasha in Luleburgaz (1560–1565 AD), Haseki-Hurrem Baths (1556 AD), and Sokollu-Mehmet-Pasha in Istanbul (1571–1574 AD), were constructed by the Ottomans, proceeding onwards through the mid-16th century. Within these structures, the geometrical patterns are created as secondary decorative features.

Floral motifs are the primary patterns on the Izniki tiles. The Rustam Pasha Mosque (1560–1563 AD) in Istanbul is very popular because of the exquisite Iznik tile works, which cover most of the surfaces. A few 10- and 12-point patterns characterize the design of the wooden doors, Minbar, and wooden ceiling of the right gallery of the main praying hall. These patterns are replicas of the styles that the earlier buildings used. The Selimiye Complex (1568–1575 AD) in Edirne is the most celebrated and most enthralling construction erected by the great architect Sinan (Freely, 2011).

Similar to most Ottoman buildings, however, the complex features only a few geometrical patterns on its carved marble Minbar and window crowns. In general, Ottoman architects favoured floral and vegetal patterns over geometrical decorations, whose use was limited to the panels of the door and Minbar. Ottoman architects and artisans preferred 6-, 5- and eventually

10- and 12-point patterns over the 8- and 16-point geometrical patterns that were very popular among Mamluk artisans.

2.8.8 Safavid architecture (1501–1736 AD)

Safavid architects tended to use geometrical ornaments in buildings of both religious and secular types. An example of an on religious building with geometrical patterns is the Ali-Qapu Palace in Isfahan (1598 AD), having 8- and 10-point patterns on its high columned balcony (Figure 36).

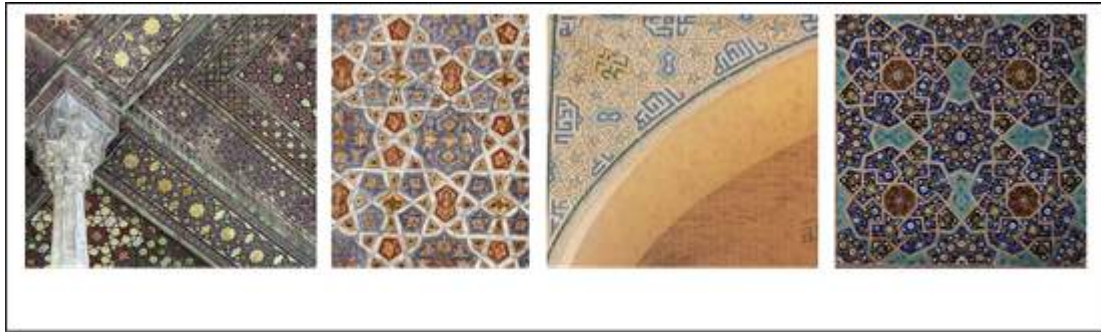


Figure 36. From left: Ali-Qapu Palace; Chehel-Sutun Palace; Hakim Mosque of Isfahan; Friday Mosque of Isfahan. (From Abdullahi, 2013.)

Another secular building that used geometrical patterns extensively is the Chehel Sutun Palace (1645–1647 AD), also located in Isfahan. The wooden ceiling at its entrance is designed with varied geometrical patterns that consist of different 8- and 10-point patterns. Usually in buildings of the secular kind, the geometrical patterns' inside elements are filled with vegetal motifs, while in many survived religious buildings from this era, there is a mixture of geometric ornaments and calligraphic inscriptions. One remarkable example of this style can be the Hakim Mosque of Isfahan (1656–1662 AD). Its facades are well-decorated using tiles and brickwork of geometrical motifs, as well as inscriptions of Nastaliq calligraphy. Similar to the other buildings from this period, the mosque is dominantly embellished with 8- and 10-point patterns; other types of patterns are limited to either grilles or furniture (Figure 36).

Decorative patterns having motifs in geometrical and floral styles were commonly used in both types of Safavid buildings, secular and religious. With stone, lattice, coloured glasses, polychromatic tiles, woods, and carved stucco, the internal and external surfaces are completely filled with these patterns. The processing detail of the Safavid decorative patterns that have survived show that these artisans preferred 8- and 10-point geometrical patterns.

In contrast to Mamluk architecture, Safavid architecture features fewer combined patterns, but these complex patterns were still common throughout the 16th and 17th centuries in Iran and central Asia.

2.8.9 Mughal architecture (1526–1737 AD)

The surviving Mughal buildings from the early times, including the Sher-Shah Mausoleum (1545 AD), have been decorated with paintings and tiles that have floral motifs. Some highly attractive examples of 6- and 8-point patterns are found on the balcony railings, marble flooring, and window grilles of the Mausoleum of Humayun situated in Delhi (1566 AD). Dominant 6- and 8-point patterns also seem to be repeated in Agra's Red Fort (1580 AD). Additionally, some

examples of 12-point and very few simple 10-point patterns are found in this complex (Figure 37).



Figure 37. From left: Humayun Tomb in Delhi; Red Fort in Agra; Friday Mosque of Fatehpur-Sikri; Etimad-ud-Daulah tomb; Lahore Fort in Pakistan. (From Abdullahi, 2013.)

By the end of the 16th century, the frequency of using the 10-point geometrical patterns increased among the Mughal architects. The Friday Mosque of Fatehpur-Sikri (1596 AD) is a representative structure of this era. Apart from the different, elegant types of 6-, 8- and 10-point patterns, 14-point geometrical patterns adorn the piers of its main dome (Figure 37); such patterns are the rarest of their kind.

Throughout the following decades, geometrical ornaments became Mughal architecture's essential decorative element, in which vegetal motifs were used as subsidiary and filler decorations. The tomb of Emperor Akbar (1612 AD) and the Etimad-ud-Daulah tomb (1628, situated in Agra) are a couple of structures that represent the architecture of this era. Laid marble and sandstone covers both the structures completely, with 6-, 8-, 10- and 12-point patterns (Figure 38). With respect to geometrical ornaments, another remarkable Mughal building is the Lahore Fort Complex, which was built during through the 16th century all the way until the 17th century.

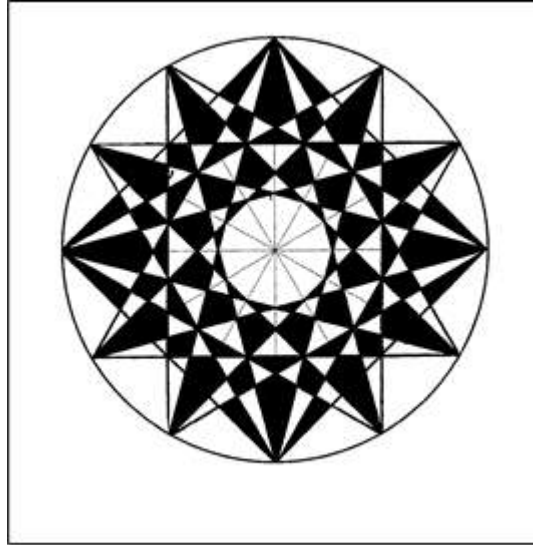


Figure 38. A 12-points pattern. (Source: author.)

Appealing geometrical patterns embellish the Sheesh-Mahal's stone-floor, the fountain courtyard, and the mosaics of the surrounding wall. It can be observed that red sandstone, white marbles, and polychromatic tiles are the main cladding and decorative materials in Mughal architecture (Asher, 1992). IGPs¹² seem to be some of the key decorative elements of both secular and religious buildings. Unlike their predecessors, such as the Mamluk architects, the Mughal architects avoided highly detailed geometrical arrangements, such as 12- and 16-point patterns (Figure 38). Instead, they exerted great effort to create accurate and perfect proportions of patterned shapes and angles. Nonetheless, some Mughal buildings do display the rarest 14-point geometrical patterns. Another feature that distinguishes the Mughal architects from others is the fact that they used geometrical patterns in their carved window railings and floor finishing designs more frequently and to a greater extent than any other architectural style in Islam did.

2.8.10 Muslims of Spain

The important surviving buildings of Spain's Muslims are the Great Mosque of Cordoba (785–987 AD), Aljaferia Palace in Zaragoza (mid-11th century), and Great Mosque of Seville (1182 AD) (Goodwin, 1991). One of the most notable palaces is The Alhambra Palace (1338–1390 AD) in Granada (Clévenot and Degeorge, 2000). The surfaces of the palace are seemed to be richly adorned using the finest motifs of the geometrical and floral type. Although, there was an extensive use of geometrical ornaments along with intricate and profusely coloured renders highly complex patterns, such as 7-, 9- and 14-point patterns, are missing. Even a 10-point pattern cannot be found and only the simplest 16-point pattern was applied (Figure 39).

¹² Islamic Geometric Patterns



Figure 39. Alhambra Palace in Granada, Spain, showing details of 6-, 8-, 12- and 16-point geometrical patterns. (From Abdullahi, 2013.)

However, if seen with respect to community use, the mosque is the place where people meet five times a day and are united while worshipping the only God. The Mosque also had other functions in the past: a learning school, a court and a political forum. Within these conditions, the mosque can be considered as the nucleus of the characteristic features of the Muslim society (Saoud, 2003). But in terms of developing calligraphy, the changing patterns followed a sequence of development since the beginning of Arabic writing until the end of Ottoman Empire (Taylor, 1989).

2.8.11 The component (product) and the function as means for observing the changing patterns of calligraphy

The above features and functions compelled Muslim architects to conform their decorative, structural and spatial designs to cast them in one significant entity. For example, dualism shared between the dome and the minaret showed a perfect expression of submission to Allah, which went on to become Muslim religious architecture's central element (Scerrato, 1976). In Islamic architecture, the dome signified two main symbolic interpretations involving heaven's vault and a symbol of divine dominance that engulfed the faithful's emotional and physical being. In terms of functionality, it externally defines the Qibla and lightens it internally (Dekkie, 1978).

The use of minaret is calling for prayers. Determination of its height depends on how far the call needs to be heard. The minaret also has a symbolic meaning and depicts the highest position towards the attestation and declaration of faith 'Shahada' (Scerrato, 1976). The use of courtyard (Sahn) that is adorned with a fountain and that provides ablution space and under the covered arcades (Riwaqs) shelters its visitors and especially the poor, happens to be another distinct feature of the mosque. The holiness of Qibla was influenced further by the introducing 'Mihrab', which was a niche that was used for marking a direction of this kind, and in private houses, bathrooms and bedrooms, were misaligned on purpose as a mark of respect (Dickie (1978).

2.8.12 The impact of mosques' architecture on calligraphy

The development of mosque plan went through several changes and modifications. It led to the four main forms of reflection of the main periods of Islamic attainment (Scerrato, 1976). The first type of mosque was developed in the period of early Khalifs and their progressive successors. This type has the form of hypostyle hall that consists of a main hall, which is in turn, made up of a number of parallel aisles that are defined by arcades of pillars and columns. Apart from creating an emotional atmosphere, rows of pillars and arcades that extend in all directions emphasise the infinity of the space, a symbol of the infinity of the divine (Omer, 2011). By emphasising its holiness, the area near the Mihrab is defined with a special treatment. Using a

dome in the square (crossing) in front of the Mihrab as well as the widened nave that leads to it and the closest aisle to the wall of Qibla are a few of the main spatial arrangements that have been introduced for the set purpose (Hoag, 1968). Further, this area's demarcation is also defined by some floral, geometric, calligraphic and stucco decoration that includes meditation messages.

North Africa, Persia, Sicily and Andalusia and South Asian countries saw the rise of the hypostyle mosque (Dickie, 1978). In the 11th century, the Sejluk Caliphate rose. The consequences of this were deep since this early success of the Turkish on the Caliphate throne left its impressions on Islam's general architecture and artistic character and set forth the processes for the Ottoman power's establishment (Davies, 1982). New styles of mosques, known as the Iwan mosques, were developed in Persia under the Sejluk princes' patronage. Here, a great entrance was built in the form of a high vaulted hall, which would lead to the sanctuary and domed area before the Mihrab and sometimes lead to the Sahn (Dickie, 1978). Commonly covered with 'Muqarnas', the roof of the Iwan is generally also well-vaulted. According to historic sources, this style first appeared in 890AD in the Friday Mosque of Shiraz and also in the Friday Mosque (Masjid-I juma) in Niriz in Faris which was built about 970AD (Scerrato, 1076). The Madrassa, an educational building that served as a lecturing hall and had its sides converted into rooms for the students, was an example of the successful adaptation of the Iwan to other building forms (Dickie, 1978). The Iwan was also adapted successfully in hospitals and caravanserais in Iran, Syria and Anatolia. In the 11th century, the popularity of this type of mosque reached its peak and led to the inception of the four Iwan mosque that made the first appearance in Isfahan Friday Mosque (11th century) (Scerrato, 1976).

As the Ottomans succeeded the Caliphate in the 14th century and reached their peak in the 16th century, it led to the introduction of new features in the architecture and design of the mosque (Davies, 1982). From its traditional conception of horizontal space, the mosque evolved to become a vertical structure that rose in the sky through its domed roof, which was arranged in numerous small domes that rose progressively like the steps towards the central nave's main dome (Scerrato, 1976). Since the vertical nature of the dome expresses infinity, this type of dome soon dominated the skyline of the Muslim mosques, and was probably influenced by the Hagia Sofia, as suggested by many Western Academics (Scerrato, 1976). Moreover, this mosque emphasised on another important symbol related to the oneness of God, which was conceptualised by Al Tawheed, which formed the Muslim faith's essence. The precise centralisation of space under the main dome confirmed both its unity as well as the symbol of one God. In the view of Davies (1982):

“The interior is then one unit to be perceived in its entirety at a single view. Its reality is not to be found in the domes and arcades but in the cavities, they define. Plenitude of space ... majestic space ... continuous space ... tawheed (the consciousness of divine Unity) made visible” (p.127).

The Ottoman domed mosques themselves showed a variety that was expressed in the style and in the number of domes employed. In the beginning, the roof comprised a number of small domes, which sometimes combined together to form a larger, central dome ('mother'). The very first of these is the Yesil Cami Mosque (Bursa) founded in 1419 (Scerrato, 1976). Located in complex site, the mosque was accompanied by a tomb, a bath and a Madrassa. Yesil Cami, a typical Ottoman mosque, was dominated by its domes that covered a majority of the interior space. The mosque is famous for the Persian-made blue and green tiles, which decorate its walls, and which

were created by the artisans from Tabriz (Hoag, 1969). In terms of general décor and ornamentation, the mosque reminds us of the Hall of Ambassadors at Alhambra. It is a combination of the late Seljuk and the early Ottoman art, as it can be observed in the style its entrance is designed, which clearly emphasises the Seljuk tradition of extensive use of Muqarnas. Another feature of the Ottoman mosque that differs greatly from the rest of the Islamic world is its slender minaret (Scerrato, 1976).

The fourth type of mosque is the one that India's Mughal dynasties developed. They successfully combined all the three aforementioned styles to evolve it into a fascinating new style that consisted of a horizontal hypostyle hall area that was used for rituals, and was covered with a flat roof that incorporated large bulbous domes, and a huge porch entrance that reminded of the Persian Iwan as observed in Delhi's Jami (Dickie, 1978).

Apart from the formal and design styles, the mosques were also categorised in terms of their status and function, similar to prayers. Attributed to the individual, the five daily prayers are performed in the Masjid (Saoud, 2003). This is the first category of mosque providing the local community the daily congregational prayer for the local community. Performed once per week, the Friday prayer is where the whole community gathers in a big place (called 'Jami') and it is known as the gathering of the faithful ones, from all the corners of the area and sometimes even from nearby villages and/or hamlets (Dickie, 1978).

At a local level, the Jami has the highest status. The Eid prayer is the third type of prayer (done twice a year in Eid Al-Fitr and Eid Al-Adhha). In this type, the whole town prays by gathering in an open space called Mussala. Lastly, the one prayer is a lifetime prayer in Ka'ba during the Pilgrimage, where an enormous Muslim population is gathered to form a circumambulation around Ka'ba and stand on Mount Arafat situated near Mecca (Scerrato, 1976).

Any mosque beyond these categories can have any function other than performing prayers. The Madrasa, used for teaching and praying, is a collegiate mosque. The Zawayia, a monastic mosque, is designed for the devoted faithful to retire from this world into a holy environment. Apart from this, the Zawayia can also be used as a boarding teaching base for the student followers of a particular scholar, thereby fulfilling the Madrasa's role (Saeed, 2011).

It can be concluded that the vocabularies of Islamic architecture have left a lot to be desired as one cannot see any preference for one style that seems to have been repeated. It must, however, be admitted that the style's monopoly has a strong support throughout Islam (Ettinghausen and Graber, 1987). One can also conclude that Islam allows variety in architectural language in accordance to its principle religious tenets which reject racism or parochialism. Thus, the variation in the styles is evidence that Islam adapted to various cultures and belief systems, none of which contradict the major focus of the religion, worshipping one God (Burckhardt, 1976).

One more conclusion that can be drawn is that in one way or another, almost all of the styles are results of the influence where Islam flourished in all walks and became a strong political force (Ettinghausen and Graber, 1987). The Modernistic Structuralist style does not hold any political agenda apart from a just a whimsical play of newer features. However, brave attempts to reinterpret the idea of the mosque in its basic and pristine form have been made (Saoud, 2003). Thus, taking in consideration all these criteria, the case studies involve two different mosques

within Saudi Arabia (one to represent the traditional style and the other to the contemporary one) to provide important data in relation to the historical review.

2.8.13 Summary of the major changes of calligraphy during the Islamic era

As discussed above, the different forms of architecture have witnessed changing forms of calligraphic patterns. The following discusses these changing forms according to the above periods as: Early Islamic era, Seljuk, Mughal and Ottoman.

The early scripts used for writing the Qur'an were bold, simple and sometimes rough. The scripts used in the hypostyle of architecture, right from the 7th all the way to the 11th century, were ultimately derived from those of the Hijaz (Makkah and Medina) and Kufic. In a broad sense, they can be categorised in three main scripts: Hijazi, Kufic, and Persian Kufic (Bloom and Blair, 1995).

Hijazi, the prototypical Qur'anic script, appeared in pages that were vertically formatted, and it is a large and thin variety having ungainly vertical strokes, which often slope to the right (Saoud, 2003). Generally written so that they are read only horizontally page formats, Kufic is a completely stable form of script in which the base line happens to be the key element, with the upward and downward strokes springing from it (Bin Embi and Abdullahi, 2013). Among all the early scripts, Kufic is said to be the most majestic. Its stability and majesty reflect the period of Islam in which it was produced, when the civilisation of Islam had an unshakeable confidence in its supremacy (Bloom and Blair, 1995).

Unlike the regional Hijazi and the Persian Kufic, 'true' Kufic, a universal script that reflected a universal civilisation, was used from Iran all the way to Islamic Spain. Apart from the main, classical calligraphy, there also were numerous regional varieties (Bin Embi and Abdullahi, 2013). The forms used in North Africa and Islamic Spain were close to Kufic in appearance than any other Eastern Post Kufic hands. Known as 'Maghribi' and 'Andalusi', those forms were only known in the Western part of the Islamic world, and calligraphy had the same prestige there as was in the East. The calligraphers who did that kind of work were not well-known beyond the specified regions (Schimmel and Rivolta, 1970).

Making its first appearance in the 10th century, Persian Kufic endured until the 12th century. Stretching the decorative possibilities to their limits, Persian Kufic also strived to maintain the legibility of the script (Bin Embi and Abdullahi, 2013). That is how Persian Kufic began employing the system used in scripts like Naskh, which were contemporary and cursive, and which had been used to copy the Qur'an in the 9th century (Bloom and Blair, 1995).

There were local varieties of the scripts created in Iran and Ottoman Turkey, which gained acceptance well beyond the place of their origin (Saoud, 2004). By the beginning of the 16th century, a very delicate, cursive-styled script had come into existence, known as the Nasta'liq, a most important local script which began developing in the 15th century in Iran and was perfected there in the 16th century. Khwaja Mir Ali Tabrizi (d.1416) designed a new calligraphy style by skilfully blending both Naskh and Ta'liq together during the era of the Safavids (Hayes, 2001). Islamic Calligraphy in India is greatly influenced by the Safavid calligraphers of Iran. Mughals preferred Nasta'liq for writing anything, except Qur'anic verses (Heidemann, 2010).

Unlike all the other earlier forms, Nasta'liq had been devised to write Persian. Nasta'liq exaggerates and emphasises the horizontal element of the Arabic script. It results in a form that is pleasing and seems to be hanging or floating across the page (Bin Embi and Abdullahi, 2013). Such quality of the work is enhanced while poetry is being written; this is because the script is arranged diagonally across the page, and each line of verse is enclosed in a cloud cartouche (Hayes, 2001). Wherever Persian happened to be a literary language, Nasta'liq was used to write Persian verses. This held true not only for Iran but also for the Mughal courts and some courts of the Deccan (Heidemann, 2010). Termed as 'Ta'liq', the Ottoman calligraphers also used it in Istanbul, where the educated class understood Persian fairly well and where the language was used to write poetry in Ottoman Turkish (Saoud, 2004).

Nasta'liq began being highly appreciated in India by the late 16th century (Taylor, 1989). At the end of the Timurid rule in 1506, many artists left the areas of Iran and Herat. Nasta'liq became popular in the Mughal reign (Heidemann, 2010). While Jahangir of Timurid had his inkpot and coins and objects inscribed in this style, the script was also incorporated in architecture. Highlighting the beauty of writing with the help of precious coloured or gold-flaked paper was a common practice; and since those times, the calligraphers still highly appreciate marbelised paper. Nasta'liq continued to develop in Iran (Saoud, 2003).

Nasta'liq also led to the development of another local Iranian script known as the Shikastah, in which, an inexperienced eye is quite likely to find the script highly convoluted, incredibly complex and highly illegible. It was used only in Iran and the use was confined only till the 19th century, during the Qajar dynasty. It is believed that it reflected the political and social convolutions (Kaptan, 2013).

There is a clear distinction between the Iranian and Ottoman scripts. The Naskh seen in the Indian subcontinent was influenced by the Iranian tradition and has yet narrower endings and looks rather cramped (Saoud, 2004). Like Kufic, the cursive scripts were largely used for epigraphy. Apart from being seen as the headings of many of Qur'an's chapters, Thuluth can also be seen on whole pages wherever an important text needs to be highlighted (Saoud, 2003). However, the greatest achievements of Thuluth were in its architectural inscriptions, for there, it seemed to have been used in Anatolia and Delhi in a simultaneous fashion, slowly replacing the too complicated and geometric Kufic. Wood, textiles, glass and metalwork also display Thuluth.

The calligraphers from the court of Bengal Sultans were so innovative that they provided the Thuluth style with a new dimension and also went on to create their own variety which is found in many Bengal's epigraphs. In this variety, the vertical strokes are arranged such that they resemble of the trunks of coconut trees, which are a regional factor. Bihari India can boast of adding a new style to the world of Islamic Art (Bihari Style) (Kaptan, 2013).

Tughra is a form of calligraphy in which the names of Allah, Qur'an verses, the king's name, emblems of government etc. are written in bird or animal form or beautiful geometric arrangements. The Ottoman Sultans of Turkey used this form to write their names and titles on royal orders, documents, stationery etc. (Saoud, 2004). In India also, this tradition was adopted by nearly all Muslim rulers. Tughra is not a separate style as such. Kufic, Naskh, Thuluth, Nasta'liq etc. can be characterised by geometric designs, with bird /animal or floral forms being called 'Tughra'. It is generally found in medallions, arms, flags, guns, coins and seals.

Sometimes a mirror effect is also created with the true and reflected image written face-to-face. The reflective calligraphy is most useful in engraving seals and dies of coins (Kaptan, 2013).

Since the artists were brought to Istanbul from the Persian cities of Tabriz, Shiraz, and Herat, Ottoman manuscripts between 1451 and 1520 AD clearly followed Persian precedents. Thuluth was introduced in India from the 14th century, but it never ousted Naskh completely (Kuhnel, 1962). Thuluth was more dignified and much more artistic. It had a great ornamental value for decorative bands on central mihrabs of mosques' medallions etc. Mughal calligraphers used this style extensively. The greatest beauty of this style is its accommodative and overlapping quality and visual value which adds elegance and beauty to the monument (Heidemann, 2010).

In the 16th century, manuscripts turned from illustrations of classic literature to depictions of contemporary events, such as diplomacy, conquest, collection of taxes, festivals, battles and skirmishes (Essa and Ali, 2012). Of course, the Qur'an remained a primary inspiration for illustration and calligraphy, and one can see 'luxury' copies of the Qur'an created at the time (Kaptan, 2013). The Ottoman Sultans were very keen to establish calligraphy as one of the noblest of arts, and many were recognised themselves by the guild as masters of calligraphy (Saoud, 2004).

2.9 Spirituality, Islamic Decoration and Calligraphy in the 6th–17th Centuries: (The Spiritual forms).

2.9.1 Introduction

As discussed above, it is clear that the concept of Spirituality appeared in different fields as a religious and philosophical movement. The present section starts with defining spirituality and the changes of calligraphy from the 7th to the 17th century and ends with the factors that have caused it to change its development. Based on the Islamic religion is Islamic Art, known as the art of civilisation. Further, it is merely a combination of the different historical circumstances and civilisations painted through an Islamic perspective of the world, rather than having to be concerned with only a particular kind of people or a particular religion (Saeed, 2011).

Islamic Art witnessed many changes after the advent of Islam. It flourished rapidly until it reached a high position. Although Spirituality increased after the first century of Islam, it added venerable characteristics to Islamic Art, especially decoration.

2.9.2 What is Spirituality?

Despite the fact that Arabs had little art in their early history, they initiated the development of Islamic Art using spiritual characteristics. They were experts in mathematics and geometry. Such experience and knowledge were applied to formulate Islamic decoration. The Turkish also played an important role in Islamic Art and its spiritual message. This country ruled a large part of the Islamic world from 10th to 19th century. Specifically, it helped Persian art and literature to emerge as a source of the Muslim architecture, art of painting and various forms of Islamic decorative arts (see Figure 40).



Figure 40. Shah Mosque in Isfahan (Source: <http://www.persianvoyages.com/mountain/wp-content/uploads/2012/10/Imam-mosque-in-Isfahan-Iran.jpg>.)

However, the dominant factor was always the spiritual aspect of art. In the subcontinent, the Mughals rulers also played a role in various Islamic artforms such as architecture (both sacred and public), miniature art, decorative arts and landscape paintings (Saeed, 2011).

For some scholars, for fourteen centuries, Spirituality had been expressed within the Islamic world in the most richly varied and original arts. In the beginning of Islam, the Spirit manifested itself directly in the Qur'anic Revelation as the foundation of the contemplative Path, and in the Sunnah of the Prophet. Spirituality was affirmed in the sacred arts of Islam, such as mosque's architecture and Qur'anic calligraphy, which infuse the Truth into people's souls through 'aesthetic shock' (Danner, 1976).

Nasr (1987) refers to the celebrated Persian Sufi scholars Kamal al-Din Husayn Kashifi, who explained the spiritual background is a key part of the Islamic calligraphy's significance. Therefore, the foundation of calligraphy of the metaphysical type, which is based on the Qurnaic symbol of the Pen and the Inkpot, can be summarised by providing a more comprehensible form of Islamic calligraphy's more metaphysical principle and spiritual significance, and in particular, the role of calligraphy on traditional Islam's religious and artistic fronts (Saeed, 2011). Sufism, therefore, is often defined as the most spiritual teachings and practices that derive from a given Revelation (Danner, 1976).

The 'Book' (the Qur'an) contains Divine creative possibilities, which are required to be explained in realities. Islamic calligraphy, with its metaphysical foundation, not only became a source from which spiritual stimulation could be drawn, but also became a sacred medium through which humans could communicate with God (Allah) (Saeed, 2011).

2.10 Islamic Decoration and Calligraphy in the 6th – 17th centuries

2.10.1 Introduction

In the 7th century, the glory of the Arabic nation originated in the Arabian Peninsula, where Prophet Mohammad's (Peace Be Upon Him) preaching united the Arabic tribes and began the Muslims' religion (Falagas *et al.*, 2006). The Islamic state was formed in 622 AD. A century after the Prophet's death (632 AD), parts of the South of Europe through northern Africa to Central Asia and the Indian subcontinent, were controlled by the new Arabic-Muslim Empire. In 711 AD, the Arab Muslims invaded southern Spain. They helped form a flourishing civilisation (al-Andalus) (Figure 41).



Figure 41. Andalusia (Source:

[http://alfatihoun.edaama.org/archive/Al%20Fatihoun/Galleries%20Files/Andalusia/Andalusia%2002/images/Andalusia%20Old%20Muslim%20Country%20\(14\).jpg](http://alfatihoun.edaama.org/archive/Al%20Fatihoun/Galleries%20Files/Andalusia/Andalusia%2002/images/Andalusia%20Old%20Muslim%20Country%20(14).jpg).)

Around the same time, a further center emerged in Baghdad from the Abbasids, known for ruling part of the Islamic world during the period known as the 'Golden Age' (~750 to 1258 AD). Some argue that many achievements of the Islamic-Arabic Golden Age had influences from the ancient Hebrews, Persians, Egyptians, Romans, and Greeks. As a result of this, translators were invited to Baghdad as their work demonstrated spectacular progress on scientific fronts. Islamic Spain's rulers were somewhat jealous of this, and while trying to outmatch Baghdad, employed scholars that contributed substantially in fields such as technology, art, science, philosophy, and medicine (Falagas *et al.*, 2006).

2.10.2 The changes of decoration and calligraphy from the 7th to the 17th century

Throughout history, Islamic decoration was the most resonant element in identifying Islamic architecture. For example, it could be found in mosques, palaces and other buildings in the Islamic realm. Studies were carried out focusing on the creation of Islamic Art from its older traditional elements about what shaped those various elements into unique compositions (Shafiq,

2014). It is worth mentioning that because there was little art in the Arabian birthplace of Islam, Byzantine, Roman and Persian civilisations influenced the shape of Islamic Art in its formation. Islamic Art generally appeared in architecture. Early Islamic architecture was formed in order to address the social, physical, environmental and psychological requirements of people in an effective manner.

Islam outlines the fundamental human needs which may be represented by religion, lifestyle, belongings, mind and posterity. This is in a similar vein to Maslow's hierarchy of needs, despite Maslow not including religious or spiritual needs (Michell, 1978). It can also be argued that Maslow's perspective to see basic needs was that of an individual; while on the other hand, Islam has three perspectives to see the basic needs of the people: state, individual and legislative (Al Sari, 2010). It is true that Islamic buildings express social and economic structure, visual sensibility, political motivation and religious beliefs of a tradition that can be said to be unified and pervasive (Michell, 1978). Therefore, it may be said Islamic countries have developed their traditional architecture from influences in people's needs that been highlighted above, such as the level of social prosperity, local architectural tradition and practices, level of construction technology, climate and building materials before that country comes under Islamic control.

The architectural reduction, that the Islamic civilisation led to, evolved an underestimation of the cultural and civil achievements that the Islamic civilisation produced regarding Islamic civilisation's cultural depth as only adornment and decoration (Hakim, 1991).

Throughout the Islamic world, the upkeep of mosques and other religious institutions was largely funded by rulers and the wealthy. However, the artists and architects who worked on buildings often ended up unpaid, despite the patrons often being known. The Dome of the Rock in Jerusalem can be considered to be one of the earliest results of patronage of the religious kind (Figure 42).



Figure 42. A mosaic combination of calligraphy and ornament at the preface of the Dome of the Rock, Jerusalem. (Source: <https://mtidry.files.wordpress.com/2010/02/exterior-dome-of-the-rock.jpg>.)

This building was constructed in the last years of the 680s (AD) along with support from the Umayyad dynasty's caliph Abd al-Malik (who reigned 685–705 AD). Similarly, the Great Mosque in Cordoba, Spain was luxuriously renovated by Al-Hakam II (who reigned 961–76 AD) and caused upset to his subjects with his lavish architectural investments. To deal with this upset, he inscribed text on the building, which contained his gratitude towards God for helping him to build a mosque that was more spacious in nature, since it eventually fulfilled the wishes of both him and his subjects.

The Ottoman ruler of Turkey in 1601 AD, Sultan Ahmet, decided to fund and build a mosque that would be more majestic than the Christian church of Hagia Sophia. This mosque was renowned for being Istanbul's largest religious structure for many centuries. Known as the Mosque of Sultan Ahmet (see Figure 43), it was flanked with tall minarets and blue tiles were used to decorate it. In the English-speaking world, it is known as the Blue Mosque (Herrington, 2002).

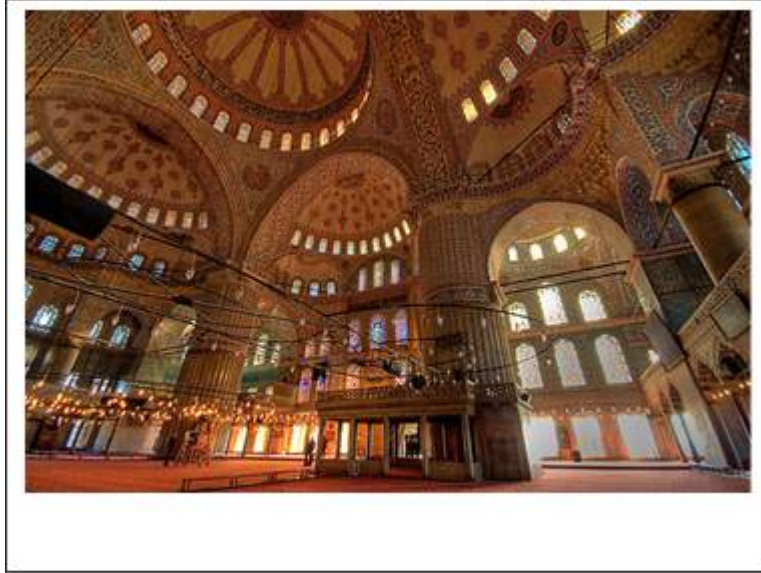


Figure 43. An interior photograph of Sultan Ahmed Mosque in Turkey (Source: <http://ih1.redbubble.net/image.7128365.9729/flat,550x550,075,f.jpg>.)

According to Nasr (1987),

“Sufism plays a valid spiritual movement which has influence on Islamic Art. In one way or the other, Sufi tradition remained a constant source of inspiration for all Islamic arts during the different periods of Muslim history. This influence gave religious and spiritual enlightenment to many Muslims architects, miniaturists, calligraphists, and musicians of different Muslim dynasties and, as a result, helped these artists to understand and underline the spiritual significance of their creative products” (pp.12-13).

The origin and ornaments of Islamic Art were dependent on Islam’s ideology and principles. They are in direct relation to the Islamic world view, to the revelation of Islam, a phenomenon that has radiated the sacred art of Islam in a direct and indirect manner, and the whole range of Islamic Art. Further, the rapport between this art and Islamic worship is what has led to the production of the causal relation between Islamic Art and the Islamic revelation. If this art were not related to Islamic revelation’s form and content in a very intimate sort of way, it could not perform a function as spiritual as the one that exists (Nasr, 1987).

There is always a reason required for the creation of an artistic universe that possesses such a particular genius, and formal homogeneity that is based on a geographical, cultural and temporal nature, because accidental historical factors cannot result in an effect of such huge dimensions (Shafiq, 2014).

Numerous studies and researches in the past focused on Islamic ornament by concentrating strictly on the lineage, style, colour and type as a form of art that belonged to the Islamic society for a long time. It is better to focus on the major changes of calligraphy from the seventh century to the seventeenth century, however. As art progressed, decoration also developed in remarkable

ways in accordance with the new religion that discouraged representation of human beings. This besides the revelation of Qur'an fostered calligraphy to flourish rapidly.

The old Arabic saying 'purity of writing is purity of the soul' states the importance of beautiful writing in Islamic culture. Hence maintaining the Qur'an, also known as the 'revealed book', in the best manner was paramount from the perspectives of both aestheticism and religion. Moreover, the Islamic discouragement of representation in a figural manner led to the development of myriad and diverse styles in Muslim calligraphy. Various materials, such as bones and palm leaves were used for the revelations given to the Prophet Muhammad to be written on (Figure 44 and 45).



Figure 44. Qur'an leaf from the 9th century. Written in Kufic, Sura 47:36. Ink, colors, and gold on parchment. (From Schimmel and Rivotla, 1992.)



Figure 45. A 10th century plate from Iran decorated with Arabic (Kufi-style) script (Source: <https://s-media-cache-ak0.pinimg.com/236x/03/db/58/03db5896e2402deda27d7559a7595fd7.jpg>.)

His third successor, Caliph Uthman (579-656 AD), was involved in editing; so, complete copies of the new, edited Qur'an were brought into existence to be sent to various parts of the ever-expanding Islamic empire. This led to a boom of pious scribes who made copies of the Qur'an, since it was considered to have a Divine Word that was binding in nature deserved the most beautiful kind of writing that was possible. There was a strong belief among the Muslims that a heavenly reward would be given to the scribe by copying the Qur'an, or parts of it. The initial script was initially an Arabic alphabet of a rather ungainly kind, which like all the Semitic scripts, ran from right to left. It has an angular nature and its spacing was done more for aesthetic purposes rather than for following the rules of grammar (Schimmel and Rivolta, 1992).

Until the 11th century, the rectangular Kufic script was used to copy the Qur'an. The rise of Islam allowed for the Arabic writing in its transcribed form to be standardised and refined, which included numerous scripts in cursive which were being used for both religious and secular purposes (Herrington, 2002).

Arabic calligraphy, despite having an infinite pattern that used naturalistic, abstract, semi-naturalistic and geometrical forms, dominated Islamic Art and seemed to have integration in all kinds of decorative schemes. A particular reason for this is the fact that it links Islam to the language of the Muslims, as the Qur'an has outlined. Islamic calligraphic art and decoration still

derive a majority of their inspiration and content from complete passages and proverbs from the Qur'an.

Due to this, almost all sorts of buildings in the Islamic realm, in their stucco, stone, mosaic or marble surfaces, have inscriptions that are often a Qur'an quote. If not, sometimes single words, such as 'Allah' or 'Mohammed', may be inscribed repetitively over the entire surfaces of the walls. There is a close relation between calligraphic inscriptions and geometry of the building, and these are quite frequently used as frames around the most significant elements of architecture, like cornices and portals. Occasionally, a tablet single panel or carved tablet is the limit to which a religious text may be confined (cartouche), which may be physically pierced to create a specific pattern of light.

It can be said the highly stylised form of Islamic Art in general and calligraphy in particular have gone through centuries of evolution and have transformed from simple designs and forms to complex forms involving, mathematical symmetry of quite a high degree (Figure 46).

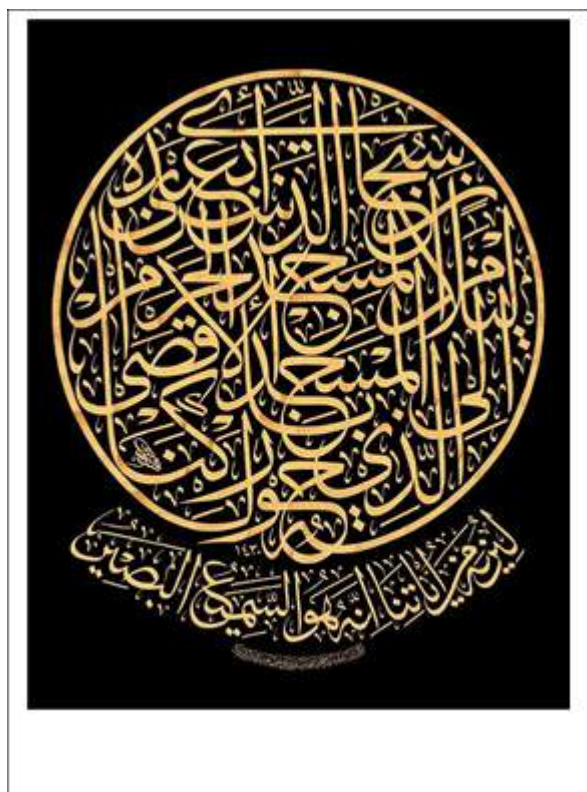


Figure 46. Symmetrical composition (Source: <http://islamicartdb.com/wp-content/uploads/2014/03/arabic-calligraphy-22.jpg>.)

From the late 7th century AD, Muslim calligraphers developed a series of scripts or lettering styles (mentioned before) to copy the Qur'an. These styles were then used on documents, coins, gravestones, textiles and buildings. From the 10th to the 13th century, there was a codification of a new system of proportional cursive scripts. The shape of each letter in a proportional script is determined using a fixed numerical figure of rhombic dots (Figure 47).

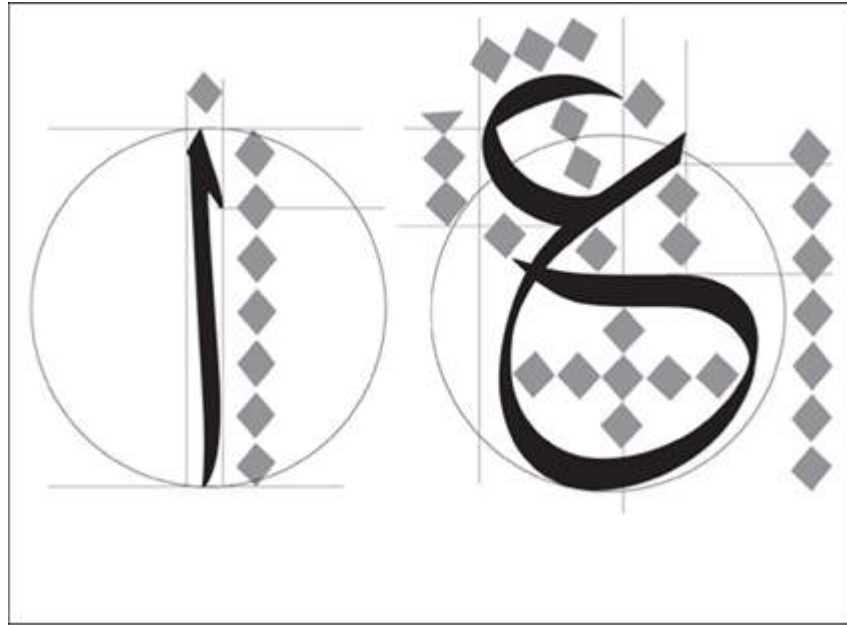


Figure 47. Calligraphic diagrams of the letters alif and ain using the proportional system based on rhombic dots described above. (Source: <http://www.metmuseum.org>.)

2.10.3 Arabic calligraphy development from firm social roots

In fourteen centuries of existence, Arabic calligraphy has been protected by religion, used in politics, boasting aesthetic sophistication, sustained by a spiritual credo, and subject of poetry and popular lore, more than an art form, calligraphy was a culture (Atanasiu, 2006). This allowed calligraphy to have a substantial effect in the 20th century. However, some people viewed it as an old custom, whereas for others, they found something that would guard their cultural values and give them solace, and refuge from the hardships of the world. Further, some tried to take calligraphy into the realm of globalisation, where it lost its meaning and became bare merely an emotion-laden movement. In all of the cases, as Turkey, Iran, and the West exemplified, calligraphy was considered a worthy instrument by political powers, which they could use to pursue their ambitions (Atanasiu, 2006).

Many works of art in the Islamic world are decorated only with calligraphy. Arabic letters were applied quite easily in various media, such as ceramics, architecture, and textiles. For example, artists could use straight lines, circles, interlaced patterns, and straight lines through words, and letters could be embellished. In fact, calligraphers sometimes drew pictures, such as human or animal forms, to use up the allotted space. For instance, the Arabic equivalent of ‘blessing’ has been inscribed on a bowl in such a manner that it leads to the formation of a bird’s breast (Figure 48), an example of zoomorphic calligraphy (Herrington, 2002).

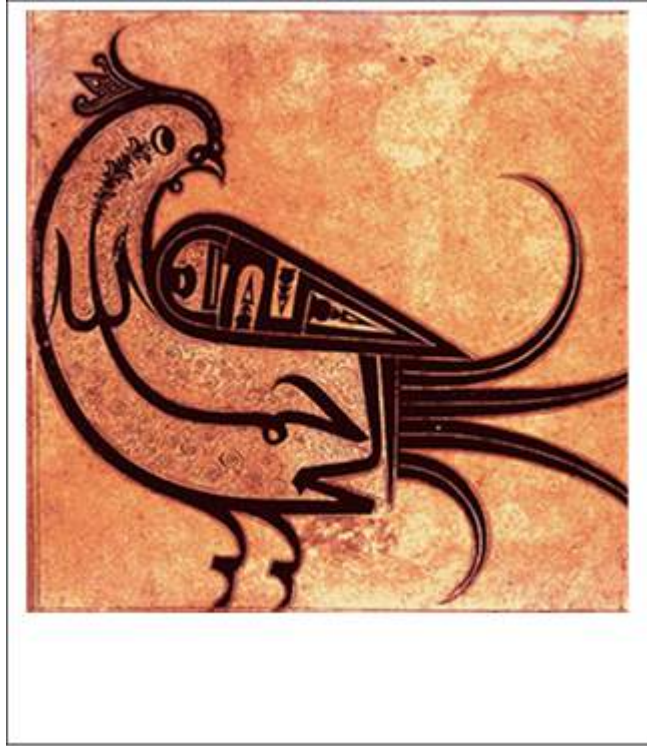


Figure 48. An example of zoomorphic calligraphy. (Source: <http://people.sabanciuniv.edu/~ayiter/stylesforstarters/geography/turk/zoomorphic2.jpg>.)

Atanasiu (2006) noted that “The succeeding centuries are dotted with anecdotal evidence on the politics-calligraphy link, the period spanning before and after the 15th century and centred on Persia being particularly significant for the history of Arabic calligraphy because the aesthetic models and social status of calligraphers that appeared during that time lasted until the present” (Atanasiu, 2006).

In addition to the Qur'an, other Islamic texts, such as those scientific, literary, and historical texts, were also enjoyed. These often included illustrations. For example, there was a particular demand for the *Shahnama* (Book of Kings) (Figure 49) which was composed in the 11th century (Herrington, 2002).



Figure 49. A masterpiece from the Safavid period. (Source: <http://amwaj.org.il/art/islam/gifs/50.jpg>.)

While the politics in countries having Arabic as their official script was influenced by Arabic calligraphy, the script also managed to influence foreign politics. Though this was not the purpose that Arabic calligraphy was designed for, during trade and the crusades from the 11th to 14th centuries, it became a fashion in medieval European arts to imitate Arabic; this substantiated Islam's prestige as a civilisation that was culturally sophisticated. Europe also developed a passion for Islamic Art again in the latter years of the 19th century, when Mamluk scripts were copied with great care, so much so that even the rounded Mamluk serifs that topped the vertical strokes were carefully imitated (Atanasiu, 2006).

Thus, the main changes of the dimensions of calligraphy can be summarised while maintaining the calligraphic composition's integrity. The major calligraphic changes include:

- Symmetric composition while producing the calligraphy.

- Maintaining the composition's symmetry while also manipulating the elements of calligraphy.
- Generation and visualisation of significant compositional changes by manipulating the symmetry.
- Harmonising both the written context and the image for building up a composition.

A comparison between Iran and Turkey makes clear that the democratic liberty of a country is inversely proportional to the stage of development of calligraphy. Although this is mostly true, there also have been instances given by Western countries where it has been seen that Arabic calligraphy can thrive as well as a civil art, without any political interference or influence. Arabic calligraphy's evolution in the West is interesting from a point of view of developmental diversity, which results from a transplanted art's particular features which are sensitive to both its cultural as well as linguistic environment (Atanasiu, 2006).

When Kemal Atatürk changed Turkey's official script from Arabic to Latin in 1928 AD, the reason behind it was that he wanted to display a symbol of technological compatibility with the modern attitude that the Latin-based West spoke and wrote, and towards which, he wished to direct his nation. Eighty years later, this move where political power had been detrimental towards calligraphy and proved to be one problem less for Turkey in its bid to join the European Union (Atanasiu, 2006).

An immediate result of this decision was that calligraphers were sacked overnight. Many of these calligraphers had worked for ministries or the administration or Istanbul's school for calligraphy, which was eventually shut down in 1928. Their jobs as clerks, where they were required to work for many hours a day, had kept them in training and had kept the script from getting fossilised and led to the rise of newer masters (the last century of the Ottoman rule was when some of the finest calligraphers of all time had lived). When the new conditions settled and no transition to Latin calligraphy or typography was seen, there was an eventual decline in the number of calligraphers and a decline also in the interest of the masses in the art, which was unsurprisingly viewed as moribund (Atanasiu, 2006).

2.11 The Changing Pattern of Calligraphy in Architecture and its Causes Since the Late Twentieth Century

2.11.1 Introduction

This section discusses the influence of globalisation on both the Islamic architecture and Arabic calligraphy. It discusses the thought of the other group involved in this study (the Modernists). It also shows the categories of Arabic scripts in modern architecture and visual arts.

The changing patterns of decoration in general and calligraphy in particular during the 7th-17th centuries were discussed above, and the remarkable influence of globalisation and its rapid spread in several parts of the world was also outlined. The invasion of new technology has also had its effect on a par with globalisation. As a result of such changes, many master calligraphers, especially in Turkey, lost their jobs. This was a result of replacing the Arabic letters with Latin. The prosperity of visual arts especially painting had also a great influence on calligraphy. It helped it prospered as an individual entity which detached it from architecture.

2.11.2 What is Globalisation?

In modern times, globalisation is one of the serious phenomena people have to face. Globalisation started some time ago as an ongoing process. Some people see it as an influence of the West on growing countries (Abdul Razak, 2011). Zukin (2008) enhances this view indicating the role of media in supporting such events as invasion of technology; through the gradual disappearance of traditional manufacturing and the growth of financial services, besides the residential conversion of buildings, and promoting by the media about alternative sources of art, design, and cuisine, in re-imaging neighbourhoods as the creative hub of a symbolic economy. However, does this mean globalisation as a modern phenomenon just has a bad side or people should deal with it as a double-edged sword?

The Encyclopaedia Britannica defines globalisation as “the process by which the experience of everyday life is becoming standardised all over the world” (Adam, 2008). Specifically, architectural globalisation is typically trapped between the forces of two opponents, such as those for, and others against, globalisation.

The meaning and concept of ‘globalisation’ is still debated, depending on an individual’s viewpoint and worldviews on how it is to be interpreted. For example, reflections of this can be seen in the use of various terms like ‘globalism’, ‘Westernisation’ and ‘Americanisation’ in many societies (Mirgholami, 2011). Such viewpoints have divided people into two groups approaching the phenomenon: protagonists and antagonists.

Protagonists see it as a positive process which provides societies with numerous opportunities and benefits, whereas antagonists put on a negative perspective while viewing this phenomenon, calling it a project that the world powers have developed to seek their interests (ibid). Anyone who is in agreement with this perspective is said to be a part of anti-Globalisation groups that have various approaches and styles. Logically, a third group has appeared (an inbetween viewpoint). However, this group believes that globalisation, like numerous other phenomena, has both pros and cons and that the societies and countries should focus on using comprehensive knowledge to make the best of its advantages and avoid its negative effects (Mirgholami, 2011).

2.11.3 The impact of globalisation

Global flows have removed physical boundaries between cities. The Western media is particularly responsible for promoting global similarity, and cities are affected by both global culture and global consumerism, which can seem superficial (Figures 50, 51 and 52).



Figure 50. Alfaisalyah Tower in Riyadh, KSA (Source: http://images.elitemeetings.com/000340/al-faisaliah-hotel-a-rosewood-hotel_meetings_a.jpg.)



Figure 51. Khalifah Tower in Dubai, UAE (Source: [http://www.royaladventuretourism.com/images/Burj_Dubai-4\(2\)\(1\).jpg](http://www.royaladventuretourism.com/images/Burj_Dubai-4(2)(1).jpg).)



Figure 52. Twin Towers in Kuala Lumpur, Malaysia. (Source: <http://www.luxurydestinations.co.uk/wp-content/uploads/2014/02/THKL-Your-Shangri-La-Story.jpg>.)

Global cities have gone through significant transitions because of the interaction of real essence of cities between the inner qualities they possess and their appearance (Mirgholami, 2011).

“If one is to approach globalisation initially in quite general terms as ‘the process whereby population of the world is increasingly bonded into a single society’”
(Albrow 1993, p. 248).

The urbanisation can certainly be regarded as an integral part of, if not the driving force behind, it. It is, therefore, not surprising to find the transformation of late modern society ascribed to the continuation of urbanisation, which was initially responsible for the shaping of early modern society (Dürschmidt, 2000).

Over the past few years, the Arab world has seen a great shift within the urbanisation of cities. Excessive use of technology allowed highly complex designs, such as the image of millennium cities such, as Dubai. Capitalistic powers maintain a significant influence within this global system indicating that less influence emerges from complex systems and hidden roots of Islamic/Arabic architectural pattern and model’s articulation (Faleh, 2013). Globalisation is multidimensional. For example, economic, political, geographic, cultural aspects form some part of it. The complex connectivity, which forms the core of globalisation, bears an intrinsic aspect in the form of its cultural dimension (Hsiao, 2003).

This globalisation has slowly led to the replacement of urban settlements’ traditional richness within the Muslim world. These global forces influence the architecture of the Arab world despite globalisation having a number of different definitions and not becoming popular until the latter half of the 1980s (Chris, 2006). Some have defined it as “the intensification of worldwide social relations that link distant localities in such a way that local happenings are shaped by events happening many miles away and vice versa” (Oncu and Weyland, 1997).

Lewis (2002) stated that “The first ones seek to establish traditional links with the past through traditional architecture, repetition of motifs, shapes, and forms that existed for a long period of time without innovation. This movement is an advocate of historical connectivity in architecture, and the preservation of the existing identity. The other group promotes the use of new technologies and materials to develop innovative architectural structures that meet different functional needs. For this movement, it is important to highlight systemisation, flexibility, and interchange-ability”.

Thoughts about the future can indicate innovation as well as more investigation towards the achievement of creativity. However, cities in the Arab world tend to be seen as confusing and chaotic. This implies that such cities may depict standards of modernity in architecture, which are yet to be identified. This might further lead to the identification of such themes of architecture as ‘non-style’ or maybe the ‘free style’ or also ‘non-cohesive style’. Faleh (2013) was concerned that “Proportions are not followed firmly, materials are not matching and are not created within a general palette and the spirit of the authentic space and style is being part of the past and getting replaced by the spirit of money and capitalistic souls”.

Further, urbanisation and the technological progress have led to a rather widespread standardisation of the built environment, which may deny the cultural and local identity. Importantly, both architects and planners have been showing a particular interest in replacing unique heritage within these cities, by trying to build cities as well as regional cities with the global ones. Thus, this helped architects to analyse and criticise the impact of globalisation at a local and regional level, which may be negative in nature (Lo and Yeung, 1998). Unfortunately, architects are often required to consider both the past and the future and are pushed to adapt to newer technologies by acting at both local and global levels so as to lead to the creation of a powerful form of modern development which can be put into their urban context (Faleh, 2013).

Arabian academics and scholars conclude that to continue development they must critically assess their own beliefs and values and must also take lessons from the West, a fact requiring some amount of urgency following the 9/11 incident (Al Sheshtawy, 2004).

This has been a part of the impact of globalisation in changing the forms of the architecture in the the Islamic world. The following discusses the impact of globalisation and industrial revolution on mass production in relation to art.

2.11.3.1 The industrial revolution and mass production

In general, we tend to think of globalisation as a phenomenon associated with the flow of capital, labour, products, ideas and images, economy, politics and power.

The Industrial Revolution, as precursor of globalisation, began in England in between around 1770 AD. This revolution brought radical changes at every level of civilisation throughout the world including the growth of heavy industry besides a flood of new building materials, cast iron, steel and glass (Hopit, 1987)

Architects and engineers devised structures hitherto undreamed-of in function, size and form (Daniel *et al.*, 2008). Furthermore, it promoted scientific thoughts, scepticism and intellectual trends. Consequently, the new way of thinking was that rational thought begins with clearly

stated principles using logic to arrive at conclusions, test the conclusions against evidence and then revise the principles in the light of evidence (Hopplit, 1987).

The invasion of organised production and market-based dissemination of industry has enhanced the rise of mass production 'media cultures' worldwide since the development of new technologies of mass communication especially in the field of architecture and fine art (Calhoun, 1988).

Twentieth-century mass media routinely employed the fine arts in various ways: as subject-matter; as a source of styles and formal innovations; and as a pool of skilled labour (whenever they employed fine artists to undertake specific commissions) (Walker, 2001).

In the field of arts, enormous changes have been brought to materials and styles since the development of printing (under the mechanical production development). This means that printing is particularly important (Benjamin, 1936).

At the beginning of the eighteenth century, lithography emerged indicating a new stage of art reproduction. Along with printing, lithography began to keep the pace with the new era enabling graphic art to illustrate everyday life to be made widely available. Despite such vital role of lithography and a few decades after its invention, photography took on its role and began a new age of mass communication (Walker, 2001).

However, although photography freed the hand of its artistic functions, filmmaking began at the beginning of the 20th century, announcing the most complicated new era of mass communication ever (Benjamin, 1936).

By referring to the impact of the above on the global market, the process of globalisation began with the reduction of taxes and obstacles to trade in goods, mainly industrial goods, between countries. In this way, one of the first steps of globalisation was the creation of a world market for industrial products. It supposed a considerable increase in potential customers: the industrial companies went from producing for national markets (of each country) to doing so for a set of potential consumers that could be counted in the billions.

The industrial companies of most of the developed or developing countries began to compete on equal terms with each other. This increase in competition forced companies to introduce improvements aimed at reducing costs and increasing the technology they used. The goal was to produce more goods, that were better and cheaper.

To reduce costs, several strategies were used, but the one aimed at locating each activity where there was trained labour to do it with fewer costs (salaries, taxes, social security, etc.). This search for new locations has led to two processes that are very important: The relocation of activities that use more labour and lower technological levels from the industrial zones of advanced countries, where labour costs are high, to other regions and countries, where they are much lower. This process is causing employment and industrial production to spread throughout the world, especially in developing countries, and to diminish its importance in developed countries, which now concentrate those productive sectors that require more technology and a more prepared workforce.

2.11.3.2 The Influence of mass production on art

The impact of mass production can be seen in the field of arts as it departs pointedly from standard and traditional forms of dissemination. Considering the above discussion of globalisation, it would not be wrong to state that globalisation has only supported the definition of modernism in significant ways. Globalisation has helped artists to develop a thinking that helps them to create modern art work, without having to feel that they are leaving their roots of traditional cultures.

Architecture, painting and sculpture remained as the three principal visual arts of Europe until the mid-nineteenth century. They thrived since they received a real and fundamental support from the most powerful and wealthy parties, including individuals, groups and institutions. Nowadays, the situation is different. This culture is now dominated by the mass media through the changes brought about by the industrial revolution and the development of a capitalist economic system. The invasion of materials besides the emergence of an urban and consuming society has affected the form and the function of art and architecture alike (Walker, 2001). Constant innovation is the thematic feature of the history of modern industry and business. It creates competition between rival groups. The experimentation and invention by scientists and engineers provided new media technologies which in turn have given rise to mass employment and products (Hopit, 1987).

With the aid of machines, artworks from the past and contemporary artworks are currently exist side by side. However, around 1900, technical reproduction had reached a standard that permitted it to reproduce all transmitted works of art affecting their audience and had captured a place of its own among the artistic processes (Benjamin, 1936) The 1960s, when the new materials became universally available throughout the world including in art, was the changing point (Schroeder, 1992).

One obvious result is the emergence of new styles of art such as Pop Art, Conceptual Art and digital art. Fine art, after the technological revolution, took a new track in consequence, which divided audiences into those who preferred the old styles and others who immersed themselves with modern technology while appreciating the old culture (Schroeder, 1992). However, the rapid impact of global market was not necessarily negative. Pop Art for example was the style of modern art in the 1960s that used the imagery of mass-media, mass-production and mass culture (Lehmann, 2012). The artwork made exceeded the stage of just attaching pieces of paper or other materials to a flat surface, to 'time-based art'. Time-based art can span a wide range of materials, from video and sound artwork, to film or slide-based projections and includes software-based art and technology-based installations and projections. However, there are three possibilities of attitudes towards art after the era of industry: positive, negative, positive and mixed, either explicit or implicit (Walker, 2001).

Despite the concern that Pop Art is an enhancement of materialism and mass production, the importance of symbolic values of common objects still existed. However, some critics have a

common concern with the misuse of commercial images and the spread of popular culture and metaphysical disgust (Kozloff, 1962).

Pop Art was one of the first forms of art after the revolution of printmaking and the press employing sophisticated marketing techniques to promote one-self's concept. Despite the fact it blurs the differences between art and consumer, it enhances the material and makes the criticism difficult to unravel.

"The total immersion of the Pop movement into the apparatuses and strategies of consumer culture through its presentation by artists and dealers and reception by collectors and public surely rendered any potential for critique futile and invalid" (Mamiya, 1992, p. 158).

Thus, the value of materialism is centred on placing importance on material possessions as a way of stressing the outer world over the inner world, i.e. supporting the consumer culture and the urge to buy and possess goods (Douglas & Isherwood, 1979). Mamiya (1992) describes this leading role as:

"perpetuating the mechanisms and ideology of consumption" (p.15).

Although Pop Art sheds light on of materialism, materialism is one of the most powerful cultural values at the present time. As state-controlled societies are collapsing and experimenting with market economies, the urge to consume is becoming greater throughout the world (Schroeder, 1992). At the same time, the global economy serves as a matrix for promoting homogeneous, ubiquitous consumer symbols to ever-increasing blocks of consumers. These forces pose an exciting challenge for consumer researchers. Equipped with tools and constructs borrowed from social sciences and humanities, scholars are charged with grappling with tremendous issues irrevocably changing the face of the world (Lehmann, 2012). Traditionally, artists and researchers are distinct, each being a little wary of the methods and purposes of the other, However, in the realm of cultural values, the two fields ought to be seen as complimentary and mutually supportive (Schroeder, 1992).

2.11.4 The influence of globalisation on Islamic architecture (acceptance and rejection)

Nowadays, globalisation influences all facets of individuals' lives including, religion, language and art. Its impact on individuals differs, however, depending on various factors such as location, education and income. As the millennium progresses, there can be seen the development of a new world which holds architecture as the most social art. By constructing continuity of a temporal, solidarity, situational and spatial kind, such a notion of architecture can lead to the original development of a civilisation. There have been instances of cultural, economic and social evolutions throughout the world because of globalisation, and in this sense, cities have certainly been impacted by it.

It is worth noting that modern technology has led countries to flourish, becoming rich in their identity, art, architecture and history and interaction with technology. A traditional architect may view technology as the gradual supplementation of a nation's predecessor's accomplishments and achievements, and like a heritage, pass it on to the next generation. While the traditional architect contributes as much as he can to the core values of architecture, he does not claim any direct credit for what he has done (Mirmiran, 1997).

A marked distinction can be observed between the modern architects and the Islamic architects. The difference is seen in the fact that, despite getting immense help from technology, the modern architects' modern buildings seem to have serious drawbacks like dismal and unnecessary spaces that are either dark or non-functional or plainly useless. These malformed constructions are formed because of disorganised and non-systematic designing; another feature of such architecture is the lack of logical relationship between the different parts of the same building. Use of space has become denser because of globalisation.

Since the traditional architect was able to use expertise and technology in an optimum manner to lead to the formation of consistent and compatible parts of building, technology and art were well integrated in Islamic architecture. Islamic architecture is characterised by stability, permanence and compatibility which found a fine and meaningful application in the frameworks of old architectural constructions. Thus, one can assert that the features and peculiarities should be taken in consideration while using science and technology (Azarshahr *et al.*, 2013).

Architecture is generally regarded as the art that has creative and innovative sides and retains good relationships with culture, space and time, rather than an absolute art. During certain periods, politics as well as political economics were connected to architecture in a remarkable manner. Thus, architecture may be a relative art, with reflections of the perspective and outlook of the architect. It is urban science and architecture that should be given the responsibility to keep a society preserved in the event of foreign countries' cultural invasions. Certain values should be reminiscent when one is in a certain location.

The cities of Muslims are considered to partially imitate structures of the Western urban patterns, having been inspired by the Western perspective and outlook, and hence, lack all Islamic viewpoints (Azarshahr *et al.*, 2013). Since the traditional Muslim architects started imitating the modern architecture of the west, besides neglecting their own traditional architecture, they fail to appreciate their own authentic architecture, which eventually has led to a degradation in architectural excellence.

Now a century later, modern Islamic architecture is not appreciated; since traditional architecture was disregarded, its fundamental principles were also neglected, and the utility of modern architecture stayed limited regarding its surface features (Golmahamadi, 2000). The traditional styles of Islamic architecture (such as being inward-looking), are compromised by more 'outward-looking' western architectural concepts. This is the concept where the overlap emphasises the divergence between the Muslim and the Western worlds (Anadolu-Okur, 2009).

2.11.5 The interpretation of calligraphy since the late 20th century

According to Panofsky (1939), there are three levels of interpretation of the theory of Iconology :

- Pseudo-formal analysis and pre-iconographical description, which is dependent on the practical experience such as being familiar with events and objects.
- A narrower sense of iconographical analysis, which basically means being familiar with specific themes and concepts and which is dependent on literary sources' knowledge.
- Iconographical interpretation in terms of a sense which is also known as iconographical synthesis. Conditioned to a personal psychology, this level is a synthetic intuition which basically refers to being familiar with the human mind's essential tendencies.

A comparative theory must be included for developing a new approach which could support the study. Islamic epistemological theory of Al-Ghazzali (1058–1111 AD) (Figure 53) was chosen to be a representative of Islamisation of contemporary Art and Calligraphy.

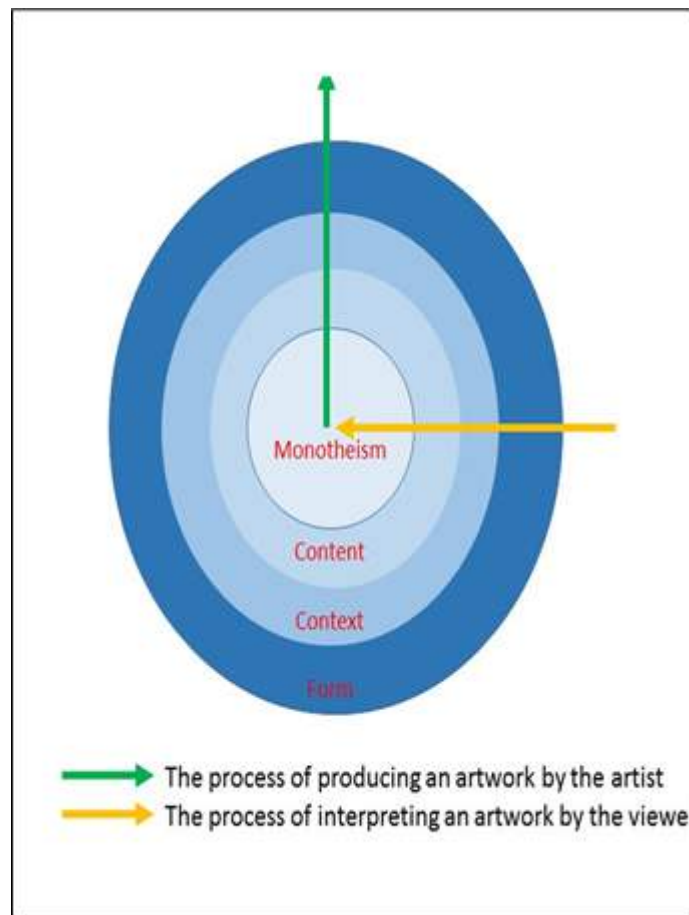


Figure 53. The History of Muslim Art Tradition or Al-Ghazzali's theory. (Reproduced by the author from Hamidon and Ishak, 2015.)

The theory of 'The History of Muslim Art Tradition' has been developed for this study taking in consideration the interest of the researchers wanting to study Islamic Art. The theory of 'The History of Muslim Art Tradition' is an adaptation between the theory of Iconology and the theory of epistemology (Hamidon, 2012).

Apart from the three levels of interpretation as introduced by Panofsky, Al-Ghazzali defined another level of interpretation that can be attributed an element of transcendence and spirituality

(Hamidon and Ishak, 2015). Al-Ghazali's theory explained that the knowledge is sourced from the God by the means of The Holy Words or the Hadith of the Prophet Muhammad, while intuition holds an entirely different meaning. This is the God's granted knowledge to the chosen few, rather than human thinking. This proposed theory is to approach the artistic material of Islam with a new level that is inclusive of the meaning through revelation of Islam.

The present research has been so oriented that it begins with the study of form and then gradually goes on the second level towards the perusal of the context. As stated above, the third interpretative level is dependent on the mind's ability to synthesise the works of art that well-define both the content and the theme. The orientation towards the centre identifies a search for the meaning of the deepest kind; the source of direction and action which allows for a spiritual experience to be represented by the symbolism, forms and composition. This theoretical framework could help deduce contemporary art's history and to hold the objectives and concepts of Islamic Art to link them to the concept of Tawheed as Muslim art's ultimate goal.

Using the theories of both Al-Ghazali and Panofsky, there can be five categories in which Islamic calligraphy can be divided: Traditional Calligraphy (Figure 54), Figural Calligraphy (Figure 55), Expressionist Calligraphy (Figure 56), Symbolic Calligraphy (Figure 57) and Pseudo-Calligraphy or Pure Abstraction (Figure 58). This categorisation was used during the 1980s and a decade afterwards.

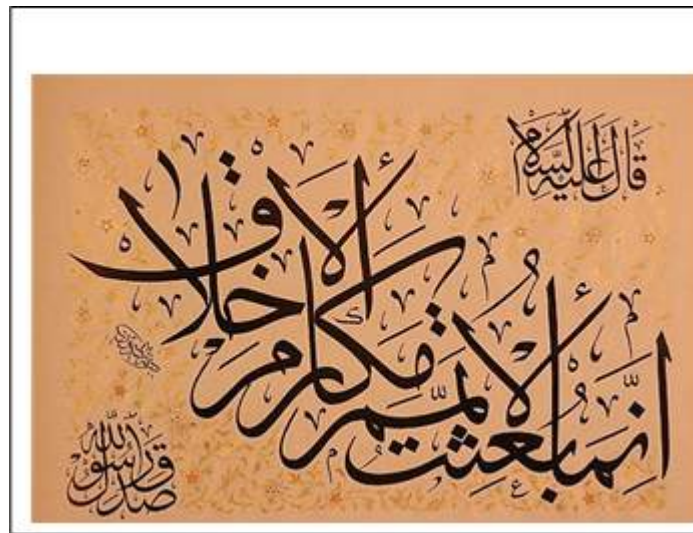


Figure 54. Traditional calligraphy by Nasir Almainmoon.



Figure 55. Figural Calligraphy by Naja Elmihdawi.

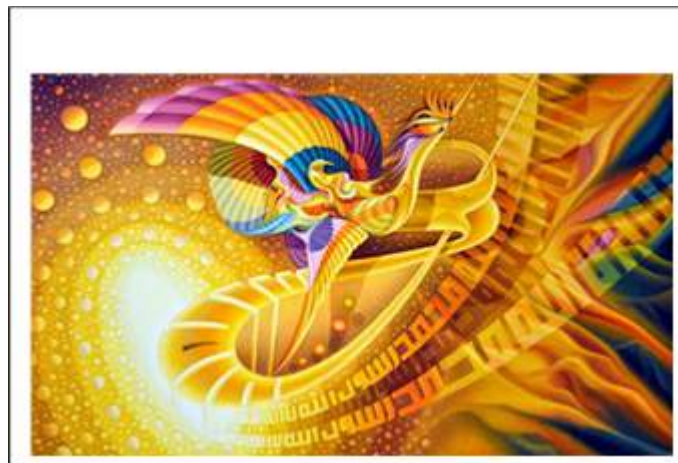


Figure 56. Expressionist Calligraphy by Mohammad Tosoon.



Figure 57. Symbolic Calligraphy by Mohammad Alrubat.



Figure 58. Pseudo Calligraphy by Wajih Nahle.

Therefore, the new artform's development and expansion brings up critical questions regarding these five art styles' limitations. Shabout, in her thesis for a doctoral degree (*Modern Arab Art and The Metamorphosis of the Arabic Letter*, 1999), raises some concerns regarding the Western influences in shaping Middle Eastern cultures and how those adopted cultures were systematically Arabised through intellectual approaches. The thesis indicates that despite the

persistent influence of the West, the contemporary Arab Art, with its unique elements, appears within Arab aesthetic values expressing Arab cultures. It participates as a potential factor to construct new identities and realities (Hamidon and Ishak, 2015).

2.12 Summary of the Literature Review

The study started with the analysis of some philosophical discourses in the definition of art with more focus on Hegel's view in the typology of art and religion to provide a context and method for the investigation. According to Hegel, an artwork is a physical manifestation of the thoughts of a group of people, a culture, in the passage of time. He then states that every work of art has two sides: 'meaning' and 'appearance'.

The latter, what he refers to as the material embodiment / form represents the former, 'the spiritual content', which acts as a focal centre of unity displayed in the form. The 'spiritual content', which is constituted by any general idea of a spiritual kind in Hegelian view, is necessary for the manifestation of the idea in a unified sensuous medium (Stace, 1924).

An extensive literature review covering the definition of Art in Islamic societies was provided.

Each thought included a historical and an artistic perspective and an analysis of the system of belief in the context of Hegel's typology of art. This was followed by examining the Islam's impact, as a religion, on the representation of art in general and on the emergence of religious decorative elements in particular. An outcome of this section is presented in an illustrated matrix recording variation in architectural settings in relation to spiritual/symbolic principles.

Additionally, reviews on Islamic ornament in medieval architecture during the Islamic empire, especially calligraphy, as there is a clear change in the function of calligraphy in religious architecture and in art generally during the different periods of Islamic era. Finally, analyses of the two traditionalists and modernist views on the influence of globalisation on calligraphy was provided. These analyses are in relation to the context of subject of authenticity as a fixed or progressing concept including the contemporary narrative of life. The outcomes of the above set out criteria for conducting a series of case studies, including surveys of contemporary mosque buildings, interviews with the experts on Islamic Art and artists.

2.12.1 The criteria for conducting a case study

The review of the literature has set out the following:

- There are two main streams in which the nature of the problem resides; one of them is the traditional and modern perspective of assessing calligraphy in mosques' architecture. The other is investigating the nature of the problem within the experience artist and experts about calligraphy and spaces.
- It is found that the changes of calligraphy are a complicated concept which requires investigation from multiple perspectives.
- Based on personal observation, there are no drastic changes but there is an indication of similarity in both traditional and contemporary mosques in Saudi Arabia.
- The current mosques in Saudi Arabia do not support the integration of a wide variety of information.

Thus, the features and the calligraphic patterns (internal and external) may be the best criteria so far for choosing the case studies.

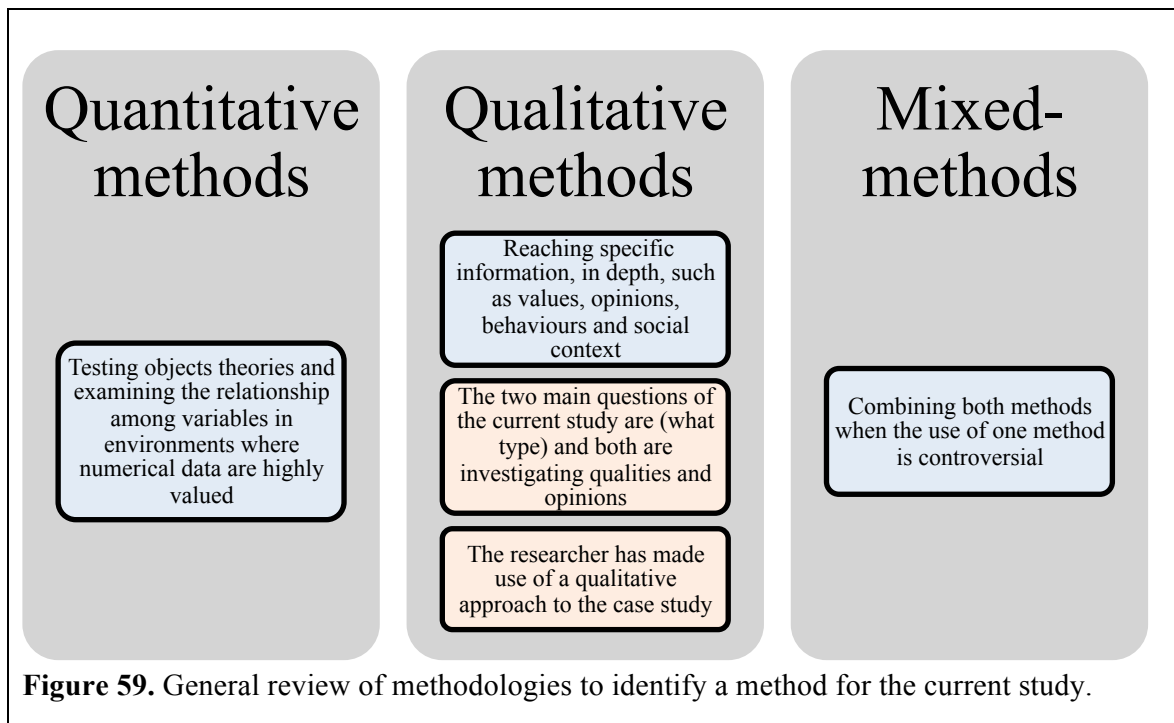
CHAPTER III: METHODOLOGY

3.1 Introduction

This chapter explains the scope, purpose, and research questions that were developed for the case studies. The methodological approach, design, and range of research methods that have been used are discussed and justified, followed by an explanation of the data collection and analysis methods used. Finally, a reflection about the reliability and validity of tools and methods used are discussed to explore the new and interesting ways which were applied to overcome the encountered limitations during the fieldwork experience.

3.2 Researcher's stance

Despite the existence of some evidence of quantities inside the mosques, such as units and measurements; the tendency towards a qualitative research was chosen because it was considered the most appropriate method. Qualitative research is a research method which can be used to answer a question using procedures to gather evidence, create findings that were not discussed before, and will help to set boundaries of the study. In this thesis, case studies were used because the two main research questions are investigating qualities and opinions, rather than investigating



quantities (Figure 59).

In the present research, the design phase has two major stages that are first the case study design, and in the second stage conclusions are drawn from the literature. Conclusions from the literature thus far indicate that calligraphy changes are a complex concept and need investigation from

multiple perspectives. Case-study design is inclusive of stating the data-collection instruments, which are followed by data analysis

3.3 Literature review and the theoretical framework

The literature review identifies two main issues relating to the problem. The first area of the problem concerns literature relating to the traditional and modern-perspective views of evaluating calligraphy and its impact in the architecture of mosques. The second area within the literature relates to the experience of calligraphy as a physical form from multiple perspectives.

The literature review used sources from historical literature and philosophical reviews. Secondary data was been collected from the findings within literature and published documents that are related to the research problem. The text is supported by a series of analytical drawings demonstrating the manifestation of thought and concept of different periods on calligraphy and architecture. These have been included because Yin (1994) states that a clear and sound documentary of case study topic is essential. Further, Merriam (1988) stresses that various types of documents are necessary for revealing exploring insights, meaning, and developing recognition that may be related to the phenomenon.

The study depends on secondary source materials for developing an accurate chronology of writing development, identifying key points of sacred writings in ancient cultures, and discovering information related to the context in which Arabic calligraphy had been developed. This data has been critical for understanding the main points of the notion of Monotheism as the core of Islamic Art in general and calligraphy.

Relevant literature has been chronologically classified. The conceptual framework is discussed in Chapters 1 and 2. Within this chapter a qualitative research approach has been explained to understand, the orientation of the study, the developments of writing and its interpretations, in a holistic fashion. The given study demands flexibility to respond to the researcher's understanding that evolves constantly and to pursue newer avenues of inquiry, as and when needed. Linking the phenomenon to some theories is essential in Chapters 4 and 5. The researcher introduces linguistic theories of Saussure, Panofsky and Al-Ghazali for better understanding and interpretation of transformation of calligraphy. The focus of qualitative research is on the description and understanding of a phenomenon. This description is inclusive of a detailed account of the participants, the activities, the processes, and the context. One goal of the research is to describe changing patterns of calligraphy under the influence of globalisation and if that description assists in understanding the mentioned transformation and is discussed in Chapters 6, 7 and 8.

3.4 The design of the current study

The following section details the design of the current study (Figure 60). It explains in detail the research focus and methodology adopted to fully comprehend the research subject and identify the research gaps in the previously reviewed literature. The selected case studies include two mosques in Saudi Arabia, six experts' views on calligraphy gathered by interview, and a sample of Saudi artists to provide a particular data that are important in relation to the historical review via a questionnaire. Because of the required data for this study, the sequence of this section is as

follows: The required data, research sample/ pilot study, research method, data collection and analysis. The case studies are discussed in depth in the following chapter.

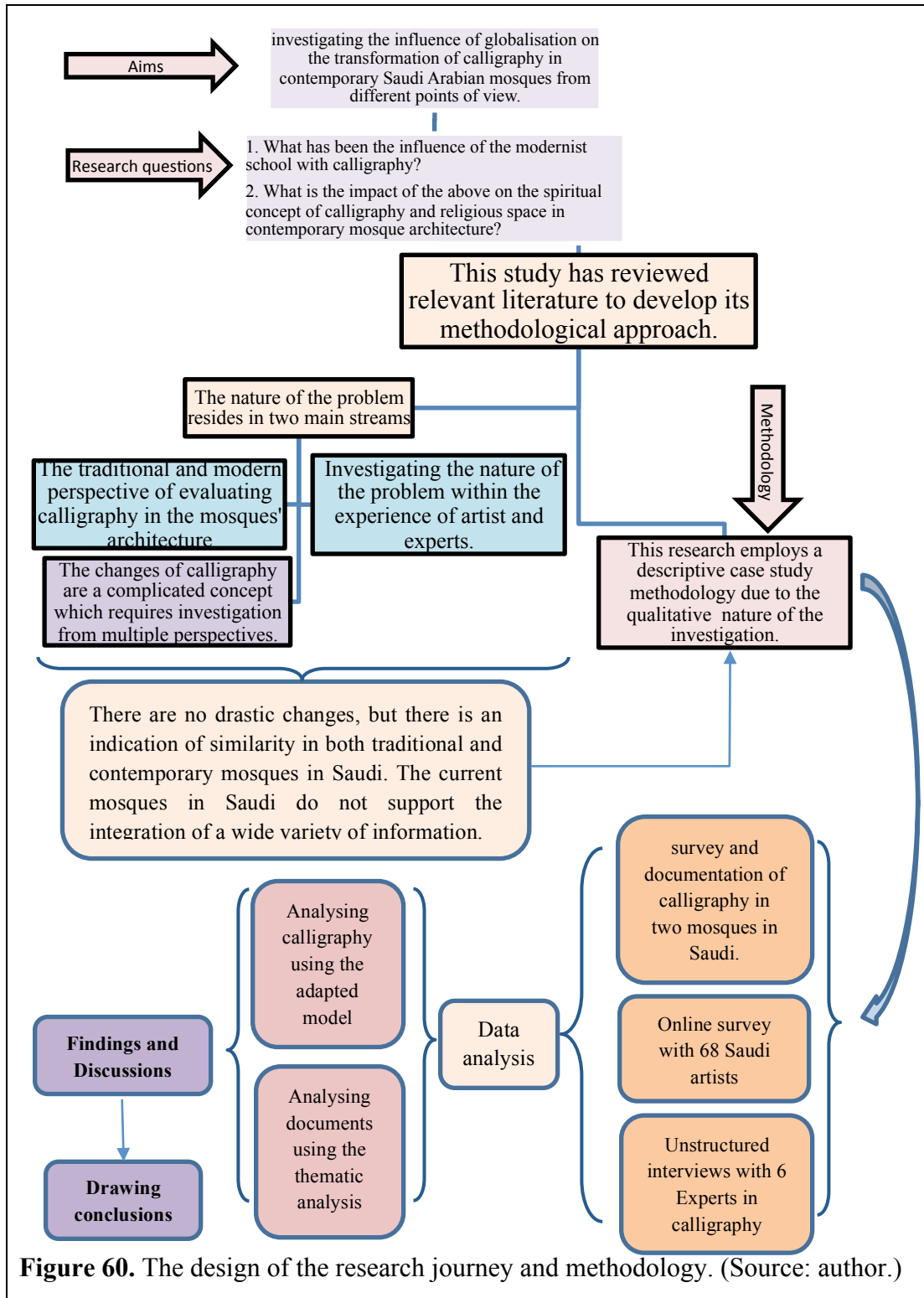


Figure 60. The design of the research journey and methodology. (Source: author.)

3.5 The research process

This study aims to investigate the influence of globalisation on the transformation of calligraphy in contemporary Saudi Arabian mosques from different points of view. It will also examine the changing correlation between calligraphy and internal spaces of Saudi Arabian mosques. The primary objectives were:

1. Review the definitions of 'art'.
2. Discussing the decorative and calligraphic patterns in Islamic architecture including the evolution of calligraphy and its applications.
3. Reviewing the social, cultural and global factors that affect both contemporary mosques' architecture and calligraphy

- Review the definitions of art.
- Conduct a review of the history of Islamic architectural ornament and calligraphic figures.
- Review the historical development of calligraphy and its use as an ornamental element in transforming space.
- Review the social, cultural and global/external factors that affect both contemporary architecture and calligraphy.
- Review the applications of calligraphy in contemporary architecture and in the visual arts.

The conclusions of the literature review shaped the key research questions as:

1. What has been the influence of the modernist school on calligraphy?
2. What is the impact of the above on the spiritual concept of calligraphy and religious space in contemporary mosque architecture?

The above questions dictate the method of investigation, and how to evaluate its outcomes.

Creswell (2008) stated that philosophical assumptions used towards the research procedures, design and methods must be stated. This means that there is a need to explain the epistemological perspective (the philosophical foundation of the research) and the conceptual framework of the subject. In order to answer the research questions this study has reviewed relevant literature to develop its methodological approach. The review of the literature set out two main streams in which the nature of the problem resides these are: the traditional and modern perspective of evaluating calligraphy in the mosques' architecture; and investigating problems that artists and experts experience.

Changes in calligraphy styles are complicated and require investigation from multiple perspectives. Based on my personal observations whilst there have been no drastic changes, there

has been an indication of similarity in both traditional and contemporary mosques in Saudi Arabia. Furthermore, the current mosques in Saudi Arabia do not support the integration of a wide variety of information. For these reasons, it was essential to conduct a qualitative approach and use the case-study method.

3.6 Data collection and analysis process

Data collection began in August 2015 and continued until mid-2016. The first step involved taking photographs of the calligraphic and decorative patterns inside the two selected mosques. The second stage was to collect data from the questionnaire conducted with artists, and data collection from the interviews with the six experts. The processes and tools used for analysing the collected data were different.

Based on the outcomes of the literature review and the findings of the pilot study, the data of the current study could be divided into two main types; pictorial and written. The pictorial data includes photos and sketches that have been generated or produced by the researcher. Written data will be collected from the survey with artists and interviews with experts.

3.7 Pilot study/Research Sample

3.7.1 Pilot study

The pilot study formed important starting point for the research and was used to adapt changes to the later study. It was conducted in August 2015, and this occurred before the field-work. I visited two mosques and took pictures of calligraphic patterns, decorations and the internal spaces of both mosques. I planned to conduct some interviews with visitors of the mosques. Due to religious, political and cultural procedures I faced some difficulties in conducting the planned interviews inside the two studied mosques. Despite some problems, I succeeded in interviewing a random sample of visitors. They were asked some related questions about their impressions about the internal appearance and decorations of the two mosques. These questions were asked during a general discussion. The time allocated for each participant who was interviewed was adjusted to 7 minutes, however this was found to be improper and unacceptable by most participants. The responses of the sample of participants was found to be effective and provided some important information. It is worth mentioning that I found that the majority of visitors refused to respond to the interviews.

Based on the results obtained in this pilot study, I decided to conduct some unstructured interviews based on pictures, with Saudi Arabian people in the United Kingdom (UK) using a focus-group research method. In December 2015, I conducted further interviews within the UK. This time it involved using two focus-groups with interviews with a total of 10 female students. Interviews from this sample included a member of the Saudi Arabian Cultural Bureau in London who indicated that there was a need to conduct online questionnaires instead of interviewing the visitors in Saudi Arabian mosques (Appendix A). After consulting the director of the study, he recommended conducting a questionnaire with artists rather than using a random sample of visitors because of their expert knowledge with traditional architecture and decoration.

The findings of these interviews and the results of the pilot study corroborated that there was a need to reform the strategy of the research. I had to make sure there was going to be flexibility in

applying the methods of the study. Other points learned at this stage were the sensitivity with using the term ‘spirituality’. My role as a researcher meant that I could overcome this difficulty by explaining the use of ‘spirituality’ within the context of this study (see the terms of references). Another obstacle was the refusal of most visitors and managers to speak about anything regarding the study, considering it to be a sensitive issue. I used this finding to change the case study approach so that it involved a group of Saudi Arabian artists (surveyed by questionnaire) as well as interviewing six experts in the art of calligraphy.

3.7.2 Research sample

The population of Saudi Arabia is estimated to 31,742,308 in 2016 (general authority for statistics Saudi Arabia, 2016). The study set the confidence level at 95% and set the confidence interval (margin of error) at 11.88. Therefore, the research sample of artists is 68 (Figure 61).

Determine Sample Size	
Confidence Level:	☒ 95% ☐ 99%
Confidence Interval:	11.88
Population:	31742308
Calculate Clear	
Sample size needed:	68

Figure 61. Determination of sample size.

This sample of artists was chosen randomly from the whole country. Gay (1987) reports:

“Random sampling is the best single way to obtain a representative sample. No technique, not even random sampling, and guarantees a representative sample, but the probability is higher for this procedure than for any other” (p. 104).

3.8 Case studies

3.8.1 Survey of the two mosques of Al-Naim and King Abdullah Mosque in Saudi Arabia

Al-Naim Mosque was opened on 4th May, 2015 in the city of Al-Ahsa and represented traditional architecture. It was chosen because of its significant features with its decoration and calligraphy. King Abdullah Mosque was opened on 17th June, 2015 in the city of Riyadh and represents an example of contemporary architecture.

The case studies include a survey and documentation of the calligraphic features in the two mosques. Yin (1994) explains how it is essential to document the topic of the case study. The two mosques representing the topic and their details are analysed using a survey of the buildings, photographs, and analytical drawings of various decorations. This survey of different parts of the space compares the traditional style with a contemporary style of mosque in Saudi Arabia.

3.8.2 Questionnaire with a group of artists

The opinions of the general-public are important, however because of problems that have been discussed in the pilot study section and the political situation in Saudi Arabia in 2015 and 2016, meant that my role as a researcher was disrupted and I was unable to conduct the interviews or survey visitors inside the mosques. The pilot study identified different opinions about calligraphy in contemporary mosques' architecture. Participants within the United Kingdom were important in drawing attention to views about calligraphy that are influenced by Islam as a religion and linked to Islamic Art. Therefore, the need to conduct a questionnaire with artists was deemed essential to collect information about perceptions of traditional and contemporary forms of calligraphy in religious architecture.

To overcome these problems, I conducted an online questionnaire during May and June in 2016, with artists who had knowledge of the traditional and contemporary styles of Islamic architecture. Five main questions were edited and revised with the director of the study at Birmingham City University (BCU) to ensure their validity (Appendix A). An estimated time for each participant of the 68 participants was 15 minutes per questionnaire, and the deadline was set for 15th July, 2016.

3.8.3 Interviews with six experts in the field of calligraphic art

This research is not only interested in the opinions of artists about calligraphy, but also how experts make sense of the transformation of calligraphy in a mosques' architecture, and in visual arts. It is also important to explore how they interpret the changing patterns of calligraphy and explain links to the different categories of calligraphy in architecture and the visual arts. The qualitative approach used for this research assumed that each participant interprets and values a phenomenon in different ways. This meant that this study focused on the participants, their interpretations, perceptions, and values of calligraphy transformation. It was important that the sample of six experts were chosen from different countries and their contribution in the field of calligraphy to guarantee a greater variety of opinions (detailed in Chapter 4).

These experts were: Shokdar, M. from Saudi Arabia, Tosoon, M. from Egypt, Elbendouri, M. from Morocco, Adnan, J. from Iraq, Alhashmi, Z. from Yemen and AbuTouq, I. from Jordan (see appendixes C–H for their styles). Unstructured interviews were the primary tool for gathering data. The questions were individually created through the interaction with interviewees (creative statements) to ensure obtaining specific opinions with the opportunity of gaining some extra points of views. The interviews were in Arabic, because the interviewees were Native-Arabic speakers and their interviews have been translated into English as the main language of

the study. The estimated time was two-three hours per interview. Because of the political crisis in some countries and to provide equal opportunities, the interviews were done through Skype and emails.

3.9 Data analysis process

3.9.1 Analysis of (documents and written data)

Document analysis is the systematic procedure which allows for the review and evaluation of printed or electronic form material (Bowen, 2009). Documentary analysis means that it is possible to understand and make developments about empirical knowledge, however, the data should be examined and interpreted (Corbin and Strauss, 2008). This method is often used in case studies for example, in a study by Angers and Machtmes (2005), an analysis of the documents was conducted as a part of their ethnographic case study. This illustrates how it is possible to explore various contextual factors and beliefs.

The current study uses an etic focus which means the participants and the setting are represented by what the researcher brings to the study (Stake 1995). This type of analysis means that data is collected in the form of field notes. This process demands multiple sources of data which need to be analysed and can be from: interviews; observations; diaries; photographs; and artefacts. Whether material is included or excluded for analysis and the order for presentation, are some of the important choices that the researcher must make. Parts of the analytical drawings are presented in the text to support the discussion while the rest of survey materials are classified chronologically and are presented with annotation in the appendix. The formal systems used for analysing qualitative data involve coding. The importance of coding is to find and mark the implicit notions in the collected data and to put together those similar types of information, categorizing them and linking such themes and notions (Rubin and Rubin, 1995).

O'Connor and Gibson (2003) have summarised the components of such analysis, that is inclusive of: organizing the data, finding and organizing ideas and concepts, building overarching themes in the data, ensuring reliability and validity in the data analysis, finding explanations for findings, to give an overview of the final steps and create a final report. This report is where the researcher summarizes why the research question(s) were important, how he went about answering them (methods), what the findings were, the implications of those findings, recommendations, and strategies, and areas of future research.

Corbin and Straus (2008) explain that qualitative data analysis can be understood as art and science because the process of analysing demands a balance between the two. It is possible to believe that qualitative data is 'art' since it relies on creation and execution of various procedures to solve a problem. It is also 'science' because the systematic process of analysis of the data is supportive of the concepts that are about to develop in terms of both their dimensions and properties and can also allow comparisons against the incoming data (Corbin and Straus, 2008). According to Wolcott (1994), there are three main processes in the analysis of qualitative data: interpretations, analysis, and descriptive, wherein these processes are also described as 'data

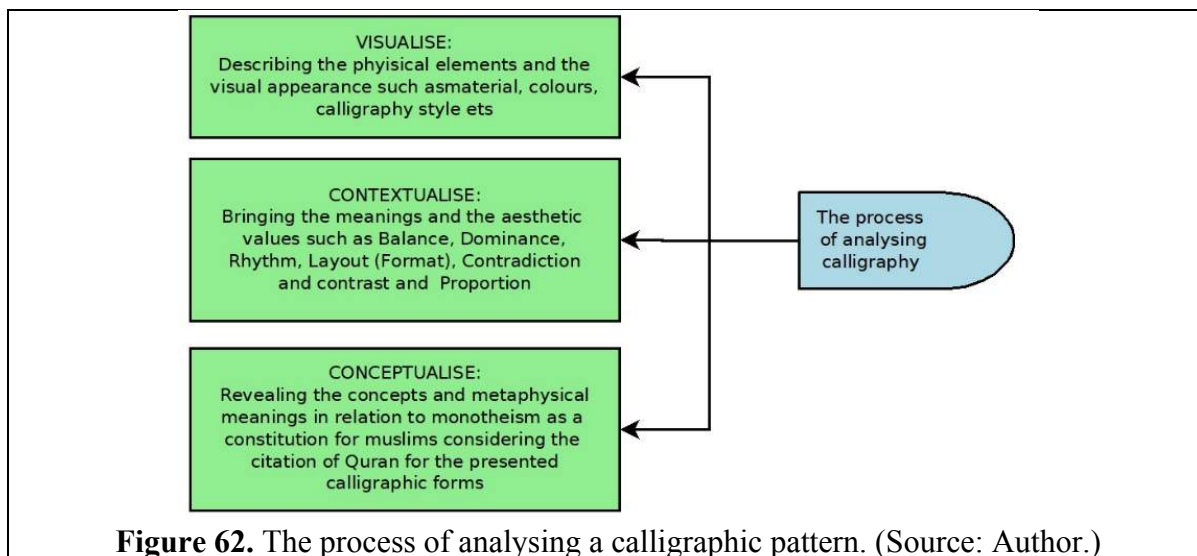
transformation'. The descriptive analysis is what often leads to the beginning of the qualitative process. This is developed from informant's words and field notes in order to ensure that the researcher can stay close to the data that was recorded originally (Wolcott, 1994). The second process expands to form an analysis that commences in a systematic way. The third process helps to make sense of what is occurring.

3.9.2 analysis of (calligraphic and pictorial data)

There are different methods for analysing artworks (photographs, paintings or calligraphy). This allows different research to adopt suitable methods. For instance, Pengelly's (1996) PhD research tested the parameters of everything that could be achieved by using materials and methods of alternate kinds. He visualised some of the research questions: 'what happens if I use safer X instead of more hazardous Y?' In the context of this specific PhD examination, the artwork allowed for compelling evidence of a pursuit of an active kind, and the response that the researcher would give to those questions. According to Hesford and Brueggemann (2006), artworks' analysis involves examining them in terms of subject/content, perspective, and audience/content.

Shillito (1991) conducted a contextual research (identified industrial uses) and undertook technical research (tests of equipment and processes). This study used computer software for designing, manufacturing and then applying these experimental processes using his own design methodology. This study then produced a series of jewellery in response to and embodying these technologies.

However, some criteria of the different methods do not apply to Arabic calligraphy. Therefore, for analysing the calligraphic patterns, a method based on Feldman's model and related to the structuralism of Panofsky and the sign of Saussure (explained in Figure 26, Section 2.7.2) as well as Al-Ghazzali theory was developed. This method took into consideration the aesthetic values in the formations of calligraphy discussed in Section 2.5.9. A model which focuses on visualising, contextualising and conceptualising such form of calligraphy was developed (Figure 62).



3.9.2.1 Contextualising the adopted method for analysing calligraphy

Feldman's exploratory approach suggests four steps for evaluating an artwork: **Description** (what is seen), **Analysis** (the way of using elements and principles their relationships), **Interpretation** (the content, concept, or meanings) and **Judgment /Evaluation** based on the previous three steps (Blackmon, 2015). The Feldman method moves from objects to subjects.

Keeping in mind Panofsky's three levels of interpretation, the epistemological theory of Al-Ghazzali was chosen to be a representative of Islamisation of Calligraphy. It is a combination of both iconology epistemology in relation to [Tawheed] monotheism (Hamidon, 2012). Therefore, the structuralism here is basically a relation between a concept and a 'sound image' (discussed in Section 2.7.2).

Considering the Hegelian philosophy that art is a spiritual and sensory activity, this activity does deal with abstract as one sensual and spiritual (Hegel, 1988). Thus, we could define such sensual and spiritual contents in mosques as the changeable (Shape) and the constant (Concept). For Muslim artists and calligraphers, the concept is monotheism (Figures 63, 64 and 65).

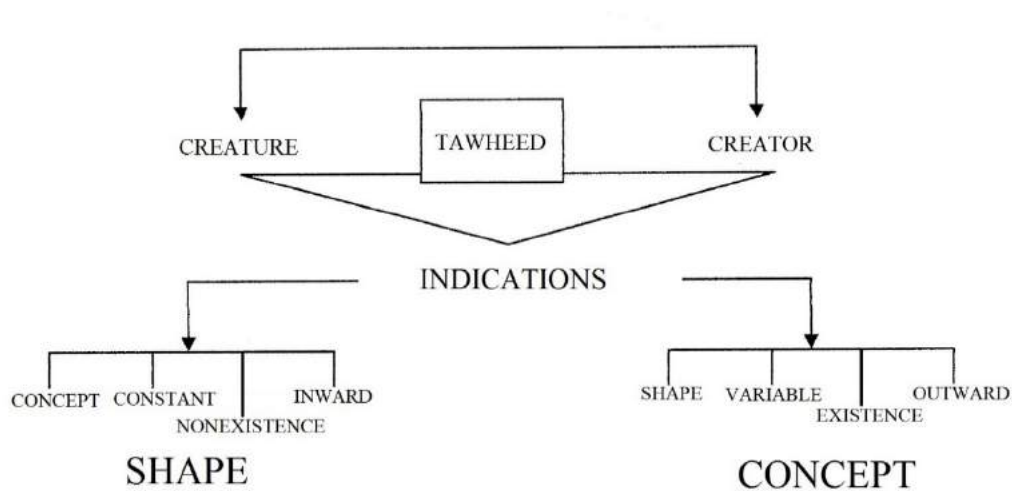


Figure 63. The dualism of shape and concept in Islamic faith. (Source: Author.)

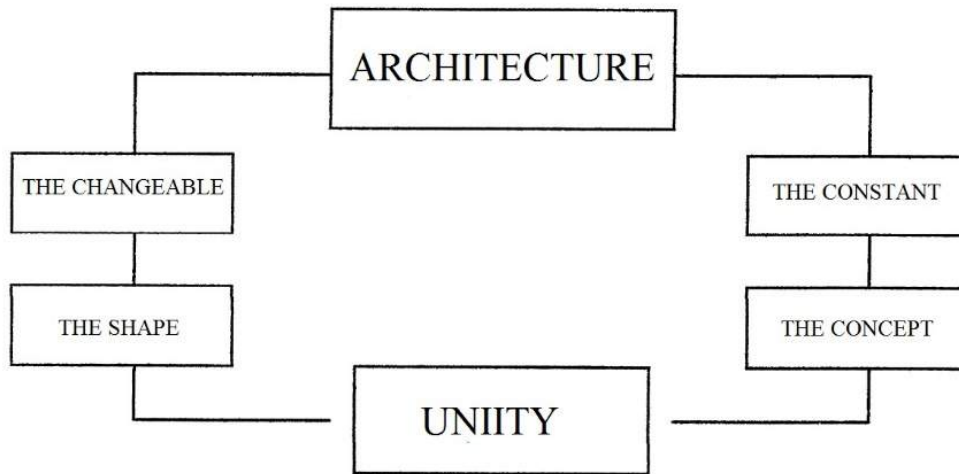


Figure 64. The dualism of shape and concept in Islamic architecture. (Source: Author.)

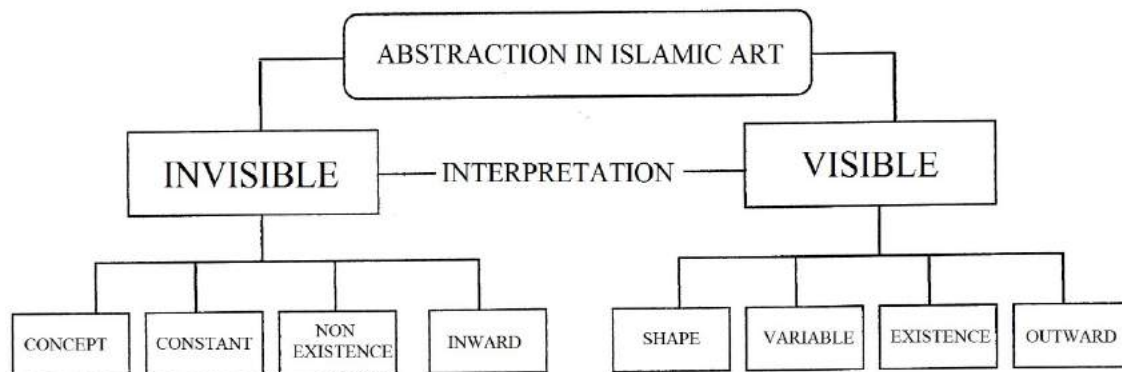


Figure 65. The dualism of shape and concept in Islamic Art. (Source: Author.)

Al-Ghazali theory suggests that the process of producing a calligraphic artwork takes the tack of: Tawheed (Monotheism) – content-context and form, while the process of interpreting it takes the opposite tack (discussed in Section 2.11.5).

To summarise, the first area of methods of ‘visualise, contextualise, and conceptualise’, *visualise* is basically focusing on describing the visual aspect and elements of the artwork. In the case of calligraphic patterns inside the mosques, the present research focuses on the style of calligraphy (e.g. Kufi, Thuluth etc.), the material (wood, gypsum etc.), the colours of forms and backgrounds, and the shapes.

The *contextualise* part is mainly used to help researchers provide a broader view and link the visual elements to the aesthetic values such as unity, dominance, contrast etc.

The *conceptualise* part is to relate the above to the Islamic faith. Therefore, one could notice that all citations of calligraphic patterns inside Saudi Arabian mosques are from the Holy Qur'an and the Narration of the Prophet (Hadith).

3.10 Ethical Consideration

All ethical guidelines of BCU are carefully considered by the researcher. All of my research materials were checked through BCU and with the Saudi Ministry of Education consideration. This was an important procedure for institutional authorisation and obtaining authorisation. The aim of the research and its objectives were informed to all the participants as well as the participants' value for the research, and then their consents were requested before starting.

Moreover, all the participants were also told that they had the right to withdraw themselves at any time during the project if they wish. The collected data were handled confidentially and securely and never been shown to any people or organisation before their agreements are received. The questionnaire included a consent that does not move the participant to the questions unless it confirmed while the experts had provided a written consent (Appendix B). The participants were told as well to give (if wanted) consent for quoting and citing their responses for the research purposes.

3.11 Summary of the chapter

This chapter explains the methodology, research design and approach. The qualitative research approach focuses on discovery. This collects data through a variety of techniques and then uses a thematic analysis, to identify and characterise the important categories, dimensions, and interrelationships of the phenomenon. Linking the assumptions to the specific character of the research demonstrates that a qualitative research approach was appropriate for this study. This qualitative approach complemented the third facet of the research strategy, using a revelatory case study approach to the phenomenon.

CHAPTER IV: THE CASE STUDY OF AL-NAIM AND KING ABDULLAH MOSQUES

4.1 Introduction

The chapter discusses the case-study approach applied for the two mosques of Al-Naim Mosque in the city of Al-Ahsa, and King Abdullah Mosque in the city of Riyadh, with analysis of the survey of the buildings, and is accompanied by photographs, and analytical drawings of various decorations used in different parts of the spaces. An analysis of the chosen calligraphic patterns of both mosques is provided.

4.2. The Choice of the Two Mosques as a Part of the Case Study

Studying the complicated concepts of the changes of calligraphy in Saudi Arabia requires a multiple-perspective discussion. There is similarity in both traditional and contemporary Saudi Arabian mosques. It was, therefore, difficult to choose which two mosques for the case study exercise to best answer the research questions.

A case study method typically involves gathering evidence from various examples of the phenomenon under study to construct a theory (Yin, 2013; Fellows and Liu, 2003). Alternatively, case-study research can be conducted using theories as the main basis (Yin, 2013). Yin (2013) claimed that:

“A good theoretical proposition lays the foundations for generalising the findings from the case study, which can apply to other situations through making ‘analytics’ instead of ‘statistical generalisations’”. (pp. 26-27)

I had difficulties in identifying suitable traditional mosques for study in Saudi Arabia, owing to significant refurbishments they have undergone. There are no original, traditional mosques with displaying the common styles of traditional mosque architecture (Figures 66, 67, 68, 69, 70 and 71). Furthermore, there are many modern mosques, especially those built in late 2000s, most of which were not built by the local community.



Figure 66. A mihrab from the Umayyad style which shows the common colours and tones beside the flow of decorative patterns and its harmony with calligraphy. (Available from https://c5.staticflickr.com/5/4065/4686109164_5c7e885992_b.jpg)



Figure 59 A mihrab from the Seljuk style that shows the unity in its perfect image between colours, patterns and calligraphy. (Available from http://esyria.sy/sites/images/aleppo/ruins/118831_2010_08_03_21_52_16.jpg)



Figure 60. A mihrab from the Mughal style that shows a complementary composition of the colours and patterns alike and the overshadowing of the blue colour. (Available from <http://blog.travelculture.com/wpcontent/uploads/2012/05/shahjehan-mosque.jpg>)



Figure 61. A mihrab from Ottoman style which shows the harmony between the elements and the appearance of the green colour. (Available from <http://www.rougemagz.com/wpcontent/uploads/2015/03/6565.jpg>)



Figure 70. The mihrab of the 1st case study. The colours could be considered as a continuation of the common Islamic styles beside the geometric and vegetal patterns (Author).



Figure 71. The mihrab of the 2nd case study. The disharmony between colours can be noticed beside the changing patterns of decorative elements (Author).

As seen in the literature, there are no observed drastic changes in calligraphic development, but an indication of similarity of traditional and modern mosques alike in Saudi Arabia. To identify two mosques that represent the two approaches of traditional architecture and the modern one was a key concern. And Al-Naim Mosque in the city of Al-Ahsa (Figure 72) (to represent the

traditional architecture) and King Abdullah Mosque in the city of Riyadh (Figure 73) (to represent the modern architecture) were selected.

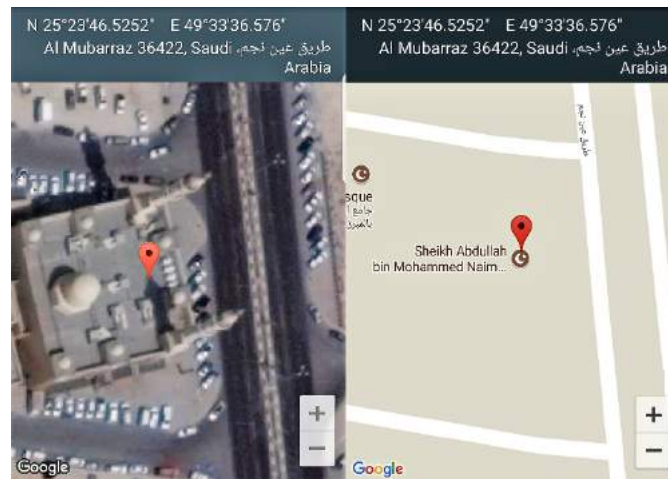


Figure 72. The location of Al-Naim Mosque (Google Earth).

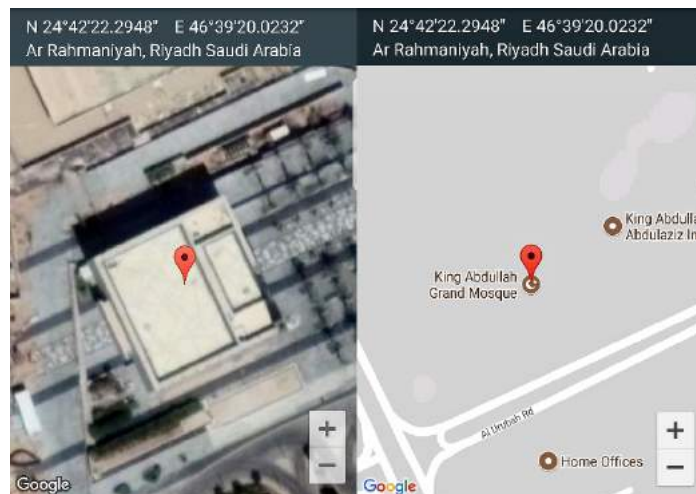


Figure 73. - The location of King Abdullah Mosque (Google Earth).

4.3. Rationale, explanation and analysis of the two mosques

This research makes use of a holistic and multiple-case study approach, outlined by Yin (2014), because it provides the greatest depth and quality of information. This approach was specifically chosen to examine the perceptions and meanings of calligraphy shifts through history by exploring different contexts. However, the phenomenon is very complex. Thus, the process of analysing the first case study influenced the next case study's direction.

There are many old mosques in Saudi that date back to the 7th century AD, but unfortunately most of them went under refurbishment and have been renovated. Such renovation resulted in a

loss of the original significant features. Other contemporary mosques such as Al-Rajhi mosque (which was built in 2013) in Makkah do not include any evidence of calligraphic forms (Figure 74).



Figure 74. Al-Rajhi mosque, Makkah.

The same phenomenon applies to Aisha Kaki's mosque in Jeddah (which was built in 2009) (Figure 75).



Figure 62. Aisha Kaki's mosque, Jeddah.

Therefore, Al-Rahmah mosque (which was built in 1985) in Jeddah (Figure 76) is likely the oldest one that has not been refurbished, but there are other mosques that could represent the traditional architecture in a better form.



Figure 76. Al-Rahmah mosque, Jeddah.

Trewin (1968) states that Islamic architecture derives from Muslim cultures throughout Islamic history. It is inspired by the essence of spirituality, which is considered to be an important factor in Islamic Art and architecture, no matter the scale. However, considering the dates of construction, was unsuitable as a choice for a traditional mosque for case-study purposes.

Some contemporary mosques in Saudi Arabia do have similar characteristics to traditional Islamic architecture, while other older mosques now lack such original characteristics. Therefore, the study considered the interior and exterior forms and features of the buildings for categorising the mosques into traditional and contemporary rather than the build date. Thus, the main distinction that can be made between the traditional and contemporary mosques is the architectural features, either internal or external. Over time, the contemporary mosques reveal a much more intriguing design, both internally and externally. Another distinction that is observed between the traditional and contemporary mosques is the representation of calligraphy inside them. The calligraphy is much more stylish in contemporary mosques and shows the clear artistry of the calligraphers. This is further described below.

4.3.1 Surveying the Two mosques of Al-Naim and King Abdullah Mosque

The first mosque, Al-Naim Mosque was opened on 4th May 2015 in the city of Al-Ahsa (it was chosen to *represent* traditional architecture; (Figures 77-85). It has significant features of both the decoration and calligraphy. King Abdullah Mosque was opened on 17th June 2015 in the city of Riyadh (and was chosen to represent contemporary architecture; (Figures 86-93).

The case studies includes a survey and documentation of the calligraphic features in the two mosques. Yin (1994) says that it is essential to document the case study. Thus, the survey includes surveying the buildings, taking photographs, and preparing analytical drawings of various decorations used in different parts of the space for comparison with the traditional style (as detailed in Chapter 5).

4.3.1.1 Al-Naim Mosque

Sheikh Abdullah bin Mohammed Al-Naim Mosque was built by his son: Sheikh Saleh bin Abdullah Bin Mohammed Al-Naim. The applications of the old Andalusian Islamic decoration

A photograph of the Great Mosque of Aleppo, showing its large domes and minarets under a clear sky. The image is taken from a low angle, emphasizing the height of the minarets. The architecture is a mix of Islamic and Byzantine styles, with visible arches and domes. The sky is a pale blue, and the overall lighting suggests a bright, sunny day.



Figure 81. The main entrance of Al-Naim mosque.



Figure 82. The way to washing area, Al-Naim mosque.



Figure 83. Selected decorations inside the Al-Naim mosque.



Figure 84. The Mihrab and decoration inside the Al-Naim mosque.



Figure 85. Different spaces inside the Al-Naim mosque.

4.3.1.2 King Abdullah Mosque

King Abdullah Grand Mosque was built by King Abdullah International Foundation for Humanitarian Activities. The construction of the mosque and the applications of its contemporary decorations were carried out under the supervision of the Saudi Binladin Group. The Imam of the mosque is Sheikh Nasser bin Ali Al-Qatami (Diyar, pers. Comm.). The following forms and images illustrate the floor plans of the mosque and its main components, as well as a selection of decorative and calligraphic patterns inside the mosque.



Figure 86. King Abdullah Mosque.

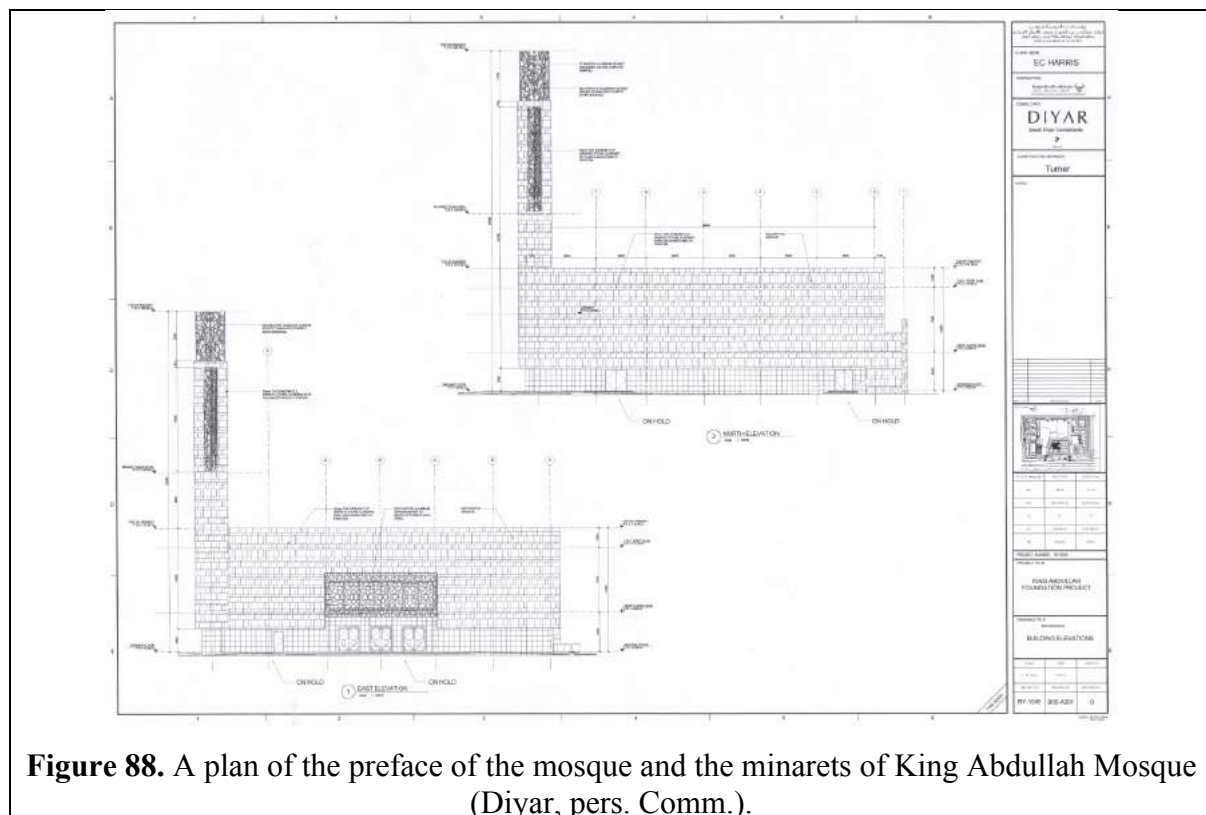
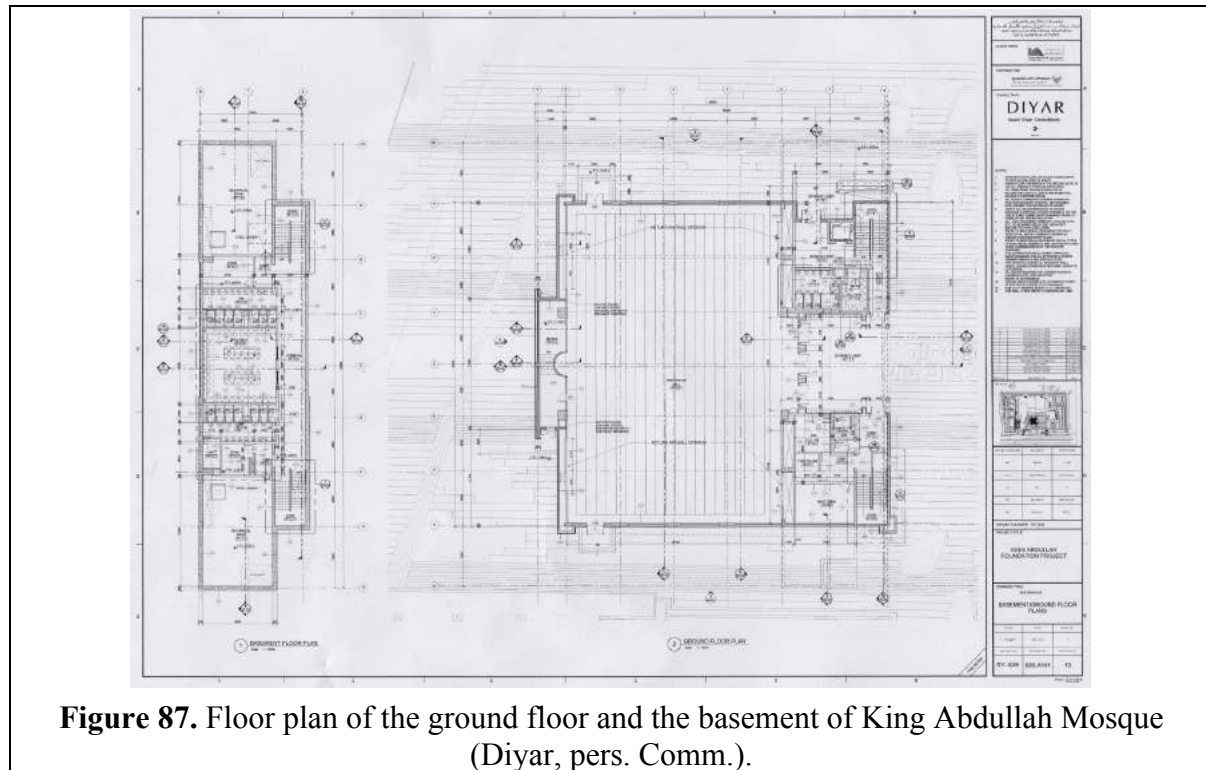




Figure 89. The way to washing area of King Abdullah Mosque.



Figure 90. The main entrance of King Abdullah Mosque.



Figure 91. Selected decoration inside King Abdullah Mosque.



Figure 92. The Mihrab and decoration inside King Abdullah Mosque.



Figure 93. Different spaces inside King Abdullah Mosque.

4.4 Analysing the Calligraphic Patterns of the Case Studies

The following analyses some of the calligraphic patterns of the two mosques of Al-Naim and King Abdullah. I chose 3 forms for each to consider the features and characteristics of the calligraphy that represent the Traditionalists' and the Modernists' approaches. The analysis focuses also on the spiritual space of each mosque.

The calligraphic patterns are coded as N1, N2, N3 and so on to represent the Al-Naim mosque and K1, K2, K3etc. to represent King Abdullah mosque. These codes are used in Chapter 5 for the discussion.

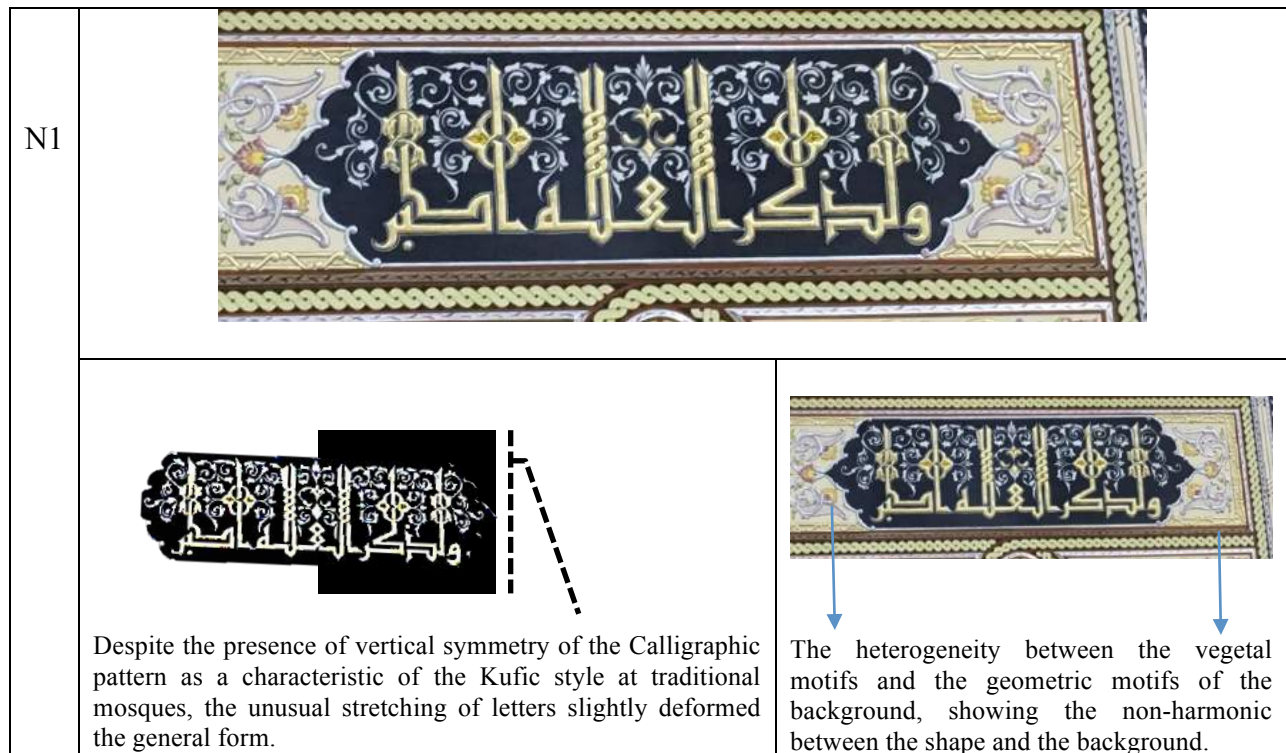


Figure 94. N1.

The calligraphic stripe (Figure 94) is written in Kufic style and surrounded by vegetal and geometric decoration. It is written on wood. It uses the colours gold and silver on a black background. The background is used to emphasise the contrast. It shows the verse of Qur'an "The remembrance of Allah is the greatest" (Qur'an 29:45).

Although the symmetry is significant, the distribution of the decoration in the background, especially the geometric motifs, was not homogeneous with the main shape (the calligraphic strip). In addition, the colour contrast between the Arabic calligraphy and its black background is clear enough to indicate its dominance. The 'rhythm of colour' took a different direction (a monochromatic gradient), which is evident in the decoration surrounding the calligraphic strip to the right and left. Despite this, there is a poor distribution of the golden colour within the work as a whole, and this may be due to the impact of culture as golden and silver are symbols of wealth.

As Burckhardt (1971) stated, the sacred calligraphy reflects the majesty of the Qur'an verses, the existence of Kufic style at mosques is historically appreciated. Kufic represents the secrecy of Arabic calligraphy. Al-Asqah (2011) states that Islamic Art is a combination of art and religion. Islamic Art, especially calligraphy, took its subject from the religious texts. However, it is common to see such short verses written in mosques beside their applications in modern art, with the calligraphy serving to fix the word God (Burckhardt, 1971). Muslims however, have high regard towards the words of God. The values of the Qur'anic writings stem from the religious thought, since Muslims consider them as a part of mentioning and remembering of God (Dhikr).

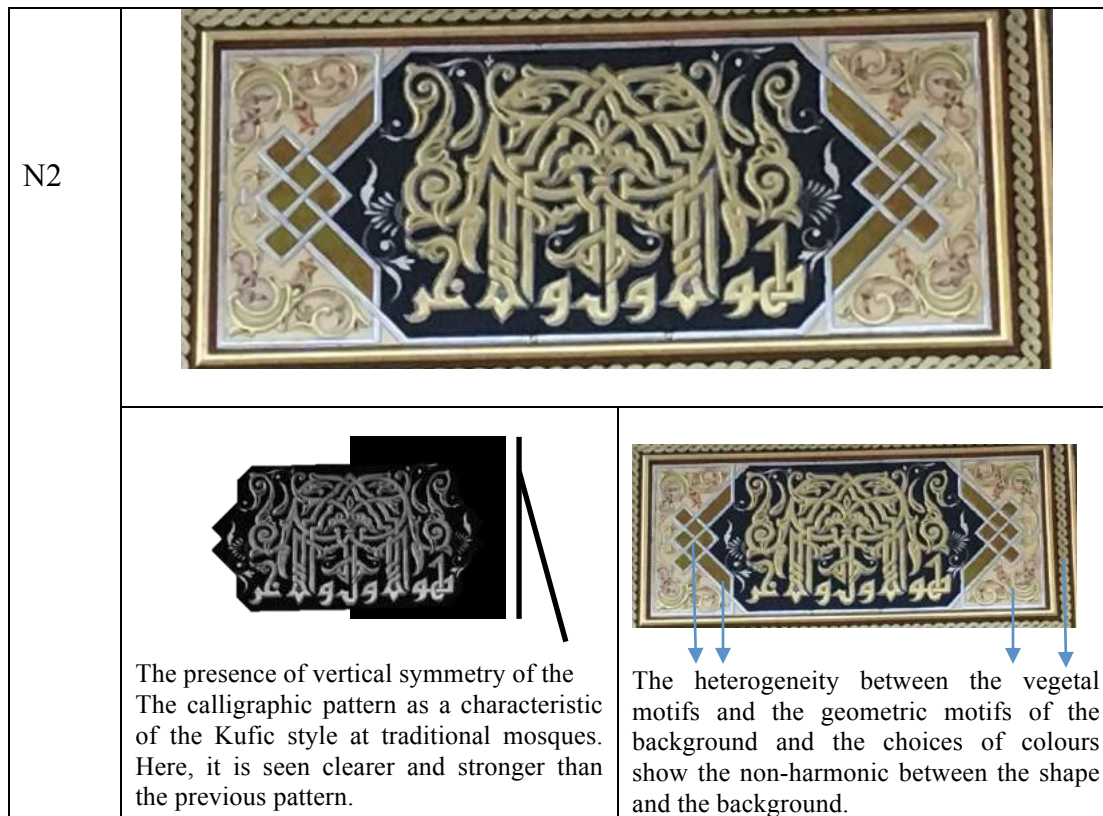


Figure 95. N2.

Figure 95 shows a similar calligraphic stripe, written in Kufic style and surrounded by vegetal and geometric decoration. It is also written on wood and uses the colours gold and silver on a black background for more contrast. It shows the verse of Qur'an "He is the First and the Last" (Qur'an 69:43). The remarkable difference between this calligraphic stripe and the previous one is the application of decoration. In N1, the decoration is separate from the writing as if it was an additional element, whereas it is a main part of the writing in N2.

As same as for N1, the symmetry is significant, and the distribution of the decoration in the background, especially the geometric motifs, are not homogeneous with the main shape (the calligraphic strip). Additionally, the colour contrast between the verse and its black background is clear enough to indicate the dominance of the form. However, the 'rhythm' of the decorative elements considers the monochromatic gradient. Despite this, the distribution of the golden colour within the work as a whole could again convey local cultural views about materials. As the current research focuses on Arabic calligraphy and its transformations, it can be said that the use of Kufic style here was highly successful if one considers the use of symmetry as a distinguishing feature of the Kufic calligraphy in the traditional Islamic architecture. This calligraphic strip shows the symmetry more than the previous figure.

Early Islamic ornament was simple. Much development then occurred as Muslims contacted and were influenced by many different cultures. Such development resulted in deriving complicated patterns. Calligraphy was added to glorify the decoration especially in mosques' architecture (Blair and Bloom, 2003). However, the uniqueness of the Muslim artist comes from a deep understanding of spirit and effort to draw people's attention to the sacred world. So, his artworks

have come as a great manifestation of the spirit for addressing the spirit of the viewers (Nasr, 1987). This, therefore, could highlight the widespread use of the Kufic style in traditional and modern mosques alike.

N3	
	This calligraphic stripe is written in a weak level of Thuluth style. The obvious point here is the difficulty of reading this verse. The calligraphic composition of the words involves the distribution of words in such a way that makes its reading difficult.  This word (Sky السماء) is written wrongly. Most likely, there is no uniformity between the geometric decorations and the Thuluth style.  The choice of colours makes homogeneity unsatisfactory.

Figure 96. N3.

N3 is written in the Thuluth style and framed with vegetal and geometric decoration. It is written on wood. It uses the colours gold on a green background. It shows the verse of Qur'an "He arranges [each] matter from the heaven to the earth; then it will ascend to Him in a Day, the extent of which is a thousand years of those which you count" (Qur'an 32:5).

Despite the dominance of the Thuluth writing and the existence of a remarkable degree of contrast between the calligraphy and green background, the presence of decorations is not homogeneous with the Thuluth style. What is more problematic is that the verse is poorly written and hard to read. Words were distributed up and down in an unusual way in the traditional style of Thuluth calligraphy. The use of the golden colour seems to be dominant.

Throughout its history, calligraphy witnessed many changes (Atanasiu, 2006), it can be said that while attempting to preserve the calligraphic composition's integrity, the impact of the changes of calligraphy is remarkable. Such changes include manipulation of the symmetry in order to generate and visualise changes that seem significant in the composition and harmonising both the written context and the image. However, N3 indicates the greatness of God. It also uses the common colours used at traditional mosques. Burckhardt (1970) states that even in the widest

sense of the term ‘sacred art’, it does not necessarily comprise images. This may explain the lesser use of decoration and limits to it in the frame.

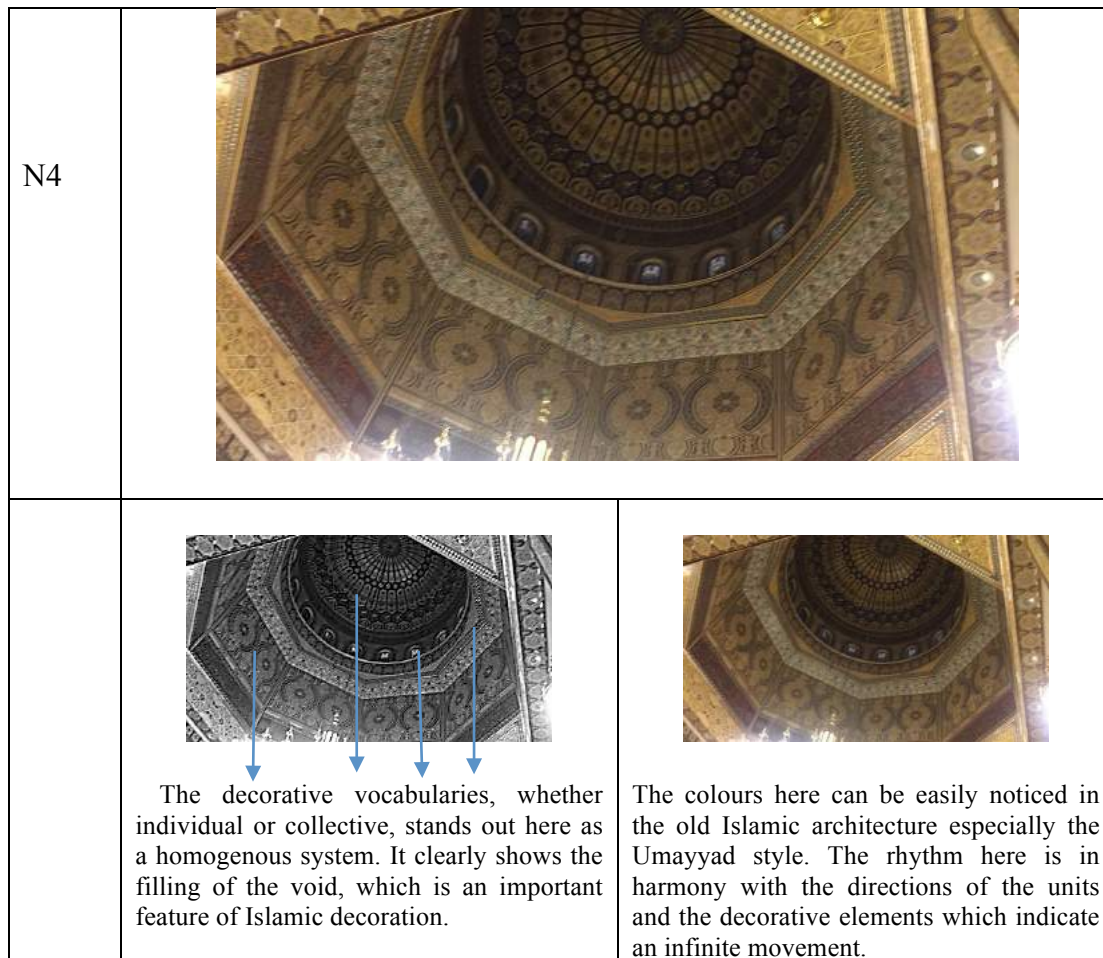


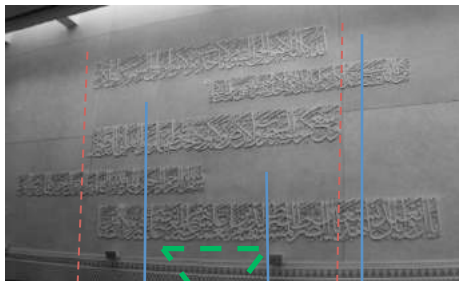
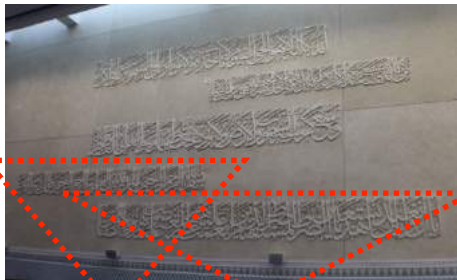
Figure 97. N4.

N4 shows an internal space, made of wood and gypsum ready-made templates, decorated with a mix of geometric and arabesque patterns and coloured mostly in gold with different tones of brown and burnt umber. It shows a similar appearance to those seen in the traditional architecture of mosques.

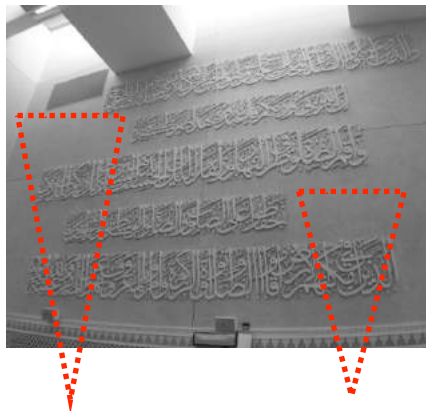
In terms of spirituality, and by considering the aesthetic values, this internal space is particularly interesting. One can see the domination and sovereignty, contradiction and contrast, rhythm and gradation, the relations of form to the background and the relationship of part to the whole and whole to the part. The distribution of decorations are harmonious and largely reconcile the geometric and vegetal motifs to enhance each other in a continuous formulation. The layout as an aesthetic value is clearly seen in this space as the decorative elements are consistent with each other. Proportion focuses on making certain that each element of the geometric and vegetal decoration is linked to the other harmoniously.

Unity, as one of the most important aesthetic relations which contributes to spreading the spirit of organisation among all the units within the whole composition, is shown in the composition as whole, with a high degree of correlation within its units. Perhaps the process of perceiving the form and determining the relationship between the whole and the parts of the structure help make it unique.

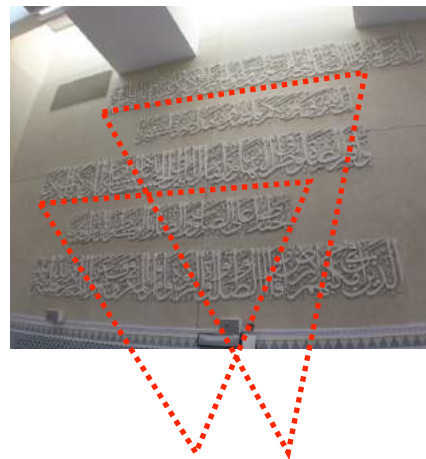
Muslim artists often gave privilege to the geometric, over the figural, and covered whole surfaces in dense geometric designs involving pentagonal, hexagonal, heptagonal and octagonal forms. Calligraphy was added to glorify the decoration, especially in mosques; architecture (Blair and Bloom, 2003). Islamic Art may be interpreted through the exteriorisation of an inner contemplative situation and instead of reflecting particular ideas, it will transform the ambience of a place in a qualitative manner to integrate it in a spiritual equilibrium (Burckhardt, 1970). However, this is commonly featured under the dome, and it indicates the unlimited unseen universe as well as having the practical and symbolic function of amplifying sound.

K1	
	 The distribution of random spaces caused some kind of visual discomfort. Spaces also have an uneven distribution. The geometric decorative stripe is useless here and seems isolated.  It is unusual to start with (In the name of God) or [Basmalah] in the middle of writing, not seen before in Qur'an.

K2



Not taking advantage of the spaces and employing them to serve the composition create a case of visual discomfort. Note that the void is disliked by the Muslim artist and filling it is one of the features of Islamic Art.



There is a defect in the ratio and proportion between the second and fourth and the rest of the lines. this defect caused some deformations to the main body of some letters despite being written by a master calligrapher (Mokhtar Shokdar).

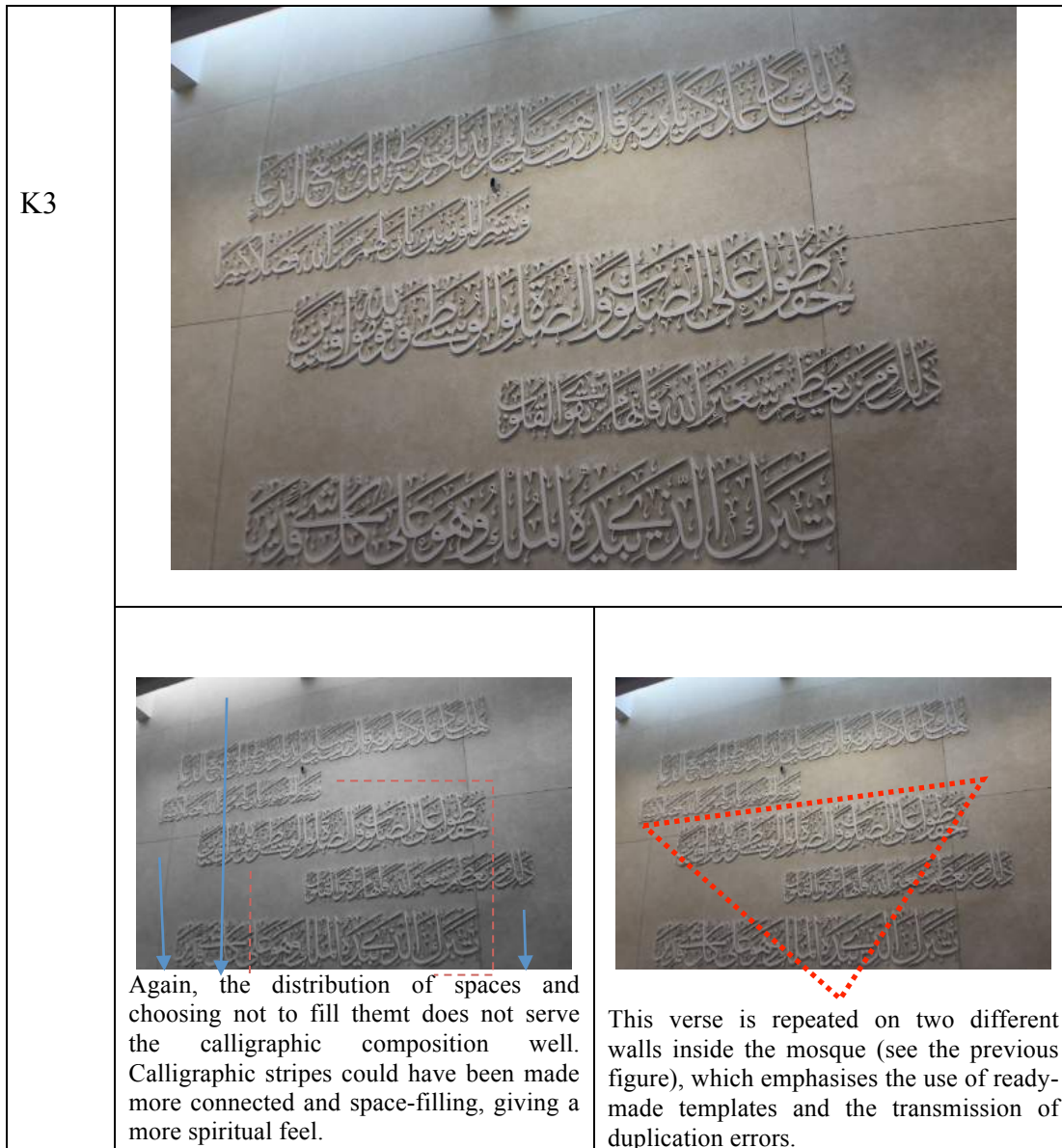


Figure 98. K1, K2, K3.

Unlike the traditional style, the second case study shows several verses of the Qur'an written in Thuluth on gypsum and plain ceramic. The calligraphic patterns are in white on a beige background. They are spread over the internal walls of the mosque. Although they are neatly written in a pure Thuluth by the master calligrapher Mokhtar Shokdar, they came without any decorative elements either vegetal or geometric.

The main writing calligraphic strips achieve most the aesthetic values including dominance, rhythm, the relations of form to the background and the relationship of part to the whole and whole to the part. However, the distribution of spaces and not filling them does not serve the calligraphic composition well and may be considered artistic defects. Calligraphic stripes could have been made more connected and space-filling, giving a more spiritual feel. The ratio and proportion between the lines, and at the beginning and end of each one, deformats the overall composition. This could imply the wide use of ready-made templates. Consequently, the main

body of some letters, despite being written by a master calligrapher, exceed their usual dimensions (considering the basis of Thuluth calligraphic style). Moreover, not taking advantage of the spaces and filling them to serve the composition, create a case of visual discomfort even though the void is disliked by Muslim artists and infilling is one of the features of Islamic Art.

Overall, the neat writing could have represented uniqueness, if the distribution of spaces was not random and unevenly distributed.

This may result from the influence of globalisation. However, despite such impact, the calligraphic patterns do express the beauty of Arabic calligraphy. According to Read (1972) ‘beauty is a unity of formal relations among our sense-perceptions’. It is the only sense-perception that is essential, from which a theory of art can be built up. Although globalisation has begun to become a key influence in terms of mass production, it has greatly replaced the traditional richness of calligraphic and decorative elements in the Muslim architecture (Chris, 2006). The esoteric doctrine concerning the nature of calligraphy in combination with its immediate presence’s beauty, which touches all who are sensitive to the saving and liberating grace of beauty, provide the key for understanding the central position of this art in Islam and the reason for the position of privilege that it enjoys in the hierarchy of Islamic Art, as well as the important role that it plays in the spirituality of Islam itself (Nasr, 1987)

However, in its origin, Islamic Art is ‘a simple aggregate of constructional procedures and decorative formulae adopted by Islam from the techniques of the people under its domination’ (Godard, 1965).

K4		

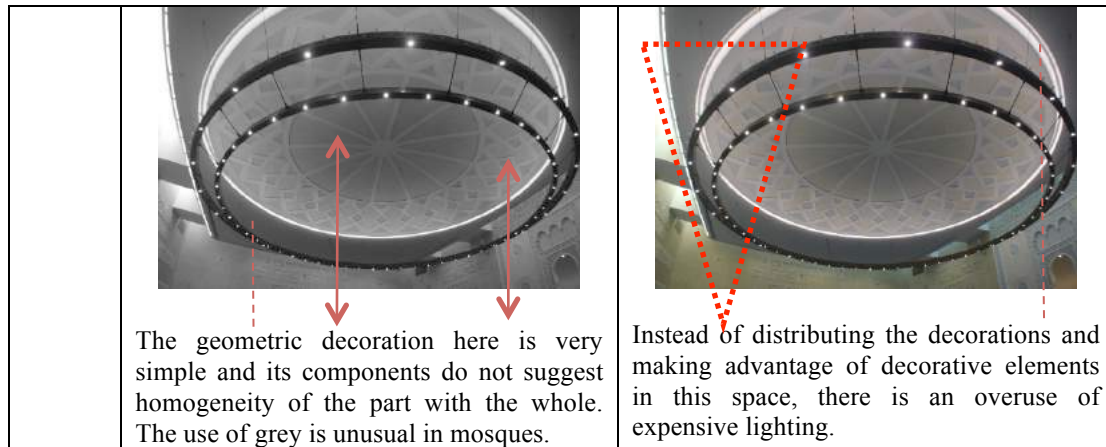


Figure 99. K4.

In K4, the internal space is made of gypsum. It includes ready-made geometric decorative strips, coloured in white, beige and grey. It also includes circular light units. This feature is commonly put under the dome and it indicates the unlimited unseen universe, besides its function in amplifying sound.

Unlike the Al-Naim mosque, this internal space clearly represents the impact of a materialistic culture. The ready-made geometric decorative strips are commonly seen in various types of buildings, not just mosques, but are clearly seen here. Its simple decorative elements and its components do not suggest homogeneity of the part within the whole. In addition, the use of grey colour is unusual in Islamic mosques' architecture. Unlike traditional mosques, which are known for complicated ornamentation, simple decorations are now a feature of contemporary mosques. Instead, use of electric lighting features in contemporary Saudi mosques, which are dominant here.

Decorative elements derived from the same templates are broadly used in Saudi and can be seen in many other buildings. The concept of art in Islamic philosophy is linked to the concept of Monotheism (Al-Asqah, 2011) but not overt in the work of some artists. It is as Nasr (1987) discussed; expressing the spirit that completed its elements of quality and made its symbols charged to exceed the limits of the senses and the mind to hold a close connection with the Absolute. Nath (1976) adds that the inner aspect of Islamic Art is interrelated with Islamic spirituality. This spirit of Islamic Art is a most important phenomenon in the calligraphic history, more important than all the formal vicissitudes of its growth. Therefore, considering the above, it can be said that this application of decoration is a clear example of materialising the Islamic decorative elements.

4.5 specific conclusions of the analysed patterns

Despite the widespread use of the calligraphic verses in both of the mosques studied, they, in general, do not represent Arabic calligraphy according to its former values and practices. The themes that were identified in the Chapter 2 (Section 2.5.9) should have been implemented. The artists should have made use of balance, dominance, rhythm, unity, layout, contradiction and contrast, and proportion. It is important for the artists to ensure that most of these aesthetic values are achieved, if not all of them, by considering the accuracy and rules of the main form (the essence). Al-Obeidi (2004) emphasises the importance of balance, as it is a general principle

of Islamic existence. For him, any process of calligraphic formation must be subject to a balancing process. Al-Ghanim (1998) justifies this, indicating that Arabic calligraphy became a necessity required by the psychological sense in Man because of the imbalance of the effects of anxiety or psychological tension. Since it is a relationship with the aesthetic in calligraphic composition and the need to exist to be able to achieve the objective of the work of art, the composition and its communication relations need to combine in a homogeneous calligraphic structure for balance. Therefore, balance involves the process of mastering the distribution of letters, shapes and 'white [empty] space', and their logical use, suggesting or verifying the equation of weights for forms on both ends of the visual or virtual axis (Al-Qalqashandi, 1963). The calligraphic formations in their independent form need balance except in rare cases. This can be seen in the calligraphic patterns of the second mosque (King Abdullah mosque studied). However, this does not reject the existence imbalance of their distributions on the walls. The writing should depict a clear formation, in the sense that every square, rectangle, or circle has clear spaces and balance.

In the Al-Naim mosque, the circular shapes occupy large areas inside the mosques (Figure 100). The distribution of calligraphy did not suit the shape artistically, i.e. there is a separation between the form and the background in most compositions. However, they were employed to an acceptable degree in some other patterns (Figure 101).



Figure 100. - The distribution of calligraphy in the circular shapes in the Al-Naim mosque.



Figure 101. The distribution of calligraphic compositions in the circular shapes in The Al-Naim mosque.

Dominance usually means ensuring that vector calligraphy was on point. This usually has colour, shape, size, texture or even space which should be clearly defined. The mosques that were visited showed that there is a clear use of the dominance factor in terms of colours and decorative elements especially in the Al-Naim mosque. Dominance is the assertion or distinction of a particular element, or a set of elements, surrounding it in design, which can be achieved by vector calligraphy, including colour, shape, size, texture, location or space, or by the motifs of elements (sovereignty is the nucleus built around it). It may be a positive element of form or space, which in art is the first to draw attention to it (Rushkin, 1971).

In terms of qualitative sovereignty, the use of different styles of calligraphy in Al-Naim mosque, such as Naskh and Diwani, Thuluth and Diwani could indicate sovereignty and prominence over other surrounding elements, because of their structural qualities and use of space (Graves, 1951). By contrast, it can be caused by the variation of the measurement of one of the characters in the word within the calligraphic configuration, or a word in the calligraphic structure. This results in the amplification of the proportions of some characters at the expense of other characters, while the contrast in colour in the calligraphic configuration appears through the colour of the ink used for composition (Sayegh, 1988).

As ‘rhythm’ is focused on showing the extension, integration, and sequencing of the calligraphic configuration, the calligraphy in King Abdullah’s mosque showed that the focus of the calligrapher (M. Shokdar) was retained, ensuring that the calligraphy repeated the same movement for the words that were constantly repeated. Of course, ‘rhythm’ is one of the aesthetic relations that indicate several expressionist concepts whose philosophical justification derives from its manifestations in nature and life. Repetition of designs in Arab Islamic art is highly regarded (Rushkin, 1971). ‘Repetition’ in this sense refers to important aspects and concepts in the process of calligraphic configuration, such as extension, integration, and sequencing, which are related to the ‘movement’ in two-dimensional calligraphic work surfaces, which is one of the most important manifestations of repetition (Sayegh, 1988) but again, this does not necessarily mean ignoring other artistic and aesthetic values. Repetition means the existence of multiple units (duplicates) interspersed with intervals, or interruptions, several extensions (temporal extension, spatial extension, the extension of the qualitative), which is any

extensions as a realistic concept of movement (endless movement). Therefore, the temporal and spatial extension is equal to movement (Almasraf, 1984).

Unity in calligraphic composition is one of the most important aesthetic relations which contributes to spreading the spirit of organisation among all the units within calligraphic composition, if placed in their correct places at the same time (Rushkin, 1971).

Perhaps one of the most important theories that played a role in the concept of 'unity' is the theory of constellations, which focuses on the process of perceiving the form through determining the relationship between the faculties and the parts on the structure of the form (Graves, 1951). Gestalt scientists have viewed design as the factor associated with closure or completion of work. Incomplete activity creates a stressful tension towards completion, that is, towards the formal closure of calligraphy configuration. This tension and incomplete structural relationships, or aesthetics, create a state of unbalance and tension (Noble, 1987). Consequently, this unity among calligraphic verses can be clearly detected in King Abdullah mosque, but not in the mosque of Al-Naim. In the latter, the integration between calligraphic patterns and the surrounding elements create a state of distraction and isolation of unity.

The layout of calligraphy for the King Abdullah mosque is clearly seen in the images captured during the fieldwork. The layout of the calligraphy reveals that there is consistency with each word joining the other. It is one of the organisational aesthetic relations of the calligraphic configuration in which the constituent units (letters and words) follow the meanings of the text structure of the Thuluth style, to achieve the functional aspects connected with the aesthetic side (Rushkin, 1971). Therefore, good distribution in the placement of characters and sections in the paths and directions are essential to the integration of calligraphic configuration and the consistency of elements. In Arabic calligraphy, consistency converges within an influential relationship for the purposes of producing an integral unit, and each one may vary according to its suitability within the context of the text or purpose. There are directional, scale, formal and spatial relations (Noble, 1987). The trends of consistency in the structure of the calligraphy vary and depend on the design as dictated by vertical, horizontal, slanted, and contrasting patterns to add an aesthetic relationship - the format (Bahnasi, 1998). However, the above relations are not fully achieved due to isolating the forms from the backgrounds. By contrast, in Al-Naim mosque, the calligraphic patterns are likely integrated with their backgrounds either in colours, textures or style.

The contradictions and contrasts as discussed above help in the understanding of the differences that calligraphy in the traditional mosques and in contemporary mosques can make. Contrast is an important value through which it can display the written vocabulary in calligraphic composition and contents, in such a way that it makes the essential elements clear and distinct (Graves, 1951). This helps with the possibility of investment to achieve sovereignty and guidance to the recipient to his goal and grant unity (Rushkin, 1971). However, in the case of the King Abdullah mosque, it can be noticed that the value of contrast is absent. The applications of colours do not support the value of contrast. This, therefore, resulted in using tones of the same colour for the form and its background. The calligraphic verses in the Al-Naim mosque, however, depend largely on the black colour as a background which reflects strong contrast. When elements are exposed to each other through the balance of correspondence or

contradiction, it is easy to identify and understand them. The variance takes a more flexible dimension than what is commonly known from the knowledge of contrasts, where the concept ranges from a maximum variance to a wide range to a minimum degree of contrast. Therefore, contrast can be a kind of comparison and can be similar or compatible or consistent in certain aspects and different or opposite in other aspects (Bahnasi, 1998). On this basis, the variation and its manifestations constitute an important aesthetic relationship in the structure of all arts and their basic design principles. In every calligraphic work there is a process of harmony and a slight, or apparent, opposition to the public space, but there is a work that has the apparent predominance in 'harmony' (Graves, 1951).

Lastly, 'proportion' makes certain that each word or element is linked. The design in terms of size and area is not determined by a fixed measure or law of its own (Graves, 1951). The standards that have been developed for Arabic calligraphy can be used to achieve technical writing (although the application of calligraphy standards may make it practical, this application requires excellence and skill and allows for creativity) (Rushkin, 1971). This is clearly seen at the Al-Naim mosque where the focus is on connecting each element either written or pictorial, with its closest surrounding element. Harmony, therefore, results from the participation of letters and formations in the distinctive styles of calligraphy and the distributions of elements and colours alike. Harmony can be achieved by the interconnection of a similar or different group of calligraphic work units and elements or the existence of what connects them, the harmony of work, and an aesthetic relationship between the calligraphic configuration vocabulary is formed (Bahnasi, 1998). However, compatibility of the Arabic calligraphy can have different forms either Functional or Symbolic (Rushkin, 1971).

In the case of the King Abdullah mosque, the compatibility of the characters of the Thuluth calligraphy performs an aesthetic function. Furthermore, the iconic and reliefs structures of Thuluth style in the mosque reflect the implications on the external body of the general form as a Symbolic compatibility. Harmony combines similar units linked by the meaning, symbol, mental or intellectual conclusion (Al-Said, 1988). Thus, harmony can exist between letters, words and formations in calligraphy. It can be homogeneous characteristics between the content and the general form resulting harmony, and harmony in the final composition of the manuscript (Rushkin, 1971).

CHAPTER V: RESULTS

5.1 Introduction

This chapter analyses the data collected from the questionnaire that was conducted with the artists, and the interviews that were conducted with the experts of Arabic calligraphy. The responses of the artists were classified into 'yes', 'no' and 'shared views'. The answers were merged and the incomplete questionnaires were used where possible. Figure 102 outlines the process of data analysis.

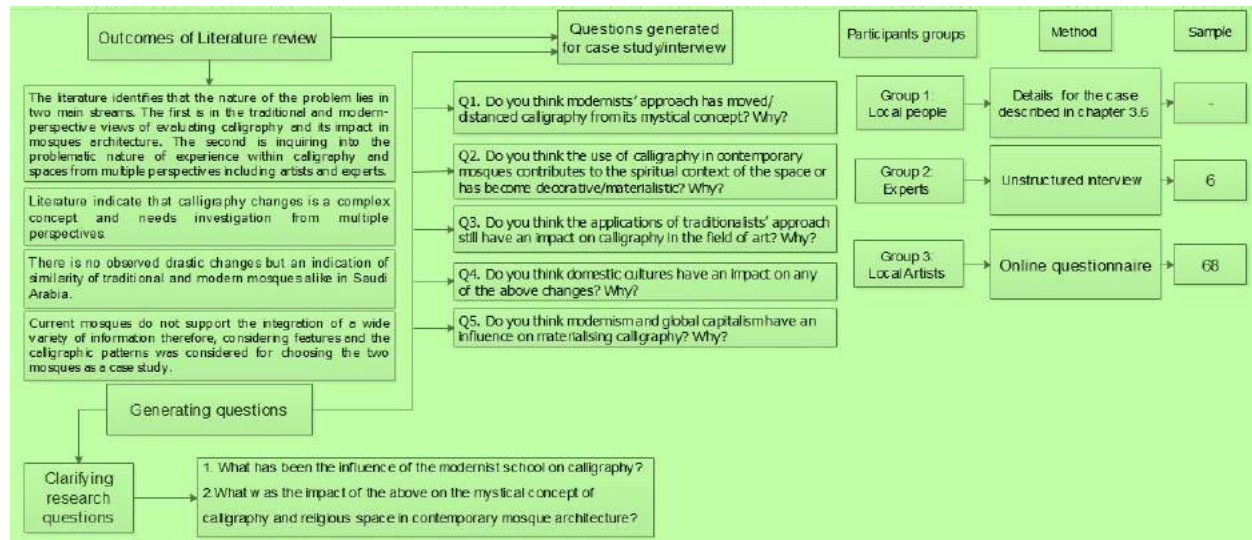


Figure 102. The process of collecting data in the present study.

The data were collected to provide the required information to respond to the two main research questions of the study:

1. What has been the influence of the Modernist school on calligraphy?
2. What is the impact of the above on the spiritual concept of calligraphy and religious space in contemporary mosque architecture?

It is worth mentioning that the following terms are used mostly in the analysis: Traditionalist approach, Modernist approach, contemporary art, and modern art. They are defined as follows: Traditionalist scholars or approaches believe in the fixed identity of the calligraphy based on the spiritual philosophy of Islam, which is not subject to change, whereas Modernists, while appreciating the dimensions of spirituality that comes from the Islamic faith, follow the contemporary philosophical debates projecting identity as a dynamic concept containing both traces of its past and the narrative of contemporary social life. Contemporary art is the art of today and is produced by artists of the 21st century, whereas modern art is the art of a style that can be distinguished by a significant departure from the styles and values of the traditional kind, particularly those created between the end of the 19th and the end of the 20th century.

5.2. Analysis of the Artists' Questionnaires

The following section analyses the responses of the questionnaire conducted with the artists (discussed in Section 3.8.2 above). The five main questions, which were posed in Arabic, of the questionnaire were:

1. Do you think the modernist approach has moved/distanced calligraphy from its spiritual concept? Why?
2. Do you think the use of calligraphy in contemporary mosques contributes to the spiritual concept of the space or has it become decorative/materialistic? Why?
3. Do you think the applications of the traditionalist approach still have an impact on calligraphy in the field of art? Why?
4. Do you think local cultures have an impact in transforming calligraphy? Why?
5. Do you think global capitalism have an influence on materialising calligraphy? Why?

The responses of artists to the questionnaire were classified, considering interpreting the meaning from the Arabic. The responses were classified into: ‘Yes’ or ‘No’, and participants explained their answers accordingly, and were reported in the text in the following manner:

Q1. Do you think a modernist approach has moved/distanced calligraphy from its spiritual concept? Why?		
Participants: 68	Yes: 32	No: 36

Table 1. Question 1.

Artists who responded ‘yes’ generally expressed that the modernist approach no longer represents the notion of spirituality. This is due to the lack of direct involvement of calligraphers and artists in presenting calligraphy on the walls of mosques. As a result, the aesthetic values of calligraphy in contemporary mosques have moved away from its traditional spiritual concept and replaced by its material and decorative patterns. Furthermore, exaggeration of decorating patterns of calligraphy removed the concept of its Islamic identity, converting the spiritual beauty of calligraphy into normal forms of writing.

Artists who expressed opposite views (‘no’) stated that although the modern approaches changed the figurative patterns of calligraphy, it still retains its spiritual meaning. These artists generally believed that the spiritual meaning is always embedded in calligraphy, regardless of its representation in traditional or modern styles. In this view, the relationship between mosque architecture and calligraphy has remained the same. This group further supported the modernists’ approach, commenting that spiritual calligraphy is linked to the language of Qur’an, not on how it is presented. Therefore, the change of representational style does not move it away from its spiritual context and the Modernist aesthetic reflects spirituality in a different way for this group of respondents. The response of few artists was more supportive of the modernist approach, stating that since calligraphy is a sacred art, the Modernist approach of calligraphy represents a new form of spirituality in contemporary mosques. For them, the Modernist approach, therefore, has made calligraphy more spiritual.

However, artists stated some shared points of view. These included that although there is a whole agreement about the spiritual message of calligraphy, there is a disagreement about the ways of its representation. This is because of the employment of unskilled calligraphers on the one hand, and the excessive misuse of materials on the other. It is thought that spirituality stems from the mosque itself, as a place of worship, not its calligraphic forms or decoration. But it can be said that its attractive decoration added some beauty to mosques despite its impact in distracting worshipers. Furthermore, the misuse of calligraphy and materials caught the attention to the

patterns without paying attention to their values and meanings. However, one cannot deny the contribution of calligraphy in its different approaches in enhancing and representing spirituality. These views support the spiritual assets of calligraphy which convey messages from the Qur'an regardless of its styles and approaches. Calligraphy, therefore, is still balanced with the development of architecture and it still indicates the strong relationship between calligraphy and spirituality to those spaces inside the mosque. However, the applications of calligraphy in mosques (when written on bases and rules) keep its spiritual nature regardless of the material. Therefore, it could be said that the Modernists' approach has made calligraphy more conceptual. Calligraphy, however, either modern or traditional, could represent spirituality if it is the work of an artist. In this way, calligraphy could indicate movement and spirituality as well as representing materialism.

Q2. Do you think the use of calligraphy in contemporary mosques contributes to the spiritual context of the space or has become decorative/materialistic? Why?

Participants: 68

Yes: 59

No: 9

Table 2. Question 2.

The artists who expressed positive opinions stated that calligraphy still contributes to spirituality. This spirituality is due to its representation of the words of God. Furthermore, most calligraphic patterns in mosques are cited from the Qur'an. As a result, such calligraphic patterns took on a sacred meaning. Within this consideration, calligraphy allows people to contemplate those written verses via any style or on any material. Therefore, sacred verses are not necessarily presented in a decorative way to be spiritual or to indicate spirituality. Thus, these participants indicate that calligraphy is still spiritual and represents identity and spirituality. Current styles of calligraphy indicate the values of beauty and identity even in the absence of decoration.

The artists who expressed negative opinions stated that walls of contemporary mosques and the calligraphic patterns on them have become materialistic. This is because calligraphy now depends on dazzling materials. As a result, those participants who answered 'No' imply that calligraphic forms in contemporary mosques do not represent spirituality. In addition, most members of society in Saudi Arabia lack the experience of evaluating art. However, this is reflected in their choices of materials which mainly focus on choosing colourful and bright materials, without paying attention to the importance of calligraphic forms.

However, the shared views of artists stated that although Arabic calligraphy is linked to worship and the Qur'an, the combination of calligraphy and decorative elements work together to enrich spirituality. In Saudi, when building contemporary mosques, most companies bring craftsmen to create calligraphic verses instead of bringing professional calligraphers. Therefore, real calligraphers are not involved in the build, and the products generally represent more materialistic forms. Due to mosques employing unskilled calligraphers, they have become more materialistic. The traditional role of architect and calligrapher, however, has disappeared, which affects spaces within the mosque and, therefore, spirituality.

The use of varied materials could add some artistic values to the calligraphic forms and decorative patterns. As the use of decorative elements could represent a spiritual scene,

spirituality does exist within the modernist approach. However, one cannot deny that some writings in contemporary mosques are complicated and difficult to read.

Contemporary mosques in general have no relationship between their walls, spaces and calligraphic and decorative elements. However, society members are competing with each other in choosing expensive materials when they intend to build mosques. Therefore, mosques in those societies involved similar features.

Q3. Do you think the applications of the traditionalist approach still have an impact on calligraphy in the field of art? Why?		
Participants: 68	Yes: 49	No: 19

Table 3. Question 3.

The artists who responded ‘Yes’ stated that the traditional approach has a fundamental and dominant role in style and value. Many competitions of traditional calligraphy are held annually, which may emphasise the importance of such art and help it retain its identity. In general, calligraphers prefer to use the traditionalist approach. Some modern experiments based on the traditional approach introduced good styles and forms of calligraphy in the field of art. However, it is impossible to isolate the traditional approach, even in the existence and development of newer technology.

The artists who expressed opposite (‘No’) opinions on this question stated that traditional calligraphy has been transformed. Its current applications are still under imitation and most artists just copy models and samples. However, calligraphy which is either Modernist or Traditionalist has become symbolic in visual art where the modernist approach has a dominant control.

The shared points of view agreed that calligraphy is flexible and can be applied on any material like wood, metal and modern materials. Therefore, because of its ability and flexibility, the traditionalist approach influences art in the same manner as the Modernist one. In general, although technology and modern materials have been highly influential, the traditional approach still has a significant impact on art and still has its own appreciation. The concern, however, is that modern artists prefer to use and apply the traditional approach despite their weakness in producing traditional calligraphy. Most artists have started using the Modernist approach without any previous knowledge of the bases and rules of traditional calligraphy. Thus, this indicates that the products become meaningless. Therefore, artists should first learn the basics and rules of calligraphy before developing a reliable style.

Q4. Do you think the local cultures have an impact on any of the above changes? Why?		
Participants: 68	Yes: 51	No: 17

Table 4. Question 4.

The artists who expressed positive opinions stated that the distinctive styles of contemporary mosques indicate the impact of local cultures. Most modern mosques in Saudi Arabia have

similar decoration and calligraphic patterns. In some cases, the same template can be seen in several mosques. With the influence of the global market and technology, a similar culture has spread broadly inside Saudi which affected both the architecture of mosques and the applications of calligraphy inside them. This influence of the local cultures on calligraphy includes the excessive use of ready-made templates. This, besides the huge production of varied materials, caught the attention of people towards them. Thus, the traditional forms were replaced with these new materials.

The artists who expressed negative opinions stated that calligraphy still represents the known culture of Muslims and, therefore, there is no influence of the local culture on it. Calligraphy, as a representation of the words of God, is still spiritual. The influence of local culture is limited to the choice of materials. This, however, does not necessarily mean there is an impact on calligraphy. For these respondents, calligraphy is an important part of the culture itself and as an identity.

However, the shared views of artists concluded that, in general, calligraphy and architecture alike reflect the real culture of any society and its members. Those members should reflect a real identity. Many recent changes were rejected at first, before people gradually accepted them. In Saudi Arabia, the value of material has a strong influence on its choice. For example, its impact can be stronger than the culture itself. However, based on this culture, most people do appreciate calligraphy in any style as a sacred and pure art, especially when considering the verses of Qur'an.

Every society has its own traditions. However, the old styles of calligraphy are still dominant. In addition, the influence of culture varies from one place to another. The local culture is usually influenced by the stronger voice, whether political or religious. For Muslims, the exaggeration in decorating mosques is hated. From this point, many contemporary mosques in Saudi Arabia are seen as less decorated, and the same view is applied to calligraphy.

Furthermore, Modernism forces people from different areas (artists, calligraphers or architects) to accept it. Therefore, they should cope with it and make the best from such developed materials to produce calligraphic patterns in their best forms. The impact of cultural trends must be taken into consideration to be able to balance calligraphic styles and to benefit from any culture in a positive manner.

The products and development of architecture reflect the development of societies and their people. However, each city has its own culture and differs from others. Therefore, the individualistic nature of culture could affect a city's architecture.

Q5. Do you think modernism and global capitalism have an influence on materialising calligraphy? Why?
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Participants: 68	Yes: 47	No: 21
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Table 5. Question 5.

The artists who responded 'Yes' stated that the global market has had an impact over the last century. Globalisation has affected most aspects of life, not just art and calligraphy. Digital

media and globalisation has broadly affected the spirituality of calligraphy. Despite spending large amounts of money on ready-made calligraphic templates, they do not necessarily represent spirituality and are still materialistic. Ready-made templates have replaced beautiful hand-crafted calligraphy. However, the constant development of materials and digital art has affected the beauty of calligraphy. A cooperative effort is required by all to retain identity by employing technology for calligraphy and benefiting from the advantages of modern materials.

The artists who expressed opposite opinions stated that some contemporary artists do not like experimenting with new technologies and materials. Thus, they continue employing the traditional writing methods. However, this emphasises the dominant role of traditionalists and their approach in opposing the power of globalisation. Contemporary calligraphers and architects are aware of this and its influence on identity.

However, there are some shared points of view that the employment of foreign workforces and unskilled calligraphers affect calligraphy in local architecture, including mosques. However, to return calligraphy back to its sacredness again, the impact of Modernism must be taken into consideration.

In general, Modernism is one of the era's requirements and artists and calligraphers alike should deal with and make the best from the technology available. As stated above, development is required, but it must not affect the essence of calligraphy. Considering the impact of technology on calligraphy, the thought, beliefs and visions of designers and calligraphers has a greater impact. Although some artists think that modern materials have weakened calligraphy, many others think that such materials could enhance the beauty of calligraphy. Therefore, in terms of modernity, making the most of technology and materials should be carried out in the way that keeps its identity. The imported materials must suit the application of calligraphy. However, artists themselves can make a difference, such as by adding spirituality to the material or vice versa.

5.3 Classification and Analysis of Experts' Interviews

The following section classifies and analyses the interviews conducted with the experts (discussed in 3.2.5.3). The analysis of the two mosques and survey of the buildings (discussed in Chapter 4) drew the attention to the phenomenon of transforming the concepts of calligraphy within the mosques' architecture, including its changing forms and the appearance of uncommon calligraphic patterns. The analysis of artists' responses to the questionnaire (see Section 5.2) provided valuable information about the transformation of calligraphy. However, the need for the experts' points of view is essential.

The survey of artists showed that they all agreed that calligraphy is a sacred art. This could be linked to the influence of Islam as a religion on Islamic Art. The philosophical views (discussed in the literature review, Section 2.2.2) emphasise that art in Islam is based on the concept of Monotheism. However, the different opinions of artists about calligraphy in contemporary mosques' architecture and in visual arts, requires more in-depth explanation. Although calligraphy is a sacred art, its changing patterns differ throughout the Islamic era. Thus, to clarify the opinions of the experts, they were classified into the following groups:

1. The development of calligraphy in relation to architecture.
2. The influence of calligraphy and mosques' architecture on each other.

3. Reasons for the transformation of calligraphy from spirituality to materialism.
4. The changing patterns of calligraphy in mosques' architecture.
5. The impact of Traditionalist and Modernist approaches to calligraphy.
6. The effects of calligraphy in contemporary mosques on the quality of spiritual spaces.
7. The influence of local cultures on calligraphy.
8. The influence of globalisation on calligraphy.

5.3.1 The development of calligraphy in relation to architecture

Six experts (as named in this paragraph) gave a variety of differing views via interviews regarding the development of calligraphy. Elbendouri sees the contemporary features of calligraphy as a positive change. He explains that Arabic calligraphy, either at mosques' architecture or in visual art, is a broad subject. Although calligraphy emerged in the Arab Peninsula, other Muslim calligraphers had developed creative patterns that reached wider areas of the Islamic world. This is because such calligraphers continued to develop the main types of calligraphy and added their own effects to it. Experts Tosoon, and Adnan, explain, since calligraphy represents the words of God, the best applications of its different forms are appreciated in the mosques' architecture. Alhashimi emphasises that the strength of architecture, especially in religious mosques, throughout history helped to preserve calligraphy from extinction. Religious architecture protected it and conveyed it to other generations. Shokdar and AbuTouq add, one cannot deny the influence of architecture on calligraphy and the opposite in the traditional architecture. The most crucial point here, is how to bring calligraphy back as a part of architecture rather than being an additional element.

5.3.2 The influence of calligraphy and mosques' architecture on each other

The experts agreed that both calligraphy and architecture have influenced each other, despite differing opinions about the relationship between calligraphy and architecture. For Shokdar, calligraphy and architecture have an integrated relationship that cannot be separated from each other. He suggests that when the architect and calligrapher have enough knowledge about calligraphy's meanings and representation, then the best figures will be produced, and vice versa. Alhashimi argues that, historically, calligraphy had come after architecture, and added a specific characteristic to the Islamic architecture. Kufic script is the earliest style of Arabic handwriting that was used by early Muslims to record the Qur'an. However, it was developed in the 8th to the 10th centuries AD, but went out to general use in about the 12th century (Encyclopedia Britannica, 2011). Abu al-Aswad al-Du'ali put the rules of Arabic grammar and the system of dots at the period of Caliphate Ali Bin Abi Talib. This could confirm that architecture existed before the Arabic writing in its calligraphic styles.

Additionally, calligraphy as a written style existed in different aspects like the design of coins and other commonplace usage. In agreement with Shokdar, Elbendouri says that such a relationship is controversial, but there is no doubt that they both affected each other. Calligraphy derives its strength from mosques' architecture and mosques become more attractive with the beauty of calligraphy combined with its decorative elements. Therefore, it is likely that calligraphy influences mosques' architecture, and vice versa. Calligraphy is a spiritual geometry that abstracts the meaning and concepts and dematerialises the embodied letters.

Adnan agrees with this opinion. She sees that calligraphy and architecture are integral to each other. However, Tosoon insists on the priority of calligraphy since it added a thematic feature to

mosques' architecture. On the other hand, AbuTouq emphasises the importance to enhance the relationship between calligraphy and modern mosques' architecture, rather than just describing such relationship.

5.3.3 Reasons for the transformation of calligraphy from spirituality to materialism

Comparing the calligraphic patterns inside contemporary mosques to their equivalent of the previous Islamic traditional mosques could potentially show the transformation of calligraphy. Such phenomenon could help unravel the reasons behind this shift. Alhashimi summarises that calligraphy inside contemporary mosques has shifted from being an artform, to more like standard writing. In addition, calligraphy was a fundamental element inside mosques' architecture, but is now likely to be seen as an additional decorative element. Architecture has pursued in its development, whereas calligraphy has become disconnected as an individual entity. Adnan adds that the end justifies the means; i.e. when earlier Muslims used their tools (calligraphy, poems etc.) to reach their main target (spreading Islam), they succeeded and produced great kinds of art. In contrast, the current Muslim calligraphers have put finance and fame at the top of their goals. AbuTouq agrees with this point. He explained that early Muslim calligraphers studied the rules of calligraphy and went deeper into its secrets and further to the spirituality of each single letter. Such investigations resulted in a sophisticated civilisation. On the other hand, Tosoon and Shokdar explain the prosperity of calligraphy during those eras as being due to the professionalism of calligraphers. Master calligraphers developed many types which were broadly used (Thuluth), which is considered as the hardest type of calligraphy. Elbendouri explained that these reasons were in relation to the sacredness of Qur'an. For example, when Muslim scholars studied philosophy, they added their touches to Arabic calligraphy and started the process of gilding paper. These developments affected the art of architecture where calligraphy found a very rich place for exposition.

5.3.4 The changing patterns of calligraphy in mosques' architecture

The highest position of calligraphy was derived from its representations of the words of God. Alhashimi emphasises that the message of Islam was the main reason for developing calligraphy, which can be seen in writing in the Holy Qur'an. Elbendouri states that the beautiful motifs and complicated calligraphic strips show a philosophy of great calligraphers who studied the letters and their meaning, which then went deeper inside their metaphysical universe. However, Adnan finds that it is difficult to compare calligraphy of the past to more-contemporary scripture. For her, the comparison is unacceptable; calligraphy is the same, but the circumstances have changed. Adnan explained that the decorative elements were used more than calligraphy in mosques' architecture, which affected the visitors and influenced their appreciation to calligraphy. The current patterns at mosques are purely calligraphic in most cases, which reflects a high degree of skill.

Similarly, Shokdar states that there is no significant change. Calligraphy still exists in its best form, but the materials have changed. The old materials were pure and had special characteristics that help calligraphers to produce stunning masterpieces. In contrast, the current materials are industrial or mostly recycled. Despite the beauty of their appearance, they lack purity. Tosoon stated that although traditional calligraphy still exists, applying letters in fine arts is remarkable (Alhorofyah in art). Additionally, the materials are mostly different. AbuTouq sees the statement in his own way by suggesting such changing patterns must be a sequence of developing calligraphy, which allows calligraphy to be divided into traditional and contemporary forms.

Master calligraphers used to study the basics of calligraphy. Therefore, they could easily develop other stunning styles, which are missing today.

5.3.5 The impact of traditionalists and modernist approaches on calligraphy

The changing concepts of calligraphy and their impact as either traditionalist or modernist have been recognised by scholars. For example, Shokdar states that to understand the changing concepts, Kufic calligraphy (especially Fatimid and Nishapuri) is suitable for any time and place. However, modern calligraphers are weak, especially at Thuluth, when compared to the traditionalists who have studied and practiced the basics of calligraphy.

Similarly, Alhashimi believes that calligraphy remains the same, but calligraphers and the applications of calligraphy have changed. The beliefs of modern calligraphers suggest that it is impossible to reach the level of traditionalists, and this has forced them to find another way to apply calligraphy (even if only in a weak way). Tosoon explains that this change in the understanding of calligraphic concepts came about when most schools that used to teach calligraphy closed. This lack of teaching meant that there was an increased number of people who lacked the knowledge of calligraphy, and as a result there has been a dwindling in general aestheticism. AbuTouq highlighted that innovation and development should start from within individuals themselves, and then spread to their immediate relatives and so on. Such processes will help grow an educated society rather than conveying the outcomes from one generation to another. The absence of such sequence has led to a change in the concepts and their materialisation. Adnan added that the current development of materials may have affected the development of calligraphy. The contemporary revolution of media and materials helped calligraphers to apply calligraphy to varied materials and test it before displaying it to the public. These modern developments mean that not only have the concepts of calligraphy changed, but also it is now linked to many kinds of art and not just the decoration of mosques. However, Elbendouri explained that the changing concepts of calligraphy are due to the remoteness of the identity. The influence of Western culture can be easily seen, and it has replaced the previous motifs and writings with abstract, meaningless and materialistic decorations.

Although calligraphy still has a major role in daily life, there is a desperate need for its reconsideration so that it can develop calligraphy and limit it to its known rules and bases (Alhashimi). This would help developers produce contemporary styles. For Tosoon, the current applications of calligraphy are weak even by traditional calligrapher standards. Most of the current calligraphers only depend on their skills when it is necessary to study the soul and essence of letters. On the other hand, Elbendouri and Adnan believe that traditionalists have their own philosophy which derives from the origins, which make a base for creativity and manifestations. Such manifestations established a magnificent style in mosques and added a lot to the semantics and metaphysical icons for the letters. Additionally, their philosophy is a fundamental approach to calligraphy and to preserve the Islamic identity. AbuTouq added that traditionalists can be considered as the root of calligraphy, whereas Modernists could start from the point they ended at. Shokdar discussed that despite the great role of traditionalists and their approach, development in calligraphy is required so that it follows contemporary life. The death of famous master calligraphers, especially in Turkey, caused a reformation in the art of calligraphy. This occurred under the influence of modern technology and the invasion of global markets. Such factors made calligraphy more materialistic and free of spirituality. Thus,

calligraphy in its current forms is confusing and the methods of production lack the quality of writing.

5.3.6 Has calligraphy in contemporary mosques affected the quality of spiritual spaces?

Spirituality for Alhashimi is in a contradictory relationship with both the time and the material. However, the modernist approach has distanced calligraphy from its spiritual position and transferred it from being sacred and fascinating to materialistic and embodied. Tosoon added that the modernist approach is not based on previous knowledge about calligraphy. Elbendouri does not think that the modernist approach is a problem. Instead, he thinks that some people deny decorating mosques and vice versa, thus affecting calligraphers. The problem for Elbendouri is the remoteness of the bases and the spiritual sequence of calligraphy and delinking it from architecture, especially at mosques. By contrast, Adnan thinks that spirituality exists in contemporary mosques. For her, calligraphy is spiritual because it is a representation of God's words. Its sacredness derives from its concepts, essence and values. Such sacredness accredits when calligraphy at mosques is considered as a part of worship.

For AbuTouq, semantics and its philosophy must be taught to both modern architects and calligraphers alike. This would help them to understand their surrounding environments and consider the concepts and meanings behind shapes and figures. Shokdar added that developers of Modernists are accepted since they studied the rules and basics of calligraphy and added a hint of beauty. However, only some modern calligraphic styles are interesting. However, it can be surmised that calligraphy at contemporary mosques is materialistic. For example, it has lost its relationship with spaces inside mosques (Alhashimi). Elbendouri reflected that during the golden eras of Islam, calligraphy has made the spaces at mosques more spiritual. For example, the movements of letters and the interaction with decorative elements move the eye from static to dynamic. This went beyond the boundaries of materials to reach a high degree of sophistication.

Although these spiritual meanings exist in contemporary mosques, they are poorer than their equivalent at old mosques. Tosoon suggested that the current calligraphy is partially accepted but does not represent the real spirituality and identity. AbuTouq, on the other hand, felt that giving authority to inexperienced calligraphers is behind this phenomenon, and what is seen of calligraphic patterns at contemporary mosques is chaos. My opinion is that such calligraphic forms are the representation of the holy Qur'an. In opposition to AbuTouq, Adnan sees calligraphy as being sacred and spiritual itself. She agreed with the statement that current calligraphers are weak, but they succeed in producing fascinating modern pieces of calligraphy. Shokdar sums this up with the idea that when calligraphers combine the quality of writing with its meanings and concepts, then it will result in a beautiful product. It is only then the product could be considered as a preservation of spirituality and identity.

5.3.7 Local cultural influence on calligraphy

Local cultures are central to change and they are influenced by the surrounding environment whether this is political, social or economic. However, they also affect other aspects of life, such as art and calligraphy (Alhashimi). Tosoon emphasised that cultural influences have affected calligraphy, and this effect can be remarkable. For example, many schools teaching calligraphy were closed and the same was applied to some artistic institutes, which occurred due to the impact of local cultures. In agreement with this, Elbendouri explained that in the past calligraphy had a great impact on culture in the Islamic world. However, in the present day, the influence of

culture on calligraphy appears to be negative. Adnan added that the impact of culture on calligraphy, especially with religious trends, can be noticed. Calligraphers are divided according to their religious interests, and this is reflected in the disunity and division.

For AbuTouq, the effect of current local cultures is caused by the lack of positive interpretation by the society members themselves. The general public are lacking in their knowledge of art and calligraphy and this has caused a huge gap between calligraphy, calligraphers and the audience. However, the importance of surrounding cultures and global markets could be useful. For example, we could cast all these inputs and stimuli to convert these materials into a new philosophy. Shokdar explained that the impact of local cultures and globalisation on calligraphic patterns have distanced people from their spiritual meanings. In Saudi Arabia, for example, weak calligraphers are abundant. Thus, a weak style of calligraphy is spread throughout the public, which results in them becoming hooked on distorted writing. As a consequence, such deformations have become beauty.

5.3.8 The influence of globalisation on calligraphy

Since the focus of capitalism has helped individuals to make the best of their abilities, calligraphers have started to change their targets for financial gain. This step has affected calligraphy by materialising it and making it a product rather than a concept (Alhashimi). Elbendouri added that the shape of the mosque differentiated from its known design because of global markets. The remoteness of calligraphy and its values and spiritual meanings caused a remoteness of the language, therefore affecting identity. Many people melted in capitalism, which directly affected spirituality and made calligraphic patterns ready-made templates, i.e. calligraphy at contemporary mosques is a kind of copy-and-paste process; the same materials, frames and even the same written verses of Qur'an.

Now, the influence of globalisation on calligraphy is at its peak. The current identity of calligraphy is mostly lost. We as calligraphers should benefit from technology and materials but use them wisely and spiritually. However, Adnan disagreed with the influence of globalisation on calligraphy at mosques. She adds, such influence is clearer in fields of fine art and the current calligraphic patterns at contemporary mosques are pure, but lack skillful calligraphers. Such impact of globalisation can also be noticed when evaluating calligraphy in fine art. For AbuTouq, globalisation and capitalism have affected calligraphy broadly. Unfortunately, artists consume the imported culture without checking its suitability to the life or identity. People should consider that technology is a tool, not a target itself. Shokdar added that although it affects our lives, we can return and make the most of it, according to our identity. He explained that when Muslims reached the European Continent, they translated their books, philosophy and added their traits, which resulted in a global civilisation through history including calligraphy.

5.4 Conclusion of the findings

The study has revealed views of different groups including artists and experts of calligraphy. The findings relate to:

- A. The literature review
- B. The artists responses to the questionnaire
- C. The interviews with experts

The findings from reviewing the literature showed the different stages of calligraphy development through history. Those stages, however, were developed in different parts of the Islamic world. By the end of the 20th centuries, and with the invasion of technology, traditional calligraphy has been challenged by the intervention of the Modernist approach. Furthermore, the competing companies succeeded in producing variety of materials that have had their own impact on calligraphy since the late 20th century. However, the analysis of images of the two case studies showed a clear influence of the global market on calligraphic patterns in both mosques. The analysis of artists and expert interviews showed different opinions about calligraphy and its two schools of Traditionalist and Modernist. However, although there is a dominant impact of the Modernist approach in the field of visual art, the Traditionalist approach is still influential and dominant inside mosques' architecture. Therefore, the following summarises conclusions drawn from the earlier findings and discussions:

- The Modernist approach has a dominant role on calligraphy in the field of visual art. This role is less influential inside mosques architecture.
- The applications of the Modernist approach in visual art include painting, sculpture, jewellery and other different fields of art.
- The Modernist approach introduces different styles of calligraphy. These styles are mainly based on the Traditionalist school. Some of these new styles are free of rules.
- Such free styles could represent spiritual meaning considering the religious views and the impact of local cultures. Such views are dominant in some Islamic countries.
- Some calligraphers introduced their calligraphic styles based on their previous experience in Traditional school of calligraphy. These styles are now considered as pioneer styles of modern calligraphers such as AbuTouq (Appendixes C1-C3) and Tosoon (Appendixes D1-D3).
- Other calligraphers stuck to the Traditional school, but with a modern vision such as Adnan (Appendixes E1-E3). Despite those changing patterns and the impact of globalisation, some master calligraphers such as Shokdar (Appendixes F1-F3) and Alhashimi (Appendixes G1-G3) prefer the Traditionalist approach.
- The influence of the Traditionalist approach on calligraphy varied between developing new styles based on the traditional one and introducing complete new styles based on the philosophy of letters rather than developing the figures of letters such as the works of Elbendouri Mohammad (Appendixes H1-H3) and the Lebanese Wajih Nahle as a clear example of this approach (Appendixes I1-I3).

However, the Modernist approach is less influential inside mosques' architecture. The applications of calligraphy inside contemporary mosques use the traditional approach. Spiritual spaces have become mostly materialised. Despite the widespread use of ready-made templates inside mosques, most of them use the applications of a Traditionalist approach. Furthermore, the influence of religious thoughts and local cultures are stronger when they mainly target the concept rather than the figure. However, the influence of the Modernist school, based on opinions, is controversial. Therefore, one cannot deny the influence of the Modernist approach on the concept of spirituality which could be summarised in the following:

- There is a misinterpretation of the concept 'spirituality' either by the audience or the calligraphers themselves. This, beside the lack of general knowledge about the traditional approach, resulted in many weak productions of calligraphic patterns inside

contemporary mosques. There were several contemporary mosques which had weak calligraphy in their interior design. This shows that the calligraphers did not have a clear idea of how the calligraphy was done in the traditional manner.

- The application of calligraphy inside contemporary mosques is mostly produced by craftsmen or weak calligraphers. This particular aspect led to the contemporary mosques showcasing a weak calligraphy that failed to reflect the local culture or the traditional forms of calligraphy that was part of traditional mosques.
- Although some contemporary mosques include productions of master calligraphers like in the King Abdullah mosque (the second case study), the assembly was not done under the supervision of the calligrapher, which resulted in putting them in unusual compositions that lack balance. This was considered to be a major flaw on the part of historical calligraphers. As there was no supervision taking place of the calligraphy on the interior of mosques, it resulted in showing weakness in design.
- The remoteness of decorative elements which used to play a vital combination with calligraphy in creation of spiritual spaces have affected the spaces inside contemporary mosques. Due to the calligraphy being weak and not showing the right local culture, the contemporary mosques were not able to create the right kind of spiritual spaces within the premises.
- The invasion of global market and the modern technology have affected the spiritual meaning of calligraphy. On the one hand, the employed scripts of a computer do not represent the typical traditional approach. On the other hand, the employment of unskilled calligraphers has made the products materialised.
- Considering the religious views and the local cultures, spirituality still exists inside contemporary mosques. This thought stems from the fact that calligraphy is sacred due its representation of the Holy Qur'an. The subject of transformation of calligraphy is an interesting and broad one, which requires a deeper investigation especially in Saudi Arabia.

CHAPTER VI: DISCUSSION

6.1 Introduction

The aim of this chapter is to provide a critical discussion of the findings and initial analysis of the previous chapter. This study's overall aim was to examine the impact of globalisation in transforming calligraphy from spirituality to materialism inside modern Saudi Arabian mosques. The existing literature as discussed in Chapter 2 indicated that there is an existing, wide body of literature which demonstrates the powerful role of globalisation on calligraphy. This chapter discusses whether or not the data collected and analysed earlier in Chapter 4 serves to answer the research questions of the study.

6.2 Discussing the Findings

As discussed in the literature review, Hegel sees that architecture represents the symbolic stage. However, symbolism in the arts for Hegel remains as Unconscious Symbolism, Symbolism of the Sublime or Conscious Symbolism (Hegel, 1988). Each form includes the applications of religion, philosophy and art. Thus, Socialism is the main reason for the development of arts. Hegel insisted on the importance of religion especially in his lectures about arts and religion in the Eastern World (ibid). The Hegelian theory of the 'essence' depends on the issue of Content and Form. However, Hegel believes that it is impossible to separate content from form and vice versa; they are in one unity (Hegel, 2005). According to these views, an artwork is a materialistic appearance of the beliefs of one society or culture during a period. He then states that every artwork has two sides: 'meaning' and 'appearance'. The latter, what he refers to as the 'physical embodiment' / or 'form' represents the former 'spiritual content' which acts as a focus of unity displayed in the form (Stace, 1924). The 'spiritual content', which is constituted by any general idea of a spiritual kind in Hegelian view, is necessary for the manifestation of the idea in a unified sensuous medium.

This does not mean, of course, that art completely eliminates sensuality, or that it seeks pure or holistic thought (as this is the task of philosophy), but merely reflects the thought by the visual manifestation. Here Hegel tells us that art occupies the middle ground between the purely sensory and pure thought, representing the sensuous for art, not the direct and independent material, (plant, stone or organic life, for example), but the idealism that should not be confused between them and the ideal of absolute thought. In agreement with the Hegelian thought, it could be said that calligraphy is a sacred art, but it must reconsider the physical part, including the method of its representation. However, Islam as a religion does not conflict with this. The philosophical views (discussed in the literature review Section 2.2.2) emphasise that art in Islam is based on the concept of (Tawheed) Monotheism, but it does not deny the importance of beauty and considering the physical manifestation. This is why we could see a dominant role of the Modernist approach on calligraphy despite the fact of its weak representation, i.e. the impact of the local culture which stems from a religious thought. This impact, therefore, has resulted in materialising the spiritual spaces inside mosques.

6.3 Specific Findings

Since the 16th century, manuscripts have transformed from illustrations of classic literature to depictions of contemporary events, such as diplomacy, conquests, collection of taxes, festivals, battles and skirmishes (Essa and Ali, 2012). Of course, the Qur'an remained a primary inspiration for illustration and calligraphy, and one can see luxurious copies of the Qur'an (Kaptan, 2013). Islamic Art also conveys meaning through the Islamic revelation. However,

depending on both theories of Al-Ghazali and Panofsky (Discussed in Chapter 2) besides the Hegelian thought, the knowledge gaps between Saudi artists and calligraphers on one side, and the audience and decision makers on the other, are remarkable. Therefore, the reasons causing such gaps in relation to calligraphy include: misinterpreting concepts, the lack of knowledge and skills, the invasion of modern materials, the influence of local cultures and the spread of visual art and the considerations of a materialistic culture in Saudi Arabia.

6.3.1 Misinterpretation of concepts

The misinterpretation and the lack of philosophical perception of some calligraphic concepts, such as spirituality, is widely spread among the locals in Saudi Arabia. This may be due to the impact of local culture, since art is considered an additional, rather than essential, aspect of life. There is a lack of appreciating art, especially calligraphy. This may be related to the absence of the culture of criticism, which is rarely taught in the Islamic world. These reasons result in lesser experience of calligraphic art and its formative and spiritual concepts.

Although there is much of appreciation of the Traditionalist approach, there is a controlling role of the Modernist approach. Nasr (1987) considers that the inner aspect of Islamic Art is interrelated to Islamic spirituality. This spirit of Islamic Art is more important than all the formal vicissitudes of its growth. Therefore, taking into consideration the sacredness of writing according to its chief origin (the Qur'an) is understood, it does not necessarily mean appreciating the presented calligraphic form in its strengths or weakness in representation. Because of this, production of weak calligraphic forms and their lack of appreciation inside mosques have spread widely.

It is worth mentioning that those missing important aspects and concepts in the process of calligraphic configuration, such as extension, integration, and sequencing, which are related to the movement of the two-dimensional calligraphic work surface, is one of the most important manifestations of repetition (Sayegh, 1988). Thus, as Al-Qalqashandi (1963) stated, the calligraphic formations in their independent form cannot tolerate lack of balance, except in rare cases. This therefore emphasises the desperate need for calligraphers and locals to be aware of the different aesthetic values of calligraphy, including both the forms and the concepts.

6.3.2 The lack of knowledge and skills

The lack of the experience of Arabic calligraphy and its application since the closure of major schools of teaching calligraphy is an important consideration. Although, there is a whole appreciation of the spiritual message of calligraphy, there is a controversy about the manner of its representation. Again, this is because of employing unskilled calligraphers who excessively misuse the materials inside mosques. The indirect involvement of calligraphers and artists in presenting calligraphy on the walls of mosques resulted in a loss of major aesthetic values in contemporary mosques. They have moved away from their traditional spiritual concepts and replaced them with materialistic forms.

Most members of society in Saudi Arabia lack the experience of evaluating art in general and calligraphy in particular. This is reflected in their choices of materials, which mainly focus on choosing colourful and bright materials, without paying attention to the importance of calligraphic form.

Traditional architects were able to use expertise and materials in an optimum manner to lead to the formation of consistent and compatible parts of buildings, and art was well integrated in Islamic architecture (Azarshahr *et al.*, 2013). In like manner, expert calligraphers are essential for combining the form and concept when producing a calligraphic pattern.

Employing unskilled calligraphers has increased the use of materialistic forms of calligraphy. Although the use of Thuluth (as a major calligraphic style in mosques) is considered traditional, there is a remarkable weakness in its presentation today. This weakness is due to the use of digital writing, originating from computers (Figure 103). This could explain the widespread of using ready-made templates and using computers for generating calligraphic patterns, instead of master or skilled calligraphers. Such productions show a separation between the content and the form, and this is what Hegel meant when he states that art is reflected in sensory form. Therefore, art for Hegel is a spiritual and sensory activity together, not mechanical, nor as practical as with philosophical ideas, so, this activity does not deal with abstract or abstract ideas; it should be a one physical and spiritual unit.

6.3.3 The invasion of materialistic culture

In contemporary Saudi Arabian mosques, one can easily see that calligraphy broadly depends on the use of dazzling materials. Obviously, the use of varied materials could add some artistic value to the presented calligraphic or decorative patterns, but the exaggeration and misuse of such materials may grab the viewers' attention to the pattern regardless of their values and meanings. The physical properties of materials allow artists to transform such materials into real values. The lack of such values may limit them to being mere symbols (Lehmann, 2012).

Of course, nature provides a variety of available materials, and the role of the artist is expressing 'beauty' (Laird, 1963), but every activity in the Islamic civilisation has an ethical purpose and a spiritual aspect (Sayegh, 1988). This therefore emphasises the importance of the meaning of a material used and how to keep it clearly defined through an artwork; particularly when the use of precious materials is reserved for the true artist (Lehmann, 2012). However, the choices of colourful and bright materials, without paying attention to the importance of calligraphic forms, is known among society members in Saudi Arabia. Furthermore, society members are competing in choosing expensive materials when they intend to build mosques (building mosques at the expense of society members is an ordinary circumstance in Saudi Arabia). Therefore, mosques in the one district come with similar features. This culture enhances the excessive use of ready-made templates. This, besides the large-scale production of varied materials, has replaced the traditional forms with those new materials which reflect the impact of material on the essence of calligraphy. One cannot deny that some writing inside contemporary Saudi mosques is complicated and difficult to read. This is due to the excessive use of ready-made templates and their choices by a member who lack knowledge about calligraphy and its deep concepts.

6.3.4 The influence of local culture and the spread of visual art in Saudi Arabia

The impact of local culture includes employing unskilled calligraphers despite the existence of master calligraphers, choices of materials, the religious thoughts and lack of knowledge about calligraphy.

There is a remarkable influence of local cultures, since there is a controversy about decorating mosques. The influence of local culture, in fact, is not limited to the choice of materials. Calligraphy, as a representation of the Holy Qur'an inside Saudi mosques, is seen as spiritual. The value of materials has a strong influence on their choice. Based on this materialistic culture, most people do not truly appreciate calligraphy in any style, apart from considering its representation of the verses of Qur'an. Selection of calligraphic patterns is generally based on the impact of colours and materials which might indicate less knowledge about calligraphic styles. Contemporary Saudi mosques indicate some similarities in their calligraphic patterns. Some mosques like Al-Naim (the first case study) and Almolhim mosques (in the same city of Al-Ahsa) include some of the same template. They sometimes convey some spelling and grammar mistakes. The invasion and the huge production of materials have established a similar culture inside Saudi Arabian society, involving the widespread use of ready-made templates. This, however, does not deny the impact of culture on calligraphy. It is thought that the influence of culture varies from one place to another. The local culture is usually influenced by the religious views. In Saudi, the exaggeration in decorating mosques is considered negatively (AbuTouq, pers. comm.). From this point, many contemporary mosques are seen as less decorated and the same is applied to calligraphy. Calligraphy is an important part of the culture itself and is an identity. Although the ready-made templates are broadly spread inside mosques, the impact of the local culture is stronger. It mainly targets the choices of materials. However, local culture as a centre of change, is affected by the surrounding environment (Tosson, pers. comm.). Its impact reaches different aspects of life including art and calligraphy. The effect of current local cultures is caused by the lack of positive interpretation of several concepts and aesthetic values by the society members themselves. Many people lack the proper knowledge of art, materials and calligraphy (AbuTouq, pers. comm.). This caused a huge gap between calligraphy, calligraphers and the audience. However, the importance of surrounding cultures and global markets could be useful but today, the influence of culture on calligraphy is negative. The impact of local cultures on calligraphic patterns have distanced people from their spiritual meanings (Shokdar, pers. comm.). In Saudi Arabia, many weak calligraphic styles are spreading throughout the public. The result, therefore, is that such weak styles are becoming disconnected from the sense of 'beauty'.

Furthermore, the influence of visual art especially digital art besides the development of technology is a point of argument. The spread of art industry or art as a profession in Saudi enhanced the culture of rapid monetary gain. Many professional artists, museum managers, and art historians tend to think about art in relation to their profession. However, when non-professionals think about artworks, it is more common for them to think about their previous experiences of artworks and whether these are from the past, present or their ideas of the future (Gerwen, 1996). Therefore, the prosperity of visual arts, especially painting, in Saudi Arabia had a great influence on calligraphy. It helped it prosper as an individual entity, which detached it from architecture and affected its function inside the architecture of mosques.

Consequently, it is important to consider reaffirming the role of calligraphy and teaching it at schools and institutions. Bortoli and Maroto (2001) stated that religion as a fundamental part of culture has its associations of colours. Thus, critics should contribute in developing the aesthetic taste of society members in order to help them distinguish between the beautiful and the ugly. Such a role may reduce the spread of weak calligraphy. In addition, this would help the coming generation to appreciate such great art and to be able to develop new styles.

In general, and by comparison to the traditional styles of mosques' architecture, one can see a general similarity between the calligraphic patterns and decorative elements in most contemporary Saudi Arabian mosques. This similarity is mostly limited to the use (the applications) of Kufic and Thuluth styles, despite the differences of their methods of presentation. Despite the broad spread of writing such calligraphic patterns in Kufic and Thuluth, most of them have no link to the surrounding decoration. This is, on the one hand, referred to the lack of knowledge about the relationship between calligraphy and decorative elements either geometric, vegetal or Arabesque. On the other hand, employing unskilled calligraphers has made new materialistic forms of calligraphy. This generally results in a separation between the content and the form, and this is what Hegel meant that art is reflected in the form of sensory. Therefore, art from the perspective of self-appearance is a spiritual and sensory activity together, not as mechanically as with things in nature, nor as practical as with philosophical ideas, so, this activity does not deal with abstract or abstract ideas; it should be one physically and spiritually.



Figure 103. The use of computer in producing calligraphic forms.

It can be said that despite the clear representation of Al-Naim mosque (the first case study) for the traditional mosques' architecture, one can notice the impact of employing craftsmen instead of master calligraphers. This also could indicate the influence of readymade templates and the global market.

Based on personal observation, some contemporary mosques in Saudi show a new style of representing calligraphic patterns such as Almolhim mosque in the city of Al-Ahsa and King Abdullah mosque in the city of Riyadh. The latter for example, employed a master calligrapher (Mokhtar Shokdar) for producing the calligraphic patterns but his role was limited to generating the masterpieces (Shokdar, 2016). The company which structured the mosque had enlarged those masterpieces of calligraphy and applied them to the walls of the mosque without taking the scales and ratios into consideration (Figure 104).



Figure 104. The distribution of calligraphic patterns inside King Abdullah mosque.

For this, the role of calligraphers and architects alike is likely missing. Furthermore, the use of ready-made templates is broadly used in contemporary mosques in Saudi conveying the same copied writings, geometric patterns and the same materials in most times.

Despite the whole appreciation of the traditionalist approach, it seems that there is a dominant role of the Modernist approach. The view on supporting the Modernists' approach of has added new forms of spirituality though, following Nasr's view (1987) that the inner aspect of Islamic Art is interrelated to Islamic spirituality. This spirit of Islamic Art is more important than all the formal vicissitudes of its growth. However, can be discussed that there is a misinterpretation of Nasr's philosophy since Nasr emphasises the importance of spirit in general and considers those masterpieces of the golden era of Islamic civilisation. Therefore, considering the holiness of writing due to its origin (representing the Qur'an) is appreciated, but the issue is related to the beauty of calligraphy as a form as well otherwise audience should accept any application of any religious citation for decorating mosques regardless of the weakness of its representation.

The products of this activity for Hegel are imaginative, if art is a spiritual content expressed through sensory representation, imagination is what gives these contents sensory forms, and imagination is the metaphor that gives meaning to art. The supporting views of people, however, show a lack of knowledge about interpreting calligraphy and its philosophy. Yes, the concept of art in Islamic philosophy is linked to the concept of Monotheism that God is the one (Al-Asqah,

2011) but not as interpreted by some artists. It is as Nasr (1987) discussed; expressing the spirit that completed its elements of quality and made its symbols charged to exceed the limits of the senses and the mind to hold a close connection with the Absolute. Thus, the uniqueness of the Muslim artist has come from his deepest understanding of spirit and his work on drawing them towards the sacred world. So, his artworks have come as a great manifestation of the spirit for addressing the spirit of the viewers.

However, Al-Ghazali theory (Section 2.11.5) explained that the knowledge is sourced from the God by means of The Qur'an or the Hadith of the Prophet Mohammad; while on the other hand, the concept of intuition has a different meaning. This theory states interpreting the meaning through the Islamic faith as the direction from studying the form, moving to towards the context and finally interpretation depending on the mind's abilities to be able to synthesise the works of art. This route to the centre is a search for the deepest meaning. This is a source of action and direction where the forms represent the ambience of the spiritual experience, thereby emulating the symbolism and composition.

Despite the differences and controversy, calligraphy either modern or traditional could represent spirituality if it is the work of an artist. This might be explained through the signification of Panofsky's iconological interpretation and the signification of Barthes (Detailed in Chapter 2). However, as for Saussure, the linguistic sign is not capable of tying a thing and a name, but rather a 'sound image' and a 'concept' (Rao, 2005). Pierce stated that all signs in simultaneous manners are indexical, symbolic, and iconic (ibid). However, Barthes' first order of signification is what a photo denotes, while in the second order the sign becomes the signifier of the cultural values.

That takes us further, into what Barthes refers to as 'myth' (the sets of myths which operate as organising structures within a culture, organising the meanings). Therefore, under the operation of this myth, the sign becomes a second-order signifier and the third-order signification is a matter of the cultural meanings of signs. When we take the word (Allah) in Arabic as an example, the eye immediately goes to the religious interpretation; The God, regardless of the way of its writing (Figure 105).

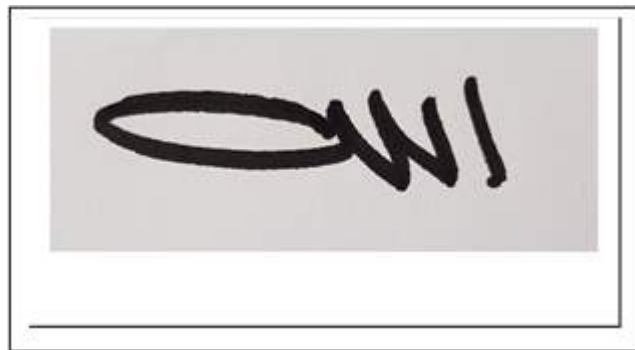


Figure 105. The word Allah in Arabic.

This reaction is accredited through cultural meaning. Instead of deriving from the sign itself, these cultural meanings derive from the way in which the society uses and values both the signifier and the signified. This may explain why some artists think that spirituality stems from the mosque itself, not the calligraphy or decoration. For them, the mosque as a place of worship

is the origin of spirituality regardless of calligraphy and decoration. However, unlike Panofsky, the emphasis has shifted the 'Why' of signification to the 'How' of signification.

Panofsky's exclusion of subjectivity in favour of positivistic objectivity-indicates that there was a deep influence of the sacrifice that cultural judgement did in favour of recreating the artistic intentions of the past (Panofsky, 1939). Thus, the work of art (in Panofsky's view of iconology) should be interpreted firstly as a specific set of forms with some meaning, next as a composition of 'stories, symbols and allegories', and finally, as a symptom of a situation in the history of culture and of ideas. Overall, the interpretation of each case should be based upon knowledge of the historical development and tradition (Bialostocki, 1963). However, considering these views of Panofsky, it can be agreed that Arabic lettering is an expressive figure of voice and meaning. Therefore, we cannot deny that calligraphy grasps spirituality and could enhance it whether modern or traditional.

Therefore, it can be argued that traditional approach has a fundamental and dominant role in style and value. Within the flexibility of Arabic letters, calligraphy, either Traditionalist or Modernist influences art the same as architecture. Its applications are broad in the field of fine art in Saudi Arabia.

Each city has its own culture and differs from the others. Therefore, the culture of citizens could affect their architecture. The influence of culture varies from one place to another. The local culture is usually influenced by the strength of politics or religion. However, most cities do not resist technology, and it is the technology that seems to be shaping the cities and making them repetitive in characteristics in most cases. There has been a great level of standardisation due to the rapid urban systems and technological developments, denying the cultural identity of human settlements and denying also the identity of unique heritages to replace it with standard, international styles of construction (Lo and Yeung, 1998). In relation to the subject of the study, many contemporary mosques in Saudi Arabia are less decorated. The different styles of mosques can indicate the impact of local cultures of each city.

Considering the influence of globalisation, the value of materials has a strong influence on mosques' architecture and its decorative elements. Its impact can be stronger than the culture itself. Therefore, contemporary architects typically found themselves in a situation where they must deal with the past, and where they must adapt new technologies by acting both locally and globally to produce a powerful form of modern development inserted into their urban context (Faleh, 2013). Based on the culture, most people appreciate calligraphy in any style as a sacred and pure art, especially when they link it to Qur'an. Some artists consider calligraphy as an important part of the culture (identity) while others see it as the identity itself. Thus, scholars and academics in the Arab world agree that the only way out of the state of underdevelopment is to learn from the west and to assess critically our own values and beliefs; a fact made urgent in the post 9/11 era (Al Sheshtawy, 2004).

From one point of view, the different perceptions about the representations of calligraphic space and its current interpretations lack objectivity, determining what influences such representation and the isolation of calligraphers and experts. This, however, indicates a gap between knowledge and experience; the knowledge of the audience and the experience of calligraphers with taking into consideration the impact of decision makers. Thus, the following attempts to gain a deeper understanding of this gap through a framework.

It is worth mentioning that to transform calligraphy back to its sacred roots again, the impact of Modernism must be considered. The artists themselves can make the difference, considering that the ‘spiritual content’, which Hegel refers to, is necessary for the manifestation of their ideas in a unified sensuous medium.

In traditional Islamic architecture, one can see/sense how inscriptions spiritually transform the space to a place in between Heaven and Earth (Scelta, 2002). The Modernist approach to calligraphy is also effective in the creation of spiritual spaces. Arguably, the concern is that when modern artists use and apply the traditional approach of calligraphy, most of them lack the skills and the previous knowledge about the bases and rules of it. This might explain why traditional calligraphy has been transformed despite the controversy over the notion that it keeps its identity. This controversy, again, could depend on what Burckhardt (1970) states that “a sacred art is not necessarily composed of images, even in the widest sense of this term; it may simply be the exteriorisation of a contemplative state and in this case, it will not reflect ideas, but will qualitatively transform the ambiance, with a view to its integration in a spiritual equilibrium whose centre of gravity is the invisible”. Thus, one can ask: what kind of identity is meant here; the Islamic or the Arabic one? One can easily recognise the nature of Islamic Art: the objective of it is above the ambience of man, where architecture and its quality are essentially aimed at inducing contemplation. Therefore, it may be said that the Islamic identity is broader as it is what Muslim artist translated into a language of art in terms of controlling calligraphy, colour and space and the relationships between them. It is generally inferred that Islamic Art is as what Muslims believe in rather than what they see (Al-Asqah, 2011).

6.4 Summary of the Chapter

It is evident that both globalisation and the Modernist approach of calligraphy have a dominant role in transforming calligraphy inside contemporary mosques in Saudi Arabia. This transformation has materialised calligraphic patterns and, therefore, affected the spiritual spaces inside mosques. It is also clear that despite the whole appreciation of the traditional approach of calligraphy, the impact of the Modernist one is apparent. This indicates a lack of knowledge about the traditional calligraphy, its spirituality and its philosophy. This knowledge gap is referred to the absence of teaching calligraphy either at schools and institutions and limiting teaching calligraphy to the departments of art at Saudi Arabian universities. The findings revealed a number of correlations between the religious and intellectual thoughts of the locals in Saudi Arabia and the misinterpretation of the role and importance of calligraphy particularly inside mosques. In the following chapter, the conclusion to the study includes a series of recommendations for further research.

CHAPTER VII: CONCLUSION

7.1 Recapitulation of purpose, aims, objectives and findings

This study aimed to investigate the impact of globalisation in materialising calligraphic patterns in mosques' architecture since the late twentieth century. It has examined the changing relationship between calligraphy and space inside mosques under the influence of Modernist approaches. The study used research objectives to achieve these aims. The research objectives included: reviewing the definitions of art; history of calligraphy and ornament; as well as reviewing the application of calligraphy in modern architecture and the visual arts.

The thesis consists of seven chapters. The focus of chapter 1 concerns the basis of the study. Chapter 2 contains a literature review of previous studies to establish the knowledge gaps. Chapter 3 identifies the methodological approach including the selection of the case studies. Chapter 4 discusses the analysis of the collected data whereas Chapter 5 discusses the findings of the collected data. Finally, chapter six outlines the conclusion for the whole study.

This study has investigated the transformation of calligraphy from the situation of 'spirituality' to materialism in contemporary mosques in Saudi Arabia. The investigation indicated critical outcomes, revealed the implicit complexities and issues for stakeholder groups, including calligraphers and local inhabitants. The following summarizes the research outcomes for answering the research questions and achieving the aims and objectives of the study. The research in this study has found that there is misconception of 'spirituality' between the locals in Saudi Arabia. This is due to the lack of knowledge about calligraphy, especially its traditional approach. It has been found that a dangerous correlation has emerged between such misinterpretation and the productions of weak calligraphic forms. Therefore, the appreciation of those weak applications of calligraphy inside mosques is widespread. In addition, the study has shown there is an isolation of decorative elements, that were historically important in integrating calligraphy in spiritual spaces. The issue of materializing calligraphy in contemporary mosques can be interpreted as an invasion of global markets and modern technology, taking into consideration the impact of religious views and the local cultures.

What was found was that there is a tendency to appreciate the Modernists' school of calligraphy among the locals in Saudi Arabia regardless of its applications (within mosques' architecture or through visual arts). One of the themes to emerge from the analysis of the questionnaire conducted with artists was their lack of cultural information about calligraphic concepts and the aesthetic values of calligraphy.

These findings suggest that local culture is a strong motivational factor for enhancing the role of calligraphers within their societies and was a perceived influence on the transformation of calligraphy in Saudi mosques and the spread of a materialistic culture. Participants of this study showed some preference for the current forms of calligraphy within contemporary Saudi Arabian mosques considering the sacredness of their source; the Holy Qur'an.

7.2 Summary of the Chapters

Chapter One: introduced the research aims, objectives and questions. It has included the structure of some interrelated questions for the current research. These have been revised during the literature review and shape the two main questions for this study, they are:

1. What has been the influence of the modernist school on calligraphy?
2. What is the impact of the above on the spiritual concept of calligraphy and religious space in contemporary mosque architecture?

Chapter Two: reviewed the related literature and previous studies to establish a solid foundation for the research. The study started with analysing philosophical discourse relating to the definition of art. This philosophical focus concerned Hegel's definition of art and his philosophical thought about artwork, from both the physical and metaphysical perspectives. Following this there has been a literature review covering the definition of 'Art' in Islamic society, the impacts of Islam as a religion on representation of art in general, and on the emergence of decoration. Finally, there was an analysis of the views of Traditionalists and Modernists concerning the influence of globalisation on calligraphy.

The findings of the literature review showed that the nature of the problem addressed in the study lies in two main streams; traditional and modern perspectives towards calligraphic patterns in religious architecture. Furthermore, the changes of calligraphic forms are complicated and must be investigated from multiple perspectives. The modern Saudi Arabian mosques generally lack a wide variety of information about calligraphy. The major outcomes of this chapter set out criteria for choosing the most appropriate case studies. Furthermore, the pilot study directed major changes on the selection of the case studies. Based on those changes, the research therefore, used a holistic multiple case- study approach which included reviews of the mosques of Al-Naim and King Abdullah, replies to a questionnaire from sixty-eight Saudi Arabian artists, and interviews with six Arab experts in calligraphy.

Chapter Three: discussed the research design and the methodological approach for the study. This study has used a case study which has included a mixed-method approach where the main tools for collecting data have been an online questionnaire and unstructured interviews.

Chapter four: analyses the collected data. The analysis of calligraphic patterns used the method of visualising, contextualising and conceptualising. In addition, the analysis of the responses of questionnaire and interviews were carried out by classifying them to interrelated headings, then applying the interpretative style of treating those types of information as text.

Chapter five: discusses the findings of the study 'As outlined below'.

Chapter six: concludes the main outcomes in response to the questions of the study. It also discusses the limitations, obstacles of the study as well as opportunities for further research.

7.3 Relationship to previous research

The following gives a brief overview of the findings of this study and their relationship to previous work in these areas.

Regarding the first research question, which looked at the impact of the Modernist school on calligraphy and its discourse, the findings of the study build on previous research in this area. Many of the previous studies are biased towards the discourse used within the traditional school. Regarding calligraphy's functions, the concept of the spirituality, a variety of discourse is available in more than one study, including the characteristics of Islamic decoration and calligraphy and an analysis of their geometric and vegetal patterns. As discussed in Chapters 5 and 6, the Modernist school has influenced the Arabic calligraphy positively and negatively. It contributed positively to the inclusion of the Arabic calligraphy as an aesthetic means in art, and contributed to its being an individual entity, while it is seen negatively in materialising the calligraphy and deforming its usual function in mosques' architecture. These effects were due to several factors including the large-scale invasion of modern industries and the impact of local culture which ranges from misunderstanding about religious thoughts, traditions and social habits.

The findings of the present study are, to some extent, at odds with those of Awawdeh (2009) who aimed to find a way to lay the foundations for contemporary architects, stemming from a flexible methodology in Islamic thought. His study, while opening a new concept for discussing Islamic art and architecture, falls short in presenting an argument on the relationship between space and decoration. This issue lies in the heart of this study because it focusses on calligraphy as a main decorative element as well as taking into account its religious function.

For the response to the second question of this study, the findings are also at odds of their spiritual concerns with some studies' results like: 'Calligraphy as a Modern Plastic Movement through Contemporary Arabic Graphic Art' (AbdelKader, 1998); 'Islamic Ornaments as A Source for Modern Decorative Work' (El-Sharkawy, 2000); 'The Plastic Systems of Arabesque and Its Uses in the Field with Silk Screen and Stencil' (Ahmed, 2007). Such studies focused on the artistic side and the applied aspects of decoration. Some of them explained how to benefit from Islamic decoration in other types of art, whereas the rest introduced historical information about Islamic art in general and Islamic decoration. These influences enhanced Arabic calligraphy, at least within the confines of the mosques' architecture. This materialisation contributed to the removal of calligraphy from its known spirituality inside the mosque. Thus, the spiritual spaces are no longer as noticeable as they were in the mosque's architecture.

However, the findings do not go against the conventional and widely expressed view that Islamic Art is based on Monotheism and the impact of religious thoughts is stronger. Hanash (2012) in his study concludes that unity is the origin and the essence of Islamic Art, while diversity has its symbolic manifestation. This theory of unity and diversity in Islamic art is based specifically on the 'qualitative unity'. It is a theory which revolves around the concept of Tawheed as the epistemological essence of the Islamic Art. The origins of this concept are related to the Divine beauty, and source their manifestations in nature, human creativity, as well as the subject of human imitation in knowledge of art (Hanash, 2012). Current thinking does not discount these conclusions but simply builds on them to include a self-concept to reach its targets.

Assabooni (2009) made conclusions about Islamic art, its spread and mentioned that the main reason was Islamic intellectual thought which affected Muslim artists. Muslim artists were also influenced by Westerners and took from their knowledge. The evolution of Islamic Art during the Islamic Empire was mentioned clearly in her study. However, it seems that she omitted the importance of architecture as the main start point of Islamic Art. This study explains that Islamic Art grew from architecture where it started in the mosque.

7.4 Research Outcomes and Response to the Research Questions

The response, to the two interrelated questions of the study requires dividing the impact of globalisation on both the architecture and art to answer the first question (What has been the influence of the modernist school on calligraphy?). This, includes explaining the spread of consumer culture and linking its impact with physical/metaphysical concepts for Muslims (inward/outward). This study explains the impact of the above on the spiritual concept of calligraphy and religious space in contemporary mosque architecture as a response to the second question. The following details those responses to the research questions.

7.4.1 The Impact of globalisation on mosques' architecture

Muslim cities are partially imitated structures of the Western urban patterns and have been inspired by Western perspectives, outlooks and therefore lack all Islamic viewpoints (Azarshahr *et al.*, 2013). Since the traditional architects have started imitating the modern architecture of the west, besides neglecting their own traditional architecture, they have ended up with a failure to appreciate their own authentic architecture, which eventually led to the erosion of that historical architectural legacy.

“In the 20th century the Islamic concepts of Unity Harmony and continuity often are forgotten in the rush for industrial development” (Martin, 2007, p. 15)

Now a century later, modern architecture is not appreciated, and a timely understanding of its appropriateness impacts our architecture in a negative manner. Since traditional architecture was disregarded, its fundamental principles have also been neglected, and the utility of modern architecture stayed limited to its surface features (Golmahamadi, 2000). The traditional styles of Islamic architecture (such as being inward-looking), are compromised by more ‘outward-looking’ western architectural concepts. This is the concept where the overlap emphasises the divergence between the Muslim and the Western world’s (Anadolu-Okur, 2009).

Globalisation has been enhancing the production of goods since the birth and development of industries. These productions are highly creative in content and have their use- and exchange-value determined by their aesthetics and symbolism. However, those changes have created a new society’s aesthetic, symbolic and emotional needs which overlapped with the existing culture (Santagata, 1998).

Undoubtedly, globalisation has not only affected architecture, but also the Islamic culture too. In the contemporary calligraphy that has been carried out in Saudi Arabian mosques, the thinking of artists has been affected by globalisation, which has led them to create modern versions of artworks of the traditional styles. These versions can be described as a deformation of traditional calligraphy and their outputs are of interest to a large segment of the society. Furthermore, there is a large consumption and attraction towards modern industrial materials due to their bright

colours and physical features in the construction of mosques, and the weak overseeing role of the building organisations concerned. This, therefore, moves us to the other part of argument that discusses the impact of globalisation on art in Saudi Arabia.

7.4.2 The impact of globalisation on Saudi Arabian art and calligraphy

The new patterns of calligraphy, which broadly use the computer in generating calligraphic forms, are appreciated by large parts of modern societies. In addition, the flourishing of plastic art in Saudi Arabia has attracted attention. Modern visual art enthusiasts in the United Kingdom carefully follow the rapid development of the artistic movements and the development of materials and goods alike. Based on what was mentioned in Section 2.11.5, the Saudi Arabian's painting witnessed the entry of the Arabic calligraphy, but diverted from its known traditional styles, except with a minor presence in some works of art. These changes may have been in favour of Arabic calligraphy as an independent entity.

In the past two decades, several groups of Saudi Arabian calligraphers have emerged and started teaching calligraphy to youngsters, but away from the governmental institutions. They have presented numerous exhibitions locally and internationally. The development of the visual arts in the United Kingdom has played an active role in the rise of the calligraphy, but this advancement did not exceed the borders of the painting's board as a positive effect if it could be said. As for the Arabic calligraphy inside mosques, we can say that it no longer represents the same function as a spiritual medium. Perhaps the influence of materials, as well as the culture of consumption among Saudi's, is the strongest factor in isolating the Arabic calligraphy and its spiritual function inside the mosques. This is compounded by the widespread use of the computer generated calligraphic patterns that are enlarged to suit the place of presentation. All these considerations have effectively contributed to transforming the calligraphy and materialising it, which, therefore, led to the absence of its spirituality.

Despite the dominance of material development, the role of the local cultural influences in transforming calligraphy cannot be dismissed. This culture can be said to be a mixture of customs and traditions (some of which may have been the output of a wrong interpretation of a religious context) under the rapid impact of Modernism and technical developments. However, the influence of tradition is known from ancient times. Benjamin (1936) sees the role of tradition as an inseparable from the form of an artwork as well as a vital in the uniqueness of an artwork.

“Originally, the contextual integration of art in tradition found its expression in the cult. We know that the earliest art works originated in the service of a ritual. It is significant that the existence of the work of art with reference to its aura is never entirely separated from its ritual function. In other words, the unique value of the “authentic” work of art has its basis in ritual, the location of its original use value. This ritualistic basis, however remote, is still recognizable as secularized ritual even in the most profane forms of the cult of beauty” (p. 224)

The great leap of socialism, and the appearance of photography as one of the first truly revolutionary means of reproduction, affected art functionally. This impact on art has become marked a century later. In terms of pure art, this impact involved strengthening the negative image of artworks. Besides the denial of their social functions, it has rejected categorising them by subject matter (Lehmann, 2012). During long periods of history, the mode of human perception was influenced by the changes with humanity's whole mode of existence. The way

human sense perception is organized, the medium in which it is accomplished, is determined not only by nature, but by historical circumstances (Benjamin, 1968).

However, the age of mechanical reproduction has had its advantages on art. It has emancipated artworks from religious rituals for the first time in history, despite its negative impact on the authenticity as a concept. Thus, the instant the criterion of authenticity ceases to be applicable to artistic production, and the total function of art is reversed (Lehmann, 2012).

To understand this, it is important to establish that an artwork is a form of communication, designed to be experienced and interpreted by persons other than its creator. In understanding a primitive artwork as it is seen by Hegel (1975):

“The primitive art works do not please us or satisfy by their immediate appearance, but by themselves, they encourage us to advance beyond them to their meaning which is something wider and deeper than what they are” (p. 308)

If this is the case for the primitive art as one of the simplest form of art, then it would be more considerable in the case of Islamic Art. Artistic creation is an act in which the artist draws on two highly developed gifts: a capacity for vivid perceptions of the world, including his or her inner world. Secondly there is an ability to be imaginative, intellectual, and technical to communicate ideas and feelings through a particular art form, thereby bringing them from the private to the public realm where they can be experienced, reflected on, and shared by others. Eisner (1991, p. 2) describes the public contributions of the arts in this way:

“The arts and the humanities have provided a long tradition of ways of describing, interpreting, and appraising the world: history, art, literature, dance, drama, poetry, and music are among the most important forms through which humans have represented and shaped their experience.”

The critical response to art is an important component of the communicative process as it refers to the public discourse stimulated by the arts. Greene (2001, p. 50) writes that the arts:

“create a public space in which meanings are shared and perspectives expressed and clarified.”

In other words, this communicative cycle is not just between the artist and another beholder. This “Great Conversation” as identified by Oakeshott and Fuller (1989) includes artists, critics, teachers, and society members. They engage in reconstructing the meaning of great artworks. The critical response to art, therefore, affects both the artistic experience of creating and the aesthetic experience of perceiving. It has a vital role in shaping the cultural environment in which new artworks are made as well as it helps local cultures to reflect on and assess their own responses considering the observations of others.

Consequently, it can be said that a functioning communicative cycle could result in a vibrant culture. Arabic calligraphy in Saudi Arabian mosques indicates the gap between the artists and local cultures. The weakening of any links along the chain could lead into new values to suit the

current deformation of calligraphy. There has been the closing of organizations, departure of individuals who provide high-quality art to the public, a decrease in the number and/or the capacity of individual appreciators of art, a lessening of opportunities to encounter works of art, a decrease in outlets for public discourse, or a decline in the quality of that discourse that will weaken the cultural sector and diminish its benefits to the public.

The framework of the art communicative cycle suggests that the focus of cultural policy should be increasing the number and quality of *aesthetic experiences* rather than on simply maximizing the number and quality of *artworks*. However, Beardsley (1982) proposes three conditions that must be met for an aesthetic experience to occur: artwork needs to provide the potential for an engaging experience; the individual beholder must have the opportunity to encounter such works of art; and the individual beholder must have the capacity to be moved by the expressive and intellectual qualities of a work of art, a capacity that typically comes from familiarity with an artistic form. If these three conditions are required to promote the spread of aesthetic experiences, cultural policies then need to have corresponding goals including increasing the number of works of art that have the potential to provide an engaging arts experience, promoting the opportunity for citizens to encounter such works of art, and cultivating the capacity of individuals to have engaging experiences with works of art. These changes have meant that art in Saudi Arabia has risen rapidly at the expense of obstructing traditional calligraphy.

Even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be. This unique existence of the original work of art determined the history to which it was subject throughout the time of its existence. This includes the changes which it may have suffered in physical condition over the years. However, the use of ready-made templates in calligraphy reproductions is far from this. Besides their impact in isolating master calligraphers, they convey common mistakes and spread them. Therefore, one can say that the whole sphere of authenticity is outside technical reproducibility. One might conclude that which withers in the age of mechanical reproduction is the aura of the artwork, not the artwork itself. This is a symptomatic process whose significance points beyond the realm of art. One might generalize by saying: the technique of reproduction detaches the reproduced object from the domain of tradition. By making many reproductions it substitutes a plurality of copies for a unique existence. With permitting reproduction to meet the beholder or listener in his own situation, it reactivates the object reproduced. These two processes lead to a tremendous shattering of tradition which is the obverse of the contemporary crisis and renewal of mankind. Both processes are intimately connected with the contemporary mass movements. Their most powerful agent is film. Its social significance, particularly in its most positive form, is inconceivable without its destructive, cathartic aspect, that is, the liquidation of the traditional values of cultural heritage. These convergent endeavors made a predictable situation which cause the most profound change in their impact upon the public; it also had captured a place of its own among the artistic processes.

Considering those variables and under the influence of current developments of technology in the current era, the response to the first research question can be summarised as follows:

The Modernist school has influenced Arabic calligraphy positively and negatively. As for the positive effect, it is limited within the field of fine arts whereas its negative impact includes the form and function of Arabic calligraphy in Islamic architecture, especially mosque architecture.

The Modernist school contributed to the inclusion of Arabic calligraphy as an aesthetic mediator within the contemporary art and contributed to its being an independent and individual entity as same as the other different schools of art.

As for the negative impact of the Modernist school on Arabic calligraphy, it is seen in materialising the calligraphy from and the loss of its usual function in the construction of mosques, where calligraphy no longer performs a function but an aesthetic element like all other elements.

These effects, whether positive or negative, were the result of several factors that supported each other. These factors included the massive invasion of modern industries, especially those related to the manufacture of raw materials. In addition, the impact of local culture ranges from misunderstanding some religious thoughts, traditions and social habits. Moreover, there is a noticeable lack of knowledge about the Arabic calligraphy among the locals in the Kingdom of Saudi Arabia, which in turn has influenced the aesthetic concepts related to the Arabic calligraphy besides the lack of a culture of criticism.

However, the views of those who see the impact of the Modernist school on Arabic calligraphy inside Saudi mosques as positive should not be underestimated. They have justified views and the role of researchers in the field of calligraphy is to clarify the vague concepts that make calligraphy at mosques controversial.

In response to the second question of this study, these above-mentioned influences enhanced materialisation in Arabic calligraphy, at least within the confines of the mosques' architecture. This materialisation contributed to the removal of calligraphy from its known spirituality inside the mosque. Thus, the spiritual spaces are no longer as noticeable as they were in the mosque's architecture. Perhaps the excessive use of ready-made templates in Saudi mosques has made Arabic calligraphy materialistic as never before. These templates not only contributed to the isolation of master calligraphers, but also contributed to the spread of computer fonts and possibly to the transmission of repeated typographical errors of the same templates.

7.5 Limitations of the Research / Anticipation of Criticisms

This study has provided an in-depth understanding of the phenomenon of transforming calligraphy from spirituality to materialism in contemporary mosques' architecture from the point of view of local artists in Saudi Arabia and experts in calligraphy from six different countries in the Islamic world. It also examined the changing relationship between calligraphy and spiritual spaces in contemporary mosques and investigated the paradoxical nature of

authenticity in relation to the art of calligraphy. Therefore, the different opinions about changing calligraphic forms and about the two approaches of calligraphy (Traditionalist and Modernist) provided richer recognition of many developing characteristics that influence the forms of calligraphy and its representation. However, there were some limitations, which future research should take into consideration.

The opinions of decision makers and Imams were targeted, but it was impossible to discuss such issues with them at the time of conducting the study. However, their opinions may be required for future works. The study targeted the visitors of the two mosques, but because of some political considerations (see Section 3.7) they were replaced with a group of artists. Interviewing the general public who visited the two mosques could have provided valuable information to address the gap between calligraphers and their audience.

The number of participants (targeted artists) was limited, and future research should investigate the issues of calligraphy with a wider audience and may be from different countries. Despite the use of some alternative terms for spirituality that have provided a good understanding of the problem being investigated in this study, many artists refused to respond to some questions which therefore required more explanation. This will be considered for further research about the sensitivity of religious terms in art discourse.

The study has provided a review of the role of calligraphy and its applications in creating spiritual space in mosques. However, the study did not consider the application of calligraphy in different art fields. Future research is needed to identify such applications and it is recommended that this should investigate further implications of calligraphic patterns, especially with the development of digital software and digital applications of calligraphy in relation to authenticity and identity.

The impact of globalisation exceeded calligraphy and decoration to affect the main parts of mosque such as minbars and mihrabs. Within Saudi Arabia it has been shown that the minaret has a completely modern design which might be the coming shape of minarets considering the cost of traditional minarets. In addition, the use of the grey colour in the decorative elements is uncommon (considering the symbolism of colours especially at mosques). Such points and the use of modern technology for producing calligraphic templates may be a good point of departure for future research.

Despite the richness of the collected information in this study, a different method from the one used in this study could provide a more in-depth understanding and a clearer perception. As mentioned, if researchers in the future could conduct a direct study with worshipers and visitors inside mosques, he or she will gain clearer perception of the local cultural issues. In the current study, the artists were interviewed instead, however, their perceptions were based on previous knowledge rather than reflecting on the impact of the calligraphic patterns and decorative elements on their expressions.

Finally, it was a pleasure to conduct this study which has opened new horizons for me since its beginning. It allowed me to research deeper in the field of Arabic calligraphy and revealed some valuable information which would be of my future studies. I should stress that my study has been primarily concerned with the transformation of calligraphy inside contemporary Saudi mosques.

The findings of the study were limited to two mosques in two different regions in Saudi Arabia. However, the views of locals and experts in the field of calligraphy were fundamental to support the analysis of the calligraphic patterns of the two mosques. I have addressed only the influence of globalisation on transformation of calligraphy and how it has affected the local culture since the emergence of industry. However, the findings of the study do not imply my tendency towards either the Traditionalist school or the Modernist one.

My findings should not be taken as evidence for supporting Sufism as a religious trend as it investigates the sacredness of calligraphy in Saudi Arabia and its values for the locals. The lack of decision makers' opinions means that we cannot be certain that the issue of transformation of calligraphy in Saudi mosques is deliberately intended by the locals. Unfortunately, I was unable to interview some decision makers in Saudi Arabia due to the political nature of the country at the time of conducting this study. Such data could have allowed me to determine whether the decision makers have a dominant force in choosing the calligraphic forms and their materials or not.

7.6 Implications of Findings

My study offers evidence for the transformation of calligraphy inside contemporary Saudi Arabian mosques. This study supports the argument for a change in the form and the function of Arabic calligraphy regardless of it being positive or negative. On the face of it, this would suggest that such transformation may be a principal factor in enhancing the role of calligraphy in other visual arts such as printmaking and digital arts. However, the supporters of the Modernist school see this phenomenon as a key point to consider the flexibility of Arabic calligraphy as well as considering the impact of local culture and the invasion of modern industrial materials.

This does not mean neglecting the importance of the traditional school of Arabic calligraphy as it has its supporters. As mentioned before, there is an increasing number of volunteers to teach Arabic calligraphy freely to young people in Saudi Arabia that might help keep this art from extinction.

7.7 Contribution to Research

Although, the study has indicated a clear change in the function of calligraphy, the findings from Chapter 4 have shown that artists and experts have expressed different opinions about the changing forms of calligraphy and about the two approaches (Traditionalist and Modernist). This has emphasised the remarkable role of globalisation in transforming calligraphy in Islamic architecture since the late twentieth century. However, the main contributions of this study can be summarised in the following paragraphs.

This study may contribute to draw the attention of scholars and researchers in the field of Islamic Art in general and calligraphy towards an important issue in the Kingdom of Saudi Arabia: the issue of criticising Islamic arts. The latter is an important issue where the full sovereignty of the religious stream is absolute reference to the country. It is not the problem of religion as a constitution, but the problem lies in the jurisprudence of interpretation and philosophy and the reluctance of many on this approach to avoid suspicions when a case of doubt.

The study revealed the existence of some unusual features of calligraphic and decorative elements inside Saudi mosques. Some calligraphic compositions exist in different mosques in the same neighbourhood, which confirms the impact of using ready-made templates conveying the

same mistakes. The literature showed a negative impact of such duplication. In addition, using computers for producing calligraphic phrases makes the problem worse. Some examples showed a mix of different calligraphic styles for the one phrase. Moreover, several unusual colours like pink were found inside some contemporary Saudi mosques. This, therefore, could draw the attention to further studies on the impact of materials on decorative arts in Saudi mosques.

The contribution of the current study included the following points. First, providing rich information about the changing forms of calligraphy since the twentieth century that supports a richer understanding of experience and interpretation of calligraphy. Second, investigating the challenges and gaps (under the influence of religious or political views or the globalisation) between decision makers, calligraphers and audience in Saudi Arabia to meet expectations of better representations of calligraphy. Third, understanding the different views of people and their perception of both calligraphy and spiritual space. Finally, it established the ground for further research in the field of calligraphy art and its philosophy in Saudi Arabia.

7.8 Recommendations for Future Research

This study may contribute to draw the attention of scholars and researchers in the field of Islamic Arts in general and calligraphy in particular towards an important issue in the Kingdom of Saudi Arabia, the issue of criticising Islamic Arts. It is not a problem of religion as a constitution, but a problem lies in the jurisprudence of interpretation and philosophy and the reluctance of many on this approach to avoid suspicions when there is doubt.

I think possible areas for further research and investigation must include the influence of religious people (Imams) and the role of decision makers on the art of calligraphy. This may investigate the decision of stopping the teaching of Arabic calligraphy in general education schools and to limit it to students at universities.

Future research into the field of Arabic calligraphy might usefully focus in depth on the applications of computer and design software in generating calligraphy.

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APPENDICES

Appendix A – Consent Form

Dear Artist,

I am conducting this questionnaire survey as a part of my research study, which will be submitted for the fulfilment of my PhD in Art and Design at Birmingham City University. The subject of my research is the transformation of calligraphy in contemporary Islamic mosque architecture: from Spirituality to Materialism.

In some types of spatial art (such as architecture and calligraphy), one can observe the gradual influence of Western modernism since the post-World War II and the rapid influence of globalisation since the late 1980s. However, such influence on most types of spatial art, especially calligraphy, has not been fully materialised and has been the subject of controversy and debate among the Islamic artists and scholars. Such debate has divided scholars and artists into two groups, Traditionalists and Modernists. Traditionalists believe in the fixed identity of the calligraphy based on the spiritual philosophy of Islam which is not subject to change. The other group, modernists, while appreciating the dimensions of spirituality that comes from the Islamic faith, follow the contemporary philosophical debates projecting identity as a dynamic concept containing both traces of its past and the narrative of our contemporary social life.

The transient views of modernists have generated the following two interrelated questions for my research:

1. What has been the influence of the modernist school on calligraphy?
2. What is the impact of the above on the spiritual concept of calligraphy and religious space in contemporary mosque architecture?

Literature reviews on historical, religious and philosophical context of Islamic Art and calligraphy has provided a foundation for my research regarding calligraphy and its changing patterns over the time. These historical reviews and critical appraisal of the two schools have provided criteria for my case studies which include obtaining opinions of contemporary artists.

Artists in Saudi Arabia are a part of the case study and their views about calligraphy and its transformation in both; visual art and architecture of mosques are necessary. These views would be analysed along with the knowledge and information gathered from the previous resources. Therefore, your participation in this questionnaire would be important and appreciated. You will be asked to fill out this online questionnaire. It will take approximately 15 minutes. I would appreciate if you would express your views on this subject by filling the following questionnaire and forward it to me.

Please feel free to contact me if you have any questions, comments, or concerns regarding this questionnaire.

Thank you in advance for your valuable contribution and co-operation.

Yours sincerely:

Ahmad Almontasheri, PhD candidate in Art and Design, Birmingham City University, UK

Email: a-s1375@hotmail.com

Mobile: +447825391382

- Please Note: by completing this questionnaire; you agree to participate. All given information will be treated confidentially and would be only used for the purposes of the study.

Your email:

General information

Name: (Optional)

Age:

- ☐ 20-30
- ☐ 31-40
- ☐ 41-50
- ☐ 51-60
- ☐ 61-above

Gender:

- ☐ Male
- ☐ Female

Educational level:

- ☐ Postgraduate
- ☐ Undergraduate
- ☐ Other, please specify:

Considering calligraphy, I see myself as:

- A modern artist
- A traditional calligrapher

1. Do you think Modernists' approach has moved/distanced calligraphy from its spiritual concept? Why?

2. Do you think the use of calligraphy in contemporary mosques contributes to the spiritual context of the space or has become decorative/materialistic? Why?

3. Do you think the applications of traditionalists' approach still have an impact on calligraphy in the field of art? Why?

4. Do you think the local cultures have an impact on any of the above changes? Why?

5. Do you think modernism and global capitalism have an influence on materialising calligraphy? Why?

- Please use the box below if you want to add any additional information:

Thank you for taking this questionnaire. Your valuable responses are appreciated. Once again, the given information will remain secured and will not be shared with any other party but for the purpose of this study.
Kind regards

Appendix B

Consent example

أؤكد أنا

زكي بن علي الهاشمي

بتاريخ ٢٠١٦/٠٧ بأنني على علم ودراية
بمحتويات هذا اللقاء وبهذا فقد منحت
الباحث / أحمد بن صالح عبدالله المنتشري
بجامعة مدينة برمنجهام كافة الصلاحية بالتصرف
بمحتواه

**(ضمن حدود البحث العلمي وأدبياته وضمن حدود
الدراسة).**

إطلاعي على البحث: وهذا إقرار مني بذلك شاملا
موافقتي تساؤلات وأهداف وما لي من حقوق أدبية
على كوني جزء من هذه المقابلة مؤكدا صحة ما ورد
فيها

موافقتي على الاقتباس من أقوالي ضمن حدود البحث
العلمي وأدبياته

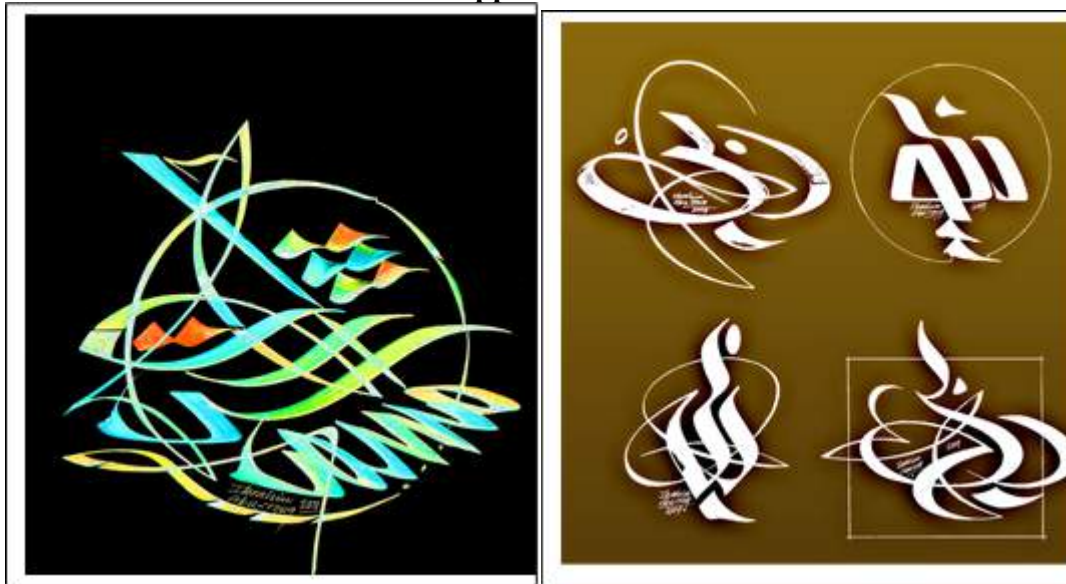
موافقتي على وضع صور من أعمالي ضمن البحث
العلمي محتفظا بحقوق الملكية الفكرية.

الهاشمي

Appendix C

Expert Artist's work: Ibrahim AbuTouq

Appendix C1



Appendix C2



Appendix C3



Appendix D

Expert Artist's work: Mohammad Tosoon

Appendix D1



Appendix D2



Appendix D3



Appendix E

Expert Artist's work: Jannah Adnan

Appendix E1



Appendix E2



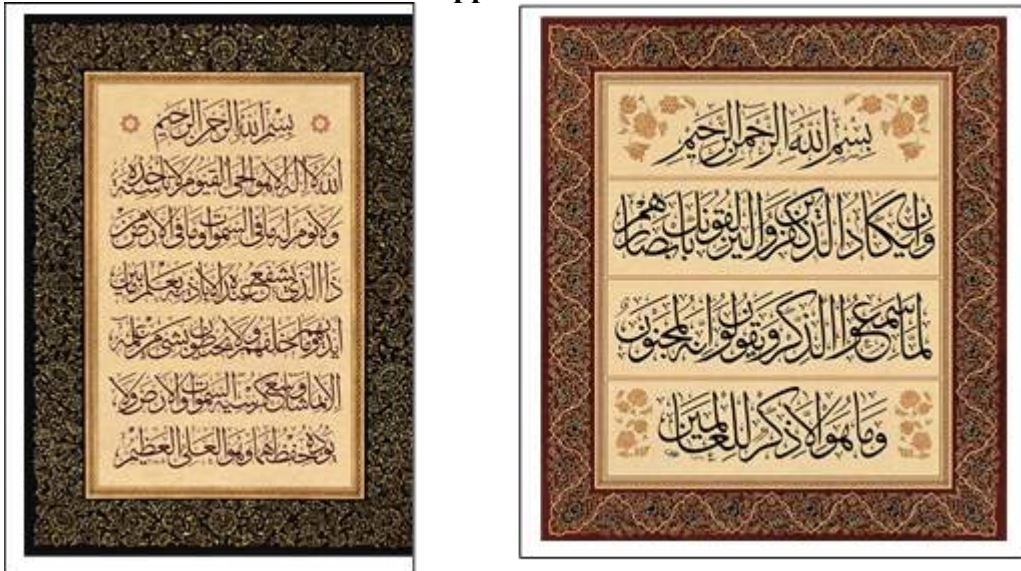
Appendix E3



Appendix F

Expert Artist's work: Mokhtar Shokdar

Appendix F1



Appendix F2



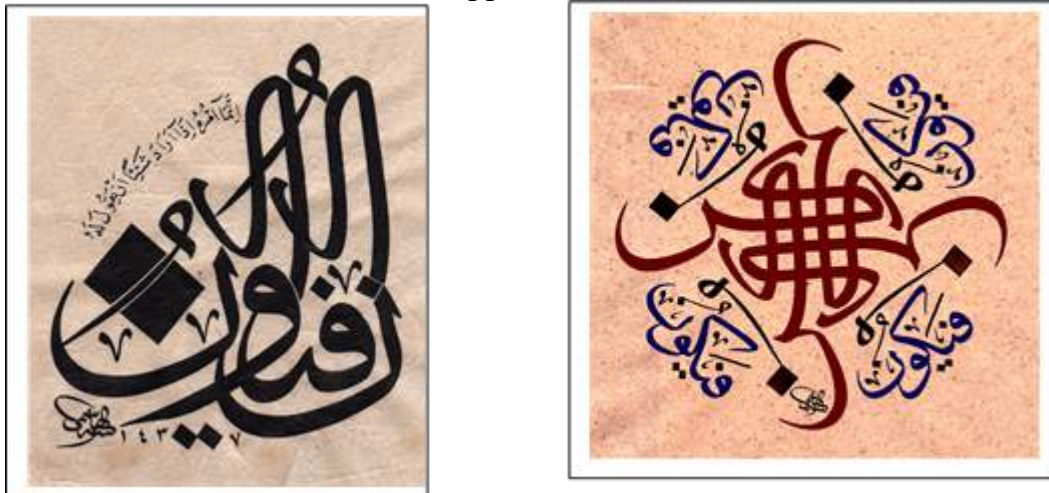
Appendix F3



Appendix G

Expert Artist's work: Zaki Alhashimi

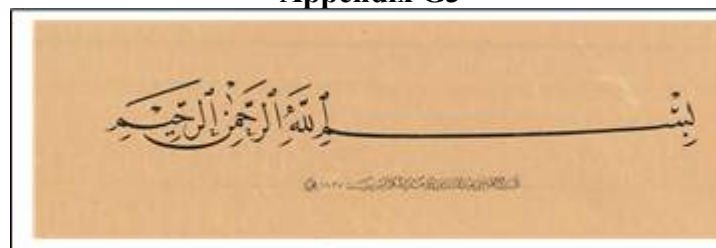
Appendix G1



Appendix G2



Appendix G3



Appendix H

Expert Artist's work: Mohammad Elbandouri

Appendix H1



Appendix H2



Appendix H3



Appendix I

Artist's work: Wajih Nahle

Appendix I1



Appendix I2



Appendix I3

