

The Art of Worship in the

Islamic World

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Textiles: Weave '92

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NATIONAL COLLEGE OF ART & DESIGN

Department of Fashion and Textiles;
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"THE ART OF WORSHIP IN THE ISLAMIC WORLD"

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Submitted to the Faculty of History of Art and
Design and Complementary Studies in Candidacy
for the Degree of Woven Textiles.

Date of Submission: 6/3/92

ACKNOWLEDGEMENTS:

I would like to take this opportunity to thank the Chester Beatty Library in Dublin, for allowing me to use their library facilities. To thank Trinity College Dublin for their information on the Book of Kells.

Most importantly I would like to express my gratitude towards my thesis tutor Mr. Paul O'Brien. And last but not least the library staff of the National College of Art and Design, Dublin.

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INTRODUCTION:

This thesis proposes to examine the relationship between art and religion through the ages. It began with the aim of examining many different religions however, the nature of the thesis and its length required a narrowing down of the theme to one particular religion. I chose Islam as this religion. The reasons for this are personal and professional but are based on its apparent differences to my own religion. As a Christian I have been brought-up in an environment surrounded by various images of Christ and His followers, the saints. In contrast Islam is a religion that finds it offensive to create images of God.

'By works was faith made perfect'

James 2:22

The above statement is taken from the New Testament of the Bible and it means that the work people did, including art, helped them become closer to and serve their God. This way of thinking can be found in many religions.

In times past art and spirituality went hand-in-hand. Art was used as a way of expressing religious faith towards a God or Gods. It was also used as a means of communicating this faith to a tribe or people and to its' younger generations. A further use was in the decoration of places of worship for the community and to bring religion into the home.

This paper begins with an appraisal of art in religion, examining the major world religions for similarities and different approaches to certain aspects of religious art. This is followed by a more detailed study of Islamic art and in particular, its' calligraphy. The final chapter takes the Qur'ans (holy books) of the Mamluks as an illustrative example of Islamic calligraphy. This approach from the general to the specific makes it easier for the writer and reader to understand the topic that is being examined. I finish the paper with a summary of the main conclusions drawn from each chapter.

CHAPTER 1: AN APPRAISAL OF ART IN RELIGION

There are many different types of religion. The five major types are: Christianity; Judaism; Islam; Buddhism and Hinduism. There are six minor religions of importance.¹ Although they differ in ways, they are also very similar in others. Among these religions there are smaller groups as well. Whilst differing in practise, they hold the same basic traditions, ideologies and philosophies. Religion is seen as the worship of one or more gods, or belief in the supernatural perhaps, but some would see it as a way of life rather than just a way of worship.² Religion is a system based on traditions and teachings, and just as the holy books and ceremonies are passed down from generation to generation, so too are the arts and the techniques used. Some have changed, while others have remained the same for hundreds of years.

Religion helps man to answer questions about himself. Such fundamental questions include: what is the meaning of life? Who created the earth and the universe? Is there life after death? These questions and their answers draw people into religion and are portrayed by images of gods and creators, good and evil, heaven and hell. (Fig. 1.1) These images were and are used to spread the gospels, beliefs and stories of a particular religion. There has never been a tribe or race of people that did not have some form of religion, with the exception of modern-day atheism.

Religion continues to be a powerful force in history. It has used its' influence and power to control countries, to accumulate great wealth and to spread its' popular theories. Its' wealth, in the form of precious metals and stones, has been used to create beautiful works of art. As a result, religion has always been a major source of inspiration for the Arts. Some of the most beautiful buildings in the world are religious houses of worship be they cathedrals, churches, mosques, temples or shrines. (Fig. 1.2) Inside these buildings religious art can take the form of stained-glass windows, carvings, sculptures, paintings and different textiles. (Fig. 1.3)



Fig. 1.1.

The Last Judgement, detail, Giusto di Menabuos, Viboldone parish Church.

Fig. 11.

Fig. 11.

British Church.
The last redoubt of the British Church.
The last redoubt of the British Church.



Fig. 1.2.

Interior of Santa Chapelle.



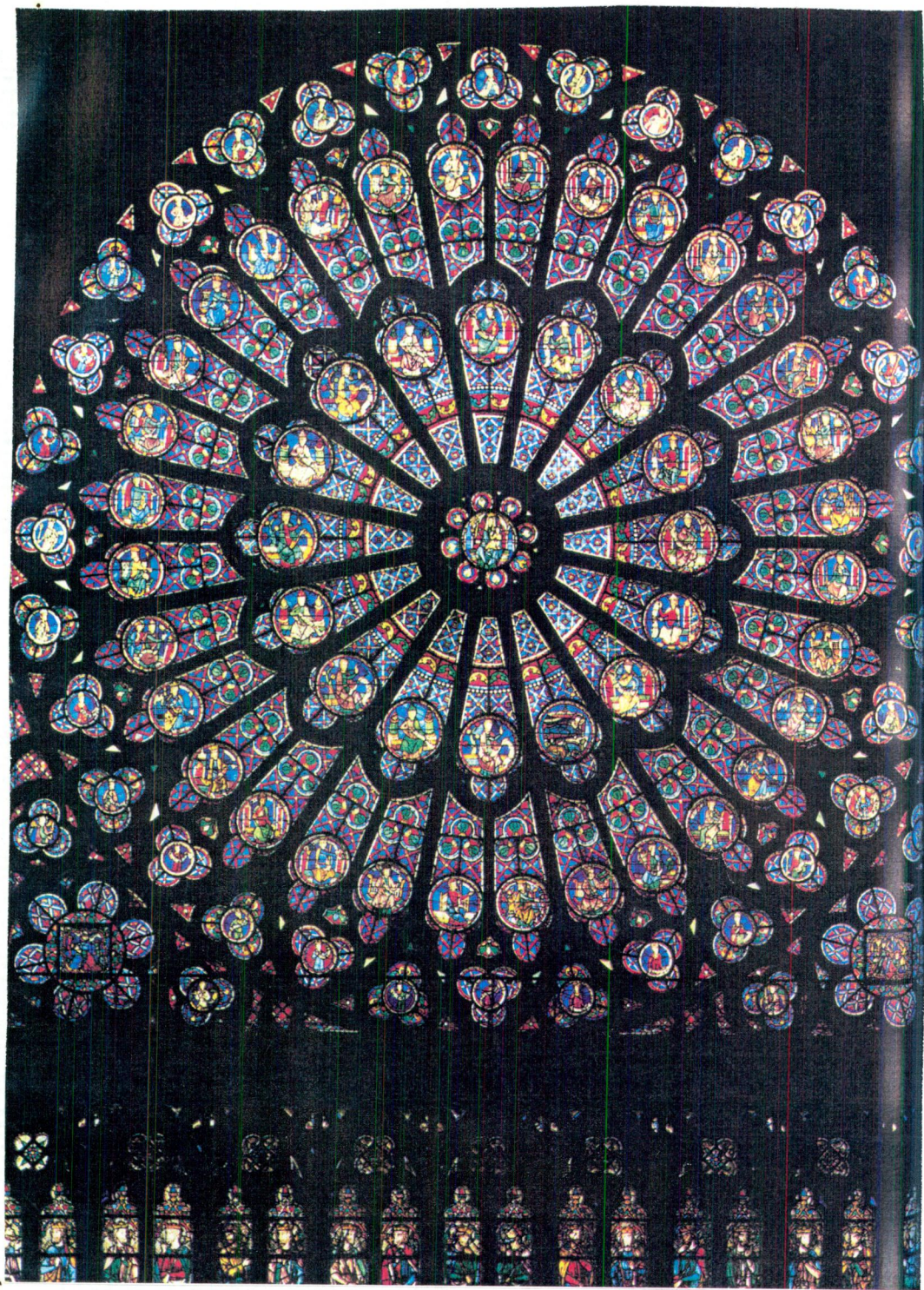


Fig. 1.3.

Rose window of the North transept , Notre Dame, Paris.

15-13

Religion has been a major influence in art, but it seems that art itself has a way of influencing people. Religion has adopted styles of art to serve itself, although this was against the early Christian religion to use pictorial representations of the faith. This is in contrast to pagan idolatry. Christians also considered it unnecessary to build a chapel, as God's temple was formed by the body of the faithful. This is similar to the Islamic view, which holds that they also did not need a specific place of worship. However, as these religions became stronger so did their need for art and decoration. If we look at early Christian art, it can easily be mistaken for late Roman or late Antique. It was only in the third century that more pictures were created and a more positive attitude towards art became apparent. (Fig. 1.4) These early styles were something the early Christians could relate to and because the Christian faith was recognized they began to develop the Roman folk art and the art of the Eastern provinces. (5 , pp. 249) As the church became stronger the Christians began to build places where the community could gather. These churches gradually became more and more ornate and were characterised by flamboyant and grandiose decoration. This was typical of Roman decoration and became a principal feature of Christian churches, an example being the adoption of mosaics. (Fig. 1.5)

As the church grew in strength, the status of Jesus Christ changed. In the early church we see him as a teacher and philosopher, but when Christianity became the official religion of Rome, Christ was seen as the Ruler of Heaven and Earth. The later image is taken from the pagan beliefs of the Romans. (Fig. 1.6) Christ is seen as an Apollo-type figure, or alternatively, he is seen as the good shepherd, a more human aspect of Christ. This image is taken from the New Testament which depicts Christ as the leader of the flock, a guardian and a friend. Such is the image of Christ that I have grown-up with.

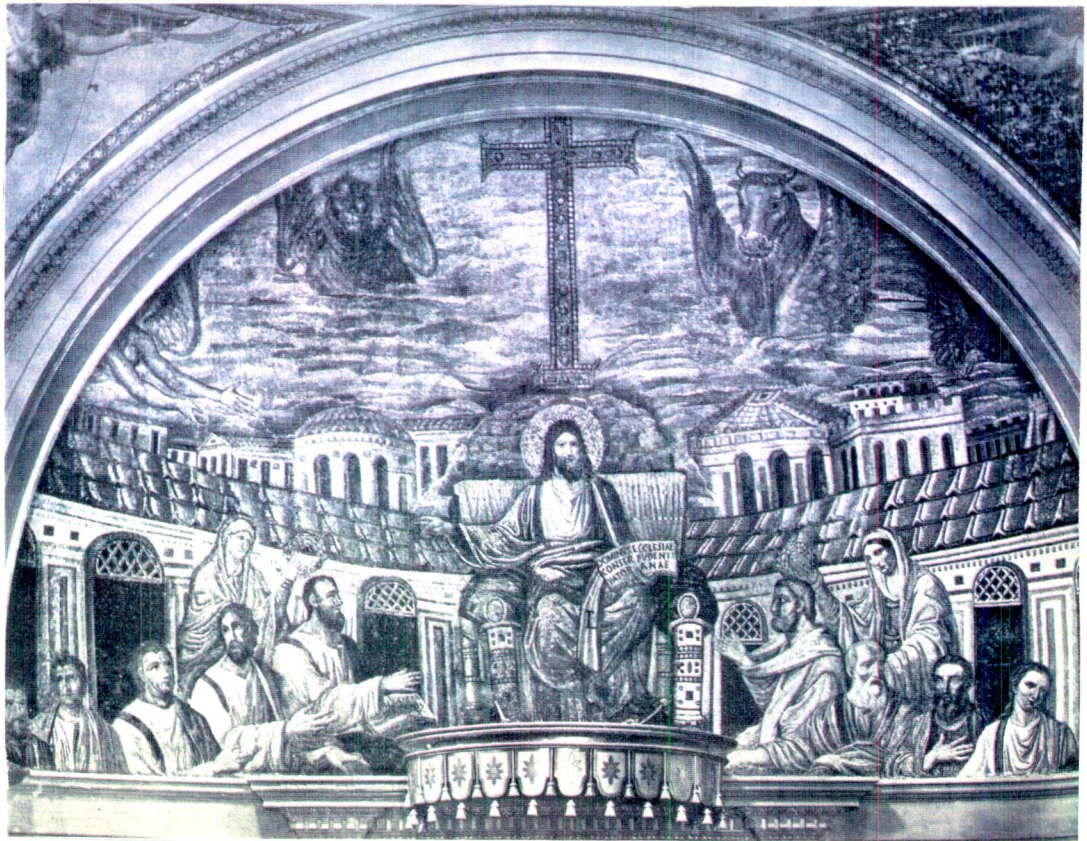


Fig. 1.4.

Mosaic - Christ Enthroned in Majesty, with Saints, Santa Pudenziana, Rome. 402 - 417.



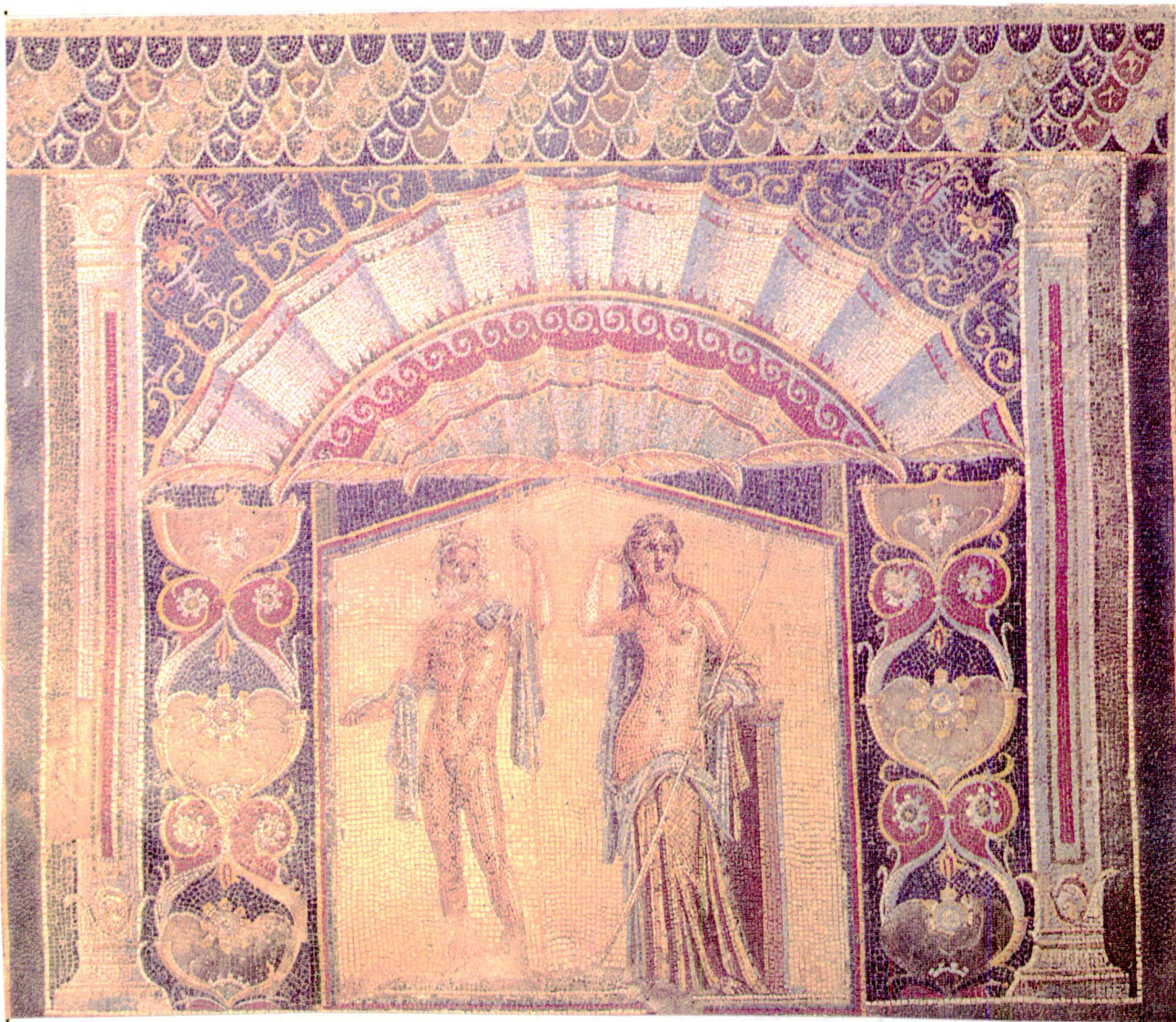


Fig. 1.5.

Wall mosaic from the House of Neptune and Amphitrite Herculaneum
A.D. 70.





Fig. 1.6.

Mosaic - Detail of a vault mosaic from the Mausoleum.
250 - 275.



Manuscripts:

The decoration of manuscripts in the early Christian church was influenced by a long Egyptian tradition of manuscript decoration. The Egyptians had composed a Book of the Dead. It was made-up of spells, prayers, formulas and counsels. It was used in the ~~Ritual~~ of the Cult of Osiris, the God of the dead. These books were essential in the tomb.³ They tell the story of what will happen to the dead in the after-world. In these earlier manuscripts the artist wants the pictures to be as readable or important, as the text itself. These manuscripts are also influenced by Roman pagan art. But as the Church becomes less interested in naturalism, perspective and realism, it is the story that becomes all important. One of the earliest manuscripts is the Vienna Genesis, dating from the sixth century. (Fig. 1.7) This manuscript has elements of the pagan religion - a pagan river goddess -, as well as elements of stylistic forms which can be seen in later medieval art.

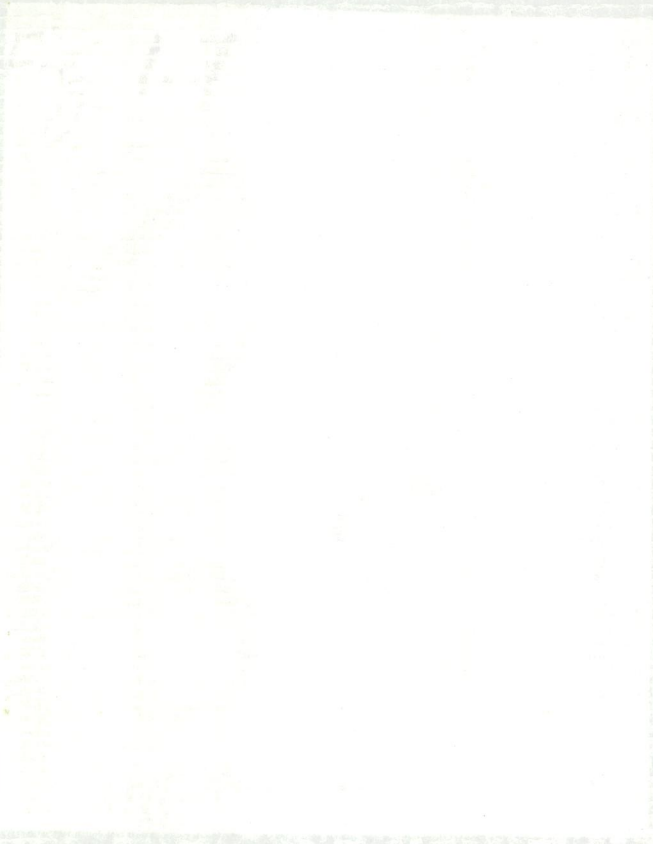
Looking at some manuscripts closer to home we have examples such as The Book of Kells, (Fig. 1.8) which was influenced by British-Roman art-work. However, ~~clear~~ links exist with the Mediterranean. (16, pp. 24) It is later than the Vienna Genesis, dating from the eighth century. Unlike the Vienna Genesis the manuscript is more decorative and where the art-work in the Vienna Genesis is telling a story, the art-work in the Book of Kells is closer to that seen in Islamic manuscripts. The carpet pages are similar to the patterns in Islamic art. The decoration serves to beautify the calligraphy. To look at a page like the eight-circle cross. (Fig. 1.9) It is pure decoration without the use of figures or recognizable elements, such as animals. The use of interlacing and geometric shapes is comparable to those used in Islam and illustrates clearly the links between different forms of religious art. This point will be expanded upon in the proceeding chapter on Islamic art.

Christian art predates Islamic art by approximately six hundred years, therefore leading to the existence of visible differences in the art of the Christian, Byzantine



Fig. 1.7.

Manuscript - Rebecca and Eliezer at the well. Sixth Century, paint on purple vellum.



COM



Fig. 1.8.

Manuscript - The Book of Kells. "The Birth of Christ",
St. Matthew's Gospel, eight century.



Fig. 1.9.

Manuscript - The Book of Kells. The eight - circle Cross.
Trinity College Dublin.

Fig 1.8



CONDENSER



and Islamic churches. Christian and Byzantine art are slightly different variations on the same theme. By way of contrast, Islam will not allow the use of the human figure generally, there are exceptions. An example would be their use of the human figure in miniatures. The Persian culture for example, has used the human figure as part of a major tradition in miniatures. The similarities may have resulted from the fact that Islam conquered parts of the Byzantine and Christian empires and there was a reciprocal influence among the different artistic traditions.

Byzantine art is a combination of the Byzantine civilisation itself and a mixture of elements from Greek, Roman and Islamic cultures in varying proportions. Like the art of Islam it is a religious art. We see the use of mosaics and the portrayal of Christ as the Good Shepherd. (Fig. 1.10) In the eighth century, religious imagery of the human figure was banned, as had happened in the Islamic culture. Only in secular art was the human image allowed. Like the art of Islam, Byzantine art is a religious art. Each faith shows a basic hidden dislike of the physical world and a dislike of materialism. It is important to the Byzantine and Moslem religion, how God views them. The Byzantine religion still believes, like the Christians, in Jesus Christ, Mary, God and the Holy Ghost. These are represented in their icons. (Fig. 1.11) These images of the holy deities and the saints would have been used as gifts to the royalty and nobility of distant lands. The Byzantine empire was eventually captured by the Ottoman Turks in 1453 when they finally overran Constantinople. However, their influence continued into European art, especially in Russia and Eastern Europe who in their turn influenced Western medieval art.

In this chapter I have covered varying aspects of different religions in an attempt to provide a background to Islamic art and its counterparts. Hopefully this will arm the reader with sufficient knowledge to continue in a more in-depth analysis of Islamic religious art.



Fig. 1.10

Mosaic - Christ as the Good Shepherd, from the entrance wall of the Mausoleum of Galla Placidia. 425 - 450.

Handwritten text on a piece of paper, possibly a letter or document, with some legible words like "Hog", "10", "17", and "18".



Fig. 1.11.

Icon - The Annunciation, St. Clement, Ohrid. 13th century.

Footnotes:

1. Confucianism, taoism, Shinto, Sikhism, Zoroastrianism, and Jainism. These religions were off-shots of the other main religions and are found mainly in China, India and Japan. Because of the large numbers in these countries they therefore have large numbers of followers.
(4 , pp. 207-210)
2. Confucianism is seen as a system of ethnics rather than a religion. It teaches, how to react to other people rather than than how to act to one God. Their God is Shang Ti. It is followed by most chinese.
(4 , pp. 209)
3. Illustration 3-34, Psychostaris (soul-rising) of Hu-Nefer, Thebes, papyrus scroll. Represents his final judfement. It shows us the stages of his judgement, like early of the Christians.
(5 , pp. 100-101)

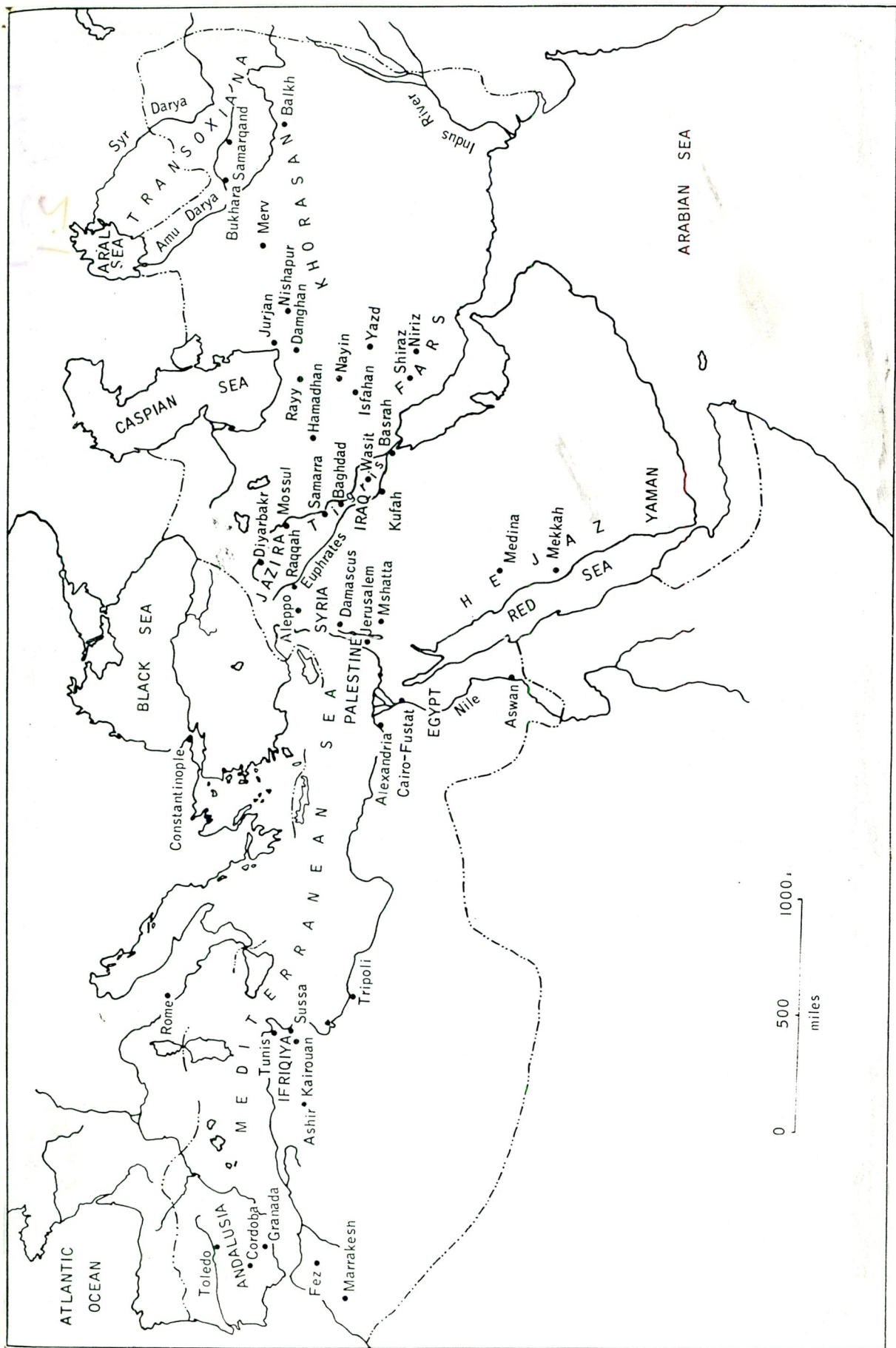


Fig. 2.1.

Map of the Islamic World.

10.5.1

13.5.1

CHAPTER 2: ISLAMIC ART AND SPIRITUALITY

In 622 A.D., nearly 300 years after the Christian faith was officially recognised by Rome, Mohammed fled from Mecca and the Islamic faith was born. Before the Islamic religion, the Arabic people had believed in more than one God and Allah was considered to be just one of these many Gods. They also believed in Jinn which are spirits of a friendly or a hostile nature. Another aspect of their faith was the belief that many objects, such as trees and stones, were sacred and to be feared and respected. (7 , pp. 293-294)

When Mohammed pronounced himself as one of Allah's prophets the ensuing religion meant that Islamic life became stricter, but it also meant that the community was more closely bound than ever before and is as it remains today. In Allah's eyes all men are equal. There is a strong Jewish and Christian influence in Mohammed's teachings, which are recorded in the Qur'an. Its' disciplined nature was intended to mark a contrast to the wayward habits of Arabians at the time of Mohammed. He felt that idols or images of God should be destroyed as they must insult him, unlike the Christian or Byzantine art, where they were openly permitted and some of the most famous and most beautiful works of art are pictorial images of Christ. Moslems are also expected to recite prayers five times a day. While saying these prayers they must face Mecca. Moslems believe that they can pray anywhere and that they do not need a particular place of worship. They wanted prayer to become a more communal act, so they built Mosques. Similar to Christian worship, the community comes together and worships God on the Sabbath.

After the first century of Islam, it spread quickly from the Arab world of Palestine, Syria and Iraq, across the Middle East, Turkey and Africa. (Fig. 2.1) They took Egypt from the Byzantine empire and moved up into Europe, through Spain in 710 A.D., but got no further and stayed

there until the late fifteenth century. The fact that they had travelled so far and wide, resulted in the influence and interchange of many cultures. By 1258 Genghis Khan had taken over Baghdad and the Islamic empire had separated into independent states. Genghis Khan embraced Islam and its art. With him he brought Chinese influences and we can see these in the motifs found in Persian art. (Fig. 2.2) The fact that the affects of initial conquests endured for centuries can be explained only by the nature of the faith. It appealed to millions of followers at a time when the Christian and Byzantine empires were at a low ebb. (4,pp.293)

Although Islamic spirituality influenced and was influenced by many cultures, Islamic art has a very spiritual side. Islamic art, like any sacred art, is seen as a gift from heaven, as an echo of the heavenly world. When asked what Islam is, Moslems feel they know or that it is understood by looking at the architecture of a great mosque or a frontal piece of a Mamluk Qur'an or the calligraphy of the Qur'an itself, or even sitting on the great carpet of Ardabil. (5,pp.195-196) Islamic traditionalists seem to feel that the message of Islamic art is in this noble tradition, and that one can see it in a traditional piece of calligraphy or hear it in a piece of classical poetry. Islamic art in its' most traditional form is seen as a timeless language and because it is timeless its' message is in the purest and most perfected form. Traditionalists also feel that it is Islamic art that has contributed most to combatting negative feelings about Islam, which some modern views have seen as an irrational, fanatical and sometimes violent force.

It is felt by some Islamic modernists that Islamic art has nothing to do with Islamic spirituality. It is seen to be of no greater value than that of any other type of art. Traditionalists see this as a way of cutting-off one of the spiritual dimensions from the Islamic community by adopting this modern philosophy. While many western cultures as well as modern moslems hold these views, Islamic art still continues to emerge as a result of the bond it has with Islamic spirituality. Whether modernists

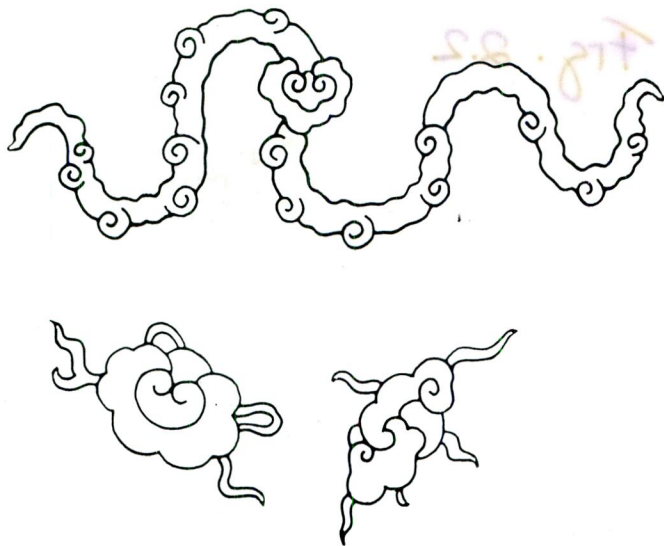


Fig. 2.2.

Chinese influences as seen in the border of this carpet.



are directly against art or see it as a luxury, it is impossible to separate it from its' spiritual significance. (7, pp. 197-198)

Traditional Moslems believe that God is beautiful and that God loves beauty. It is a divine quality and by beautifying everything that concerns God, you are also bringing the values of Islam to the Islamic people. By making everything from Qur'ans to literature, to weaving, it reminds people of how important God (Allah) is.

'Whithersoever ye turn there is the face of God'
(7, pp.8)

The spirituality penetrates into all types of activities. When people dismiss Islamic art they are also dismissing Allah, which is a dismissal of the faith and traditions of Islam.

Modern Moslems see art as just a way of decorating, making something more luxurious. But a traditionalist view is, why spend so much effort in perfecting these techniques concerned with art, or in perfecting storytelling or the psalmistry of the Qur'an, if there is nothing behind it. Modernists see prayer, fasting and pilgrimages as the best way to worship God. They feel that no further reminders are necessary if they can carry out these duties. But human nature being as it is, people forget or ignore these duties and this is the point the traditionalists are making; that unless you embrace all types of art, whether it be music, poetry, calligraphy or any of the plastic arts, you are not embracing the Islamic religion in full as you are not constantly thinking of it.

Modernists have allowed the Islamic culture to be put aside and modern Western cultures have been re-built, and as some would see it, destroyed beautiful Islamic cities,

not to mention the most sacred. They have allowed Western architecture and urban planning, as well as alien interior decoration and music, to become part of their homes. Traditionalists see the use of modern western cultures as a proposed model for a new Islamic culture as the destruction of everything Islam stands for. In the case of modern countries, Islamic art itself has been neglected. Unless traditionalists stop all forms of travel and communication to the western world they must be prepared to fight for their beliefs.

Islam uses the Qur'an as the basis of science and philosophy. But now new technology and beliefs of the 20th century challenge the fundamental characteristics of religion. Like western cultures, new sciences and discoveries have given people new things to believe in and the church has lost its' grip on some people. It is a dilemma most cultures suffer from. But I find myself agreeing with the traditionalists' views that it is important to keep their own culture and religion.

It must be remembered that Islamic art is used as auxiliary aid to the Qur'an, architecture or whatever-form it is decorating. It is a very unifying quality, that although the locations are miles apart, the geography of the art is the same.

Islamic art like any other sacred art is not simply the materials used, but what they have been used for, by that religion. The origin of Islamic art and the forces and principles which created it must therefore be related to the world view of Islam itself. As the contemplation of God is seen in the Qur'an, so is the nature of this art to be contemplative. It would not be a sacred art if it was not related to the most intimate function of Islamic revelations.

This relationship originated in the Islamic religion. There is a distinction between sacred art and traditional Islamic art. The sacred art leads directly to the practices

of spiritual life, such as the Mosque. The traditional art, on the other hand, would be seen as miniature painting showing scenes of everyday life in the Court. (Fig. 2.3)

Islam consists of a Divine Law. This is seen as the law of the land, as well as a spiritual path. This Divine Law plays an important role in creating Islamic art. Besides providing the general social background, it also directs the artist on the right path, with the right attitudes and virtues from the Qur'an.

The Qur'an is the origin of Islamic spirituality. It is this spirituality that forms the art of Islam. Without the Qur'an and its' teachings there would be no Islamic art. It is Islamic art, not because it is done by Moslems, but because behind it lies the teaching of Allah and it supports the spiritual life. It moulds the minds and souls of all Moslems. Praying five times a day would mould any mind, with the constant reminding of God that it must bring.

The more important sacred arts received greater patronage than others. Calligraphy and the illumination of Qur'ans for example. These depend on the Mosques or Courts for patronage. Other arts such as music, miniature painting or poetry, depend on the ruling classes or merchant class for their patronage. The Qur'ans would have received more patronage because they were for public use. The Mosque itself depended on the Court or noble classes for patronage and again were for public use, which made them more popular when it came to patronage.

While figural art was not officially prohibited by the Islamic faith, meaning that it was not written in the Qur'an, it was known that Mohammed saw figural art as a link to the old religion before Islam and that he also wanted the art of Islam to be as far as possible from the pagan art that preceded it. This is probably a significant development in calligraphy. (12, pp.9)



Fig. 2.3.

Minature - Khamsa of Nizami showing Khusraw and Shirin sitting at night listening to stories told by Shirin's handmaidens.



Religious architecture is closely related to Moslem prayer, which is a part of every Moslem's life. It is written in the Qur'an, that they do not need a special place to pray. However, it soon became a communal thing, so mosques were built. These mosques would have been made to hold all the population of Moslems of a city. In the center of the qiblah wall is a niche. The qiblah faces in the direction toward Mecca and Moslems had to face Mecca while they prayed. The niche or Mihrab, (Fig.2.4), may have been used by the prophet to stand in while he led the communal prayers in his home before mosques were built but one of the early characteristics of Islamic art is its' avoidance of symbolism as a way of showing its' individualism, by standing apart and rejecting christian and pagan customs alike. (5,pp. 295)

The Great Mosque of Samarra, (Fig.2.5), was the largest mosque in the Islamic world. These early Islamic buildings had wooden roofs. The lack of decoration resulted in a lack of experimentation with the architecture. Not until art became more positive did they begin to create rich and varied visual effects, even though these wooden roofs were more flexible and permitted enlargement with the minimum effort. They began introducing arches and domes. (Fig.2.6-2.7) These arches were incredibly decorative. The mosques or palace would have been made to look very plain or grim on its outer walls but inside the designs and decoration were very rich, showing us how wealthy these people were. Many influences came from Byzantine, Sassanian Persian and even Spain (the Moors), but their arrangement is typically Islamic. Most of these design elements are based on plant motifs, which are mixed with geometric shapes. In secular art there can be found animals and some human figures. These natural forms became so stylised that they are lost in the decorative forms of the plants and leaves that are used (Fig. 2.8). Stone carving, paint and mosaics used on floors, walls and ceilings were all used in architectural decoration.

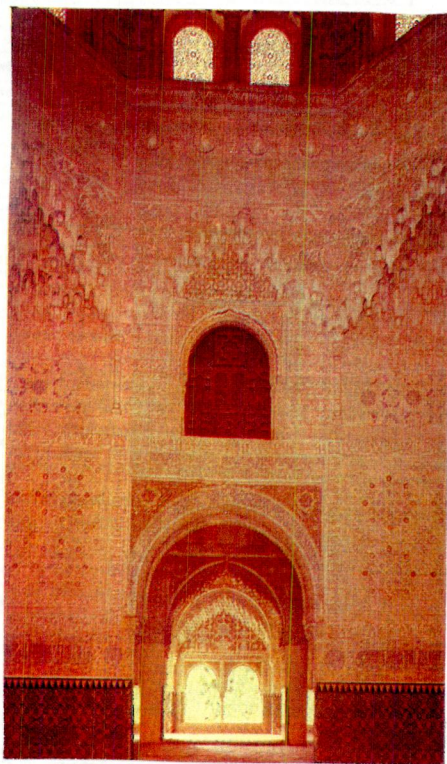


Fig. 2.4.

Niche or Mihrab; From the Hall of the Two Sisters.



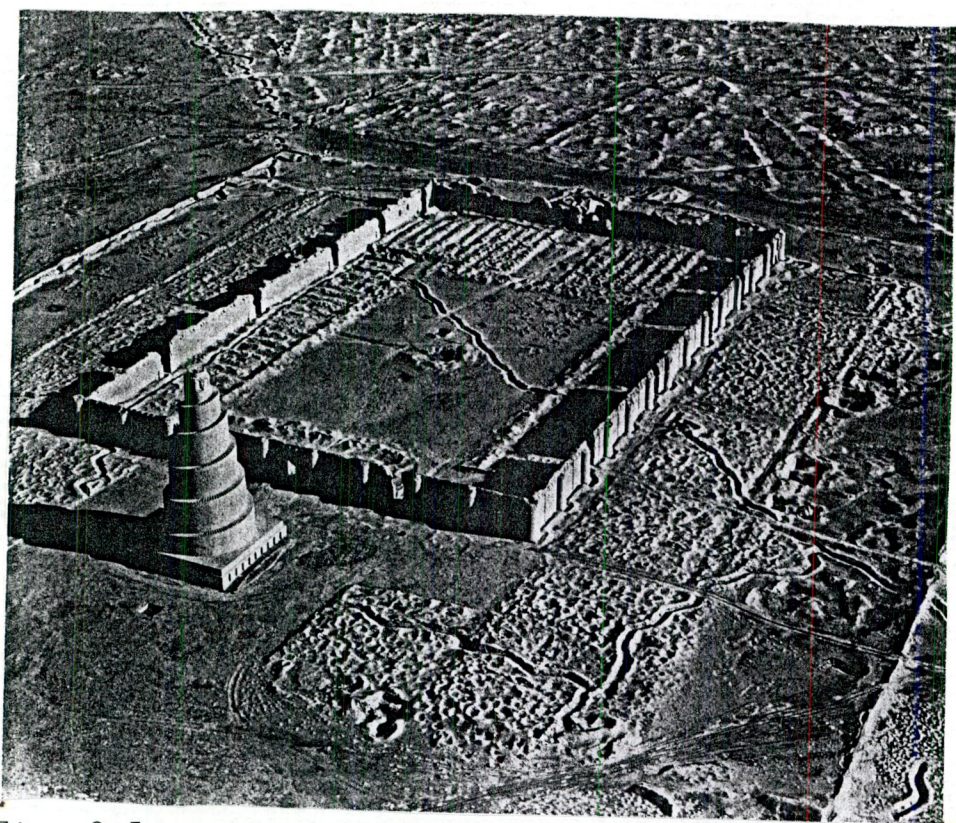


Fig. 2.5.

The Great Mosque of Samara.





Fig. 2.6.

The Dome before the Mihrab.



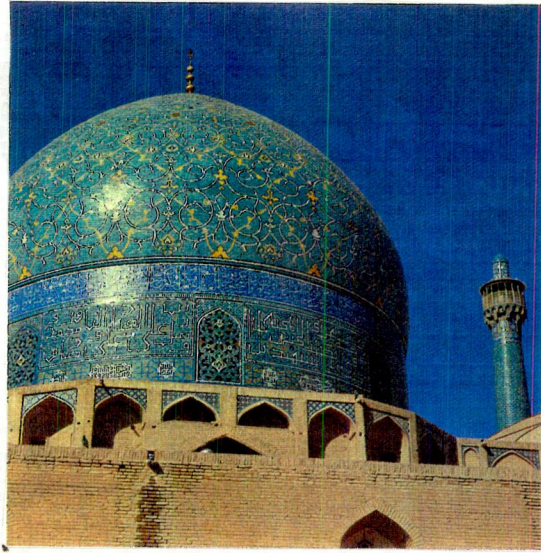


Fig. 2.7.

Dome of Madrasa-I-Shah, Iran. 1612 - 37.



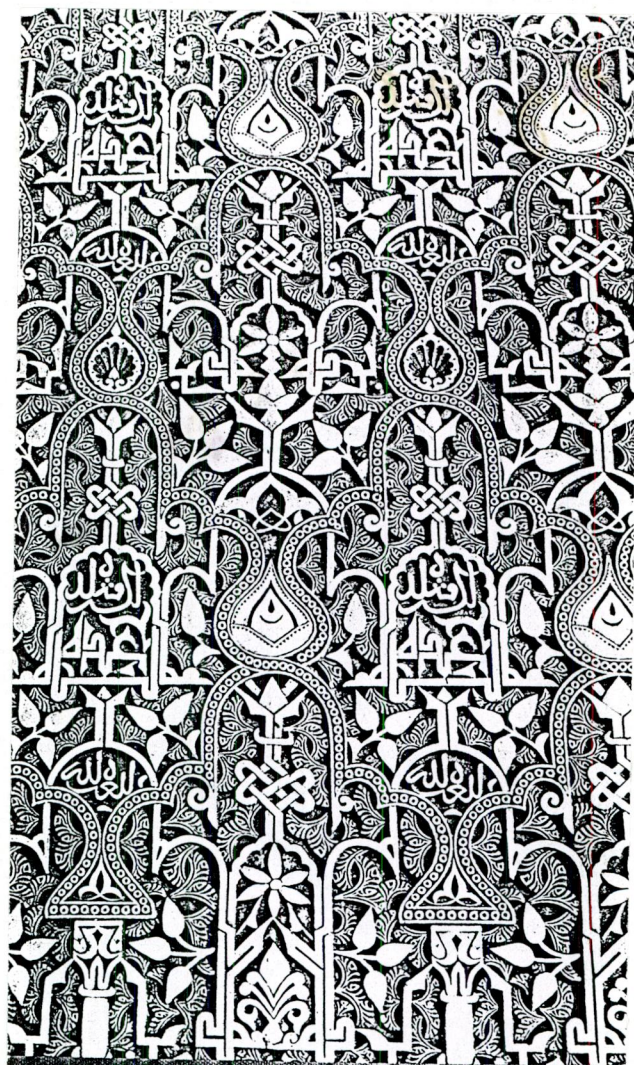


Fig. 2.8.

Plaited and ornamental Kufic Script combined with Thuluth, some of the script has been deliberately manipulated to form arches. It is also made up of ornamented foliage.

Fig. 2.8

8.5.217

The relationship of one form to another in the Islamic faith is more important than the overall design. This system offers the potential to let the design grow in any direction. This inconsistency shows a certain temporal quality that reflects a feeling for moveable furnishing and such things as rugs and hangings in particular. It must be this duty to travel and spread the word of Allah that drives the Moslem faith.

The Ottoman Turks used their architecture to express their religious symbolism. To the Ottoman culture, a circle set in a square signified heaven. The circle symbolises eternity - it has no beginning or end. The square symbolises the four corners of the universe. On this principle they built their Mosques, geometric and formal. A square prayer hall, covered by a dome. (Fig. 2.9 - 2.10) This type of architecture shows that Moslems relate their religion to everything. (5 , pp.303)

Even in the use of textiles and the plastic arts one can find religious symbolism and significance. They took different techniques and motifs from architectural decoration and adapted them to many different types of art. Mosque lamps were made with enamelled glass and inscribed with quotations from the Qur'an. Basins and boxes with geometric shapes and calligraphy on them were found also to take their inspiration from the Qur'an.

The most precious and highly-valued objects were textiles, which, in the Islamic world, serve as more than just a useful or decorative object. They used the format of the rugs as symbols and decoration. The Ardabil Carpet is a large example a medallion carpet. The medallion in the centre is seen as the doorway into heaven and the decorative corners are the corners of the universe, as mentioned previously. The lanterns represent lights from heaven, the sun and the moon, perhaps. These are then surrounded by geometric designs or leaves and flowers. (Figs. 2.11 - 2.12) Prayer rugs are specially made for the Mosque. They are used when praying

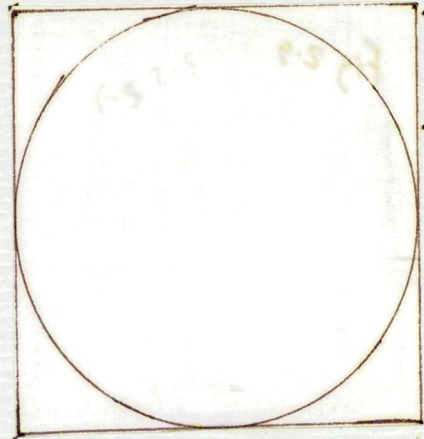


Fig. 2.9.

Square represents the universe and the circle represents eternity, used in Architecture as seen in Fig. 2.10.

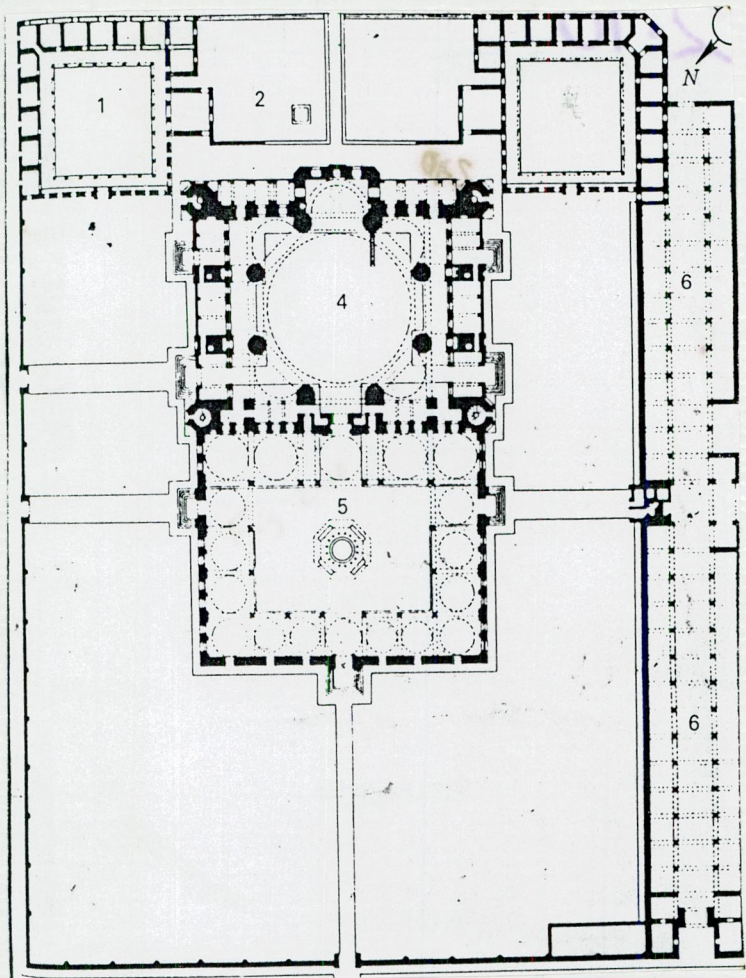


Fig. 2.10.

Plan for Selimige Cami, Edirne. Showing the circle in the square plan. The dome in a square hall.

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Fig. 2.11.

Detail of Ardabil Carpet, from the Tomb - Mosque of Shah Tahmasp,
Iran 1540, $34\frac{1}{2}'$ x $17\frac{1}{2}'$.





Fig. 2.12.

Prayer Rug of Sejjade format. Related to the Ottoman ceramic tile designs. Sixteenth century.

Fig 2-12

21.0

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and are not very large. They have an architectural motif at one end, like the niche used in the Mosque, and you face this arch when facing Mecca. Because these rugs were made for a Mosque or a tomb, their decoration excludes human and animal figures. This was why sculpture, mural or panel painting did not develop in religious art and why it did not develop to a great extent in secular art, as it did in Europe. In fact miniature painting was related more to carpet design than to European or Chinese painting, by which it was influenced. The traditional carpet is seen as the earthly reflection of the cosmos itself. To sit upon it is to sit in an imaginary garden. They who sit there are higher than their mundane surroundings.

In this chapter I have briefly touched on the subject of Islamic art and its' spiritual side. I also took a look at calligraphy, which will be expanded upon in the following chapter.

CHAPTER 3: CALLIGRAPHY; THE GEOMETRY OF LINE

Calligraphy like any other Islamic art is very spiritual. It is known as the visual side of the word of Allah. Calligraphy has continued to be the central visual art with its' numerous applications ranging from architecture, poetry to the plastic arts. (Fig. 3.1) Although calligraphy has developed in numerous forms and has been used not directly in relation to the Qur'an, it has been the Qur'an that has created this most beautiful art form. It is the art form that penetrates everybodys' lives, because it is used on plates, lamps, boxes and buildings everywhere. Craftsmen used calligraphy to decorate objects of everyday life in order to constantly remind man of God's words and presence. In Islamic cultures, good calligraphy is the sign of a cultured person, or of a place, as well as representing a disciplined mind and soul. This admiration of Arabic calligraphy spread to Europe and can be seen in the art of the Middle Ages. (Fig. 3.1a) It was seen as a form of decoration and it wasn't until the fifteenth century that the Arabic alphabet became known to the Western world. It has been copied and traced for hundreds of years, based on a strong tradition of Arabic calligraphy which existed even before Mohammed.

Collection of the Qur'an:

After the death of Mohammed, the Qur'an was transmitted orally by the Huffaz (a group a people who memorised the Qur'an)¹. But as some of these were killed in the fighting that took place after the prophet's death, the Moslems became alarmed and began to look at pre-Islamic calligraphy.²

Pre-Islamic Calligraphy:

If one could imagine that the calligraphy has to look as wonderful as it sounds in the words of Allah, to the Moslems, then you can capture an idea of how beautiful Islamic calligraphy is. In comparison pre-Islamic

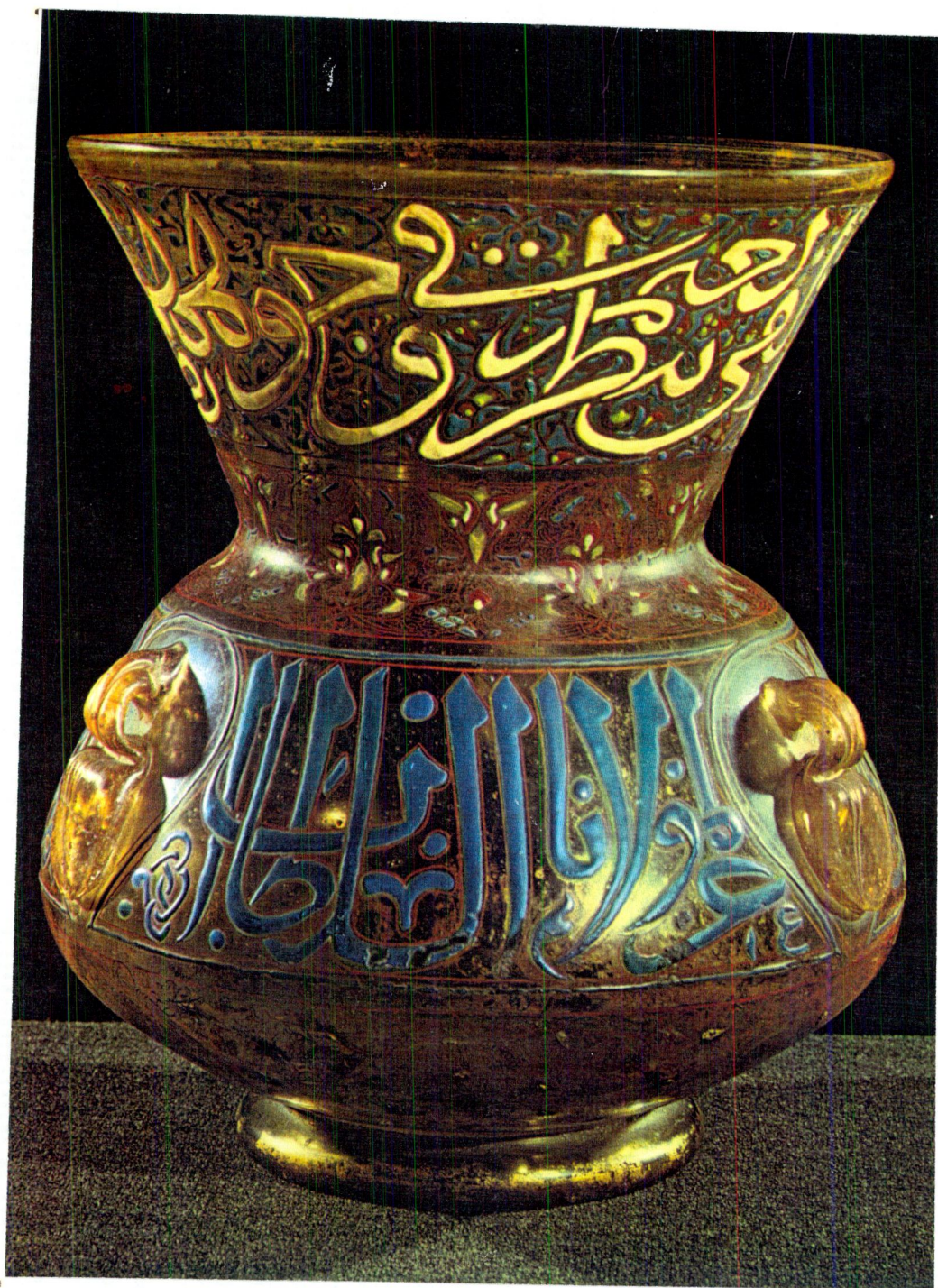


Fig. 3.1.

Glass mosque lamp with enamelled decoration inscribed with three quotations from Koran. Lamps such as this were made all over the Islamic world, but the finest one found in Egypt and Syria.

Fig. 31

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Fig. 3.1a.

This is an example of Islamic Calligraphy in Western art.
It is used as decoration in the border of their robes.

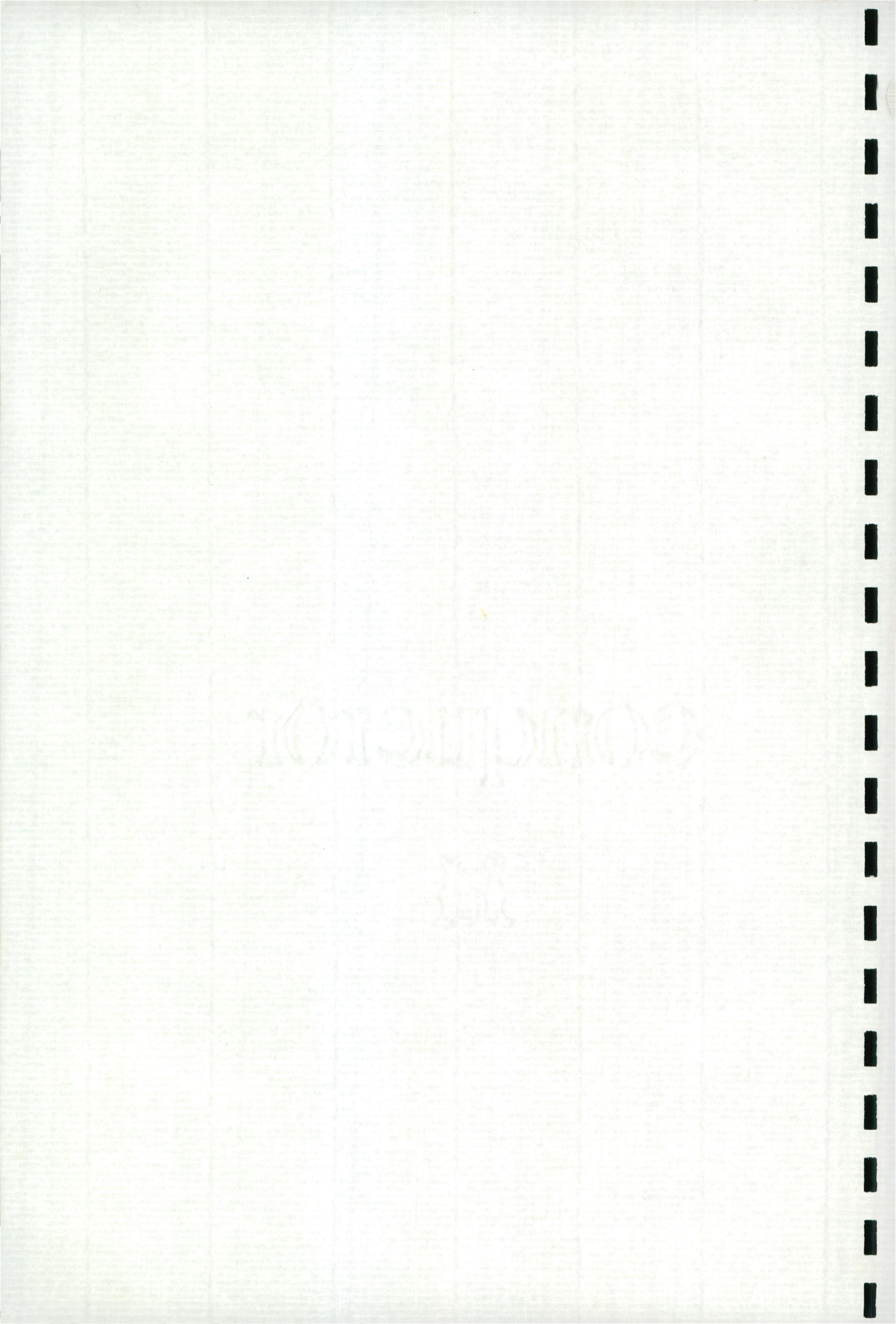


calligraphy was the poor cousin, more vulgar and less beautiful. There was a tradition of pre-Islamic calligraphy in the Arab world, known as Nabato-Aramaic and before that Phoenician. (12, pp.32) It did not hold the same importance in religion as it did to the Islamic Arabs and pre-Islamic Persia. These scripts were seen as crude examples of the forerunners of the wonderful calligraphy to come with the arrival of Islam. They used calligraphy in administrative and commercial work but little was used in a religious context, until the Islamic religion came to the fore. Then it appeared in abundance, on everything from buildings to coins. It is believed that the quick rise of Arab and Persian calligraphy is due to the spirituality of the Islamic faith and the divine word of Allah. (12, pp. 27)

Styles and Schools:

There are many different styles or variations of calligraphy. (Fig. 3.2) They also show a universal style that goes beyond the geography of borders. There are about 28 letters, that is excluding diacritical marks and vowel signs.³ These diacritical marks make reading less complicated.

Kufic was one of the first Qur'anic scripts used. It is an angular geometric type of script. (Fig. 3.3) It was used originally to transcribe the Qur'an or texts of great religious or literary importance. Kufic is named after the city of Kufa, but it is claimed that Kufa was founded after the known existence of Kufic. In fact, Kufic developed from the Hirah script. The chief script is pre-Islamic Kufa. As Kufa was known as a great intellectual centre, it enabled styles of calligraphy to develop and of these new styles, Kufic was the most successful. It was perfected aesthetically as well as technically.



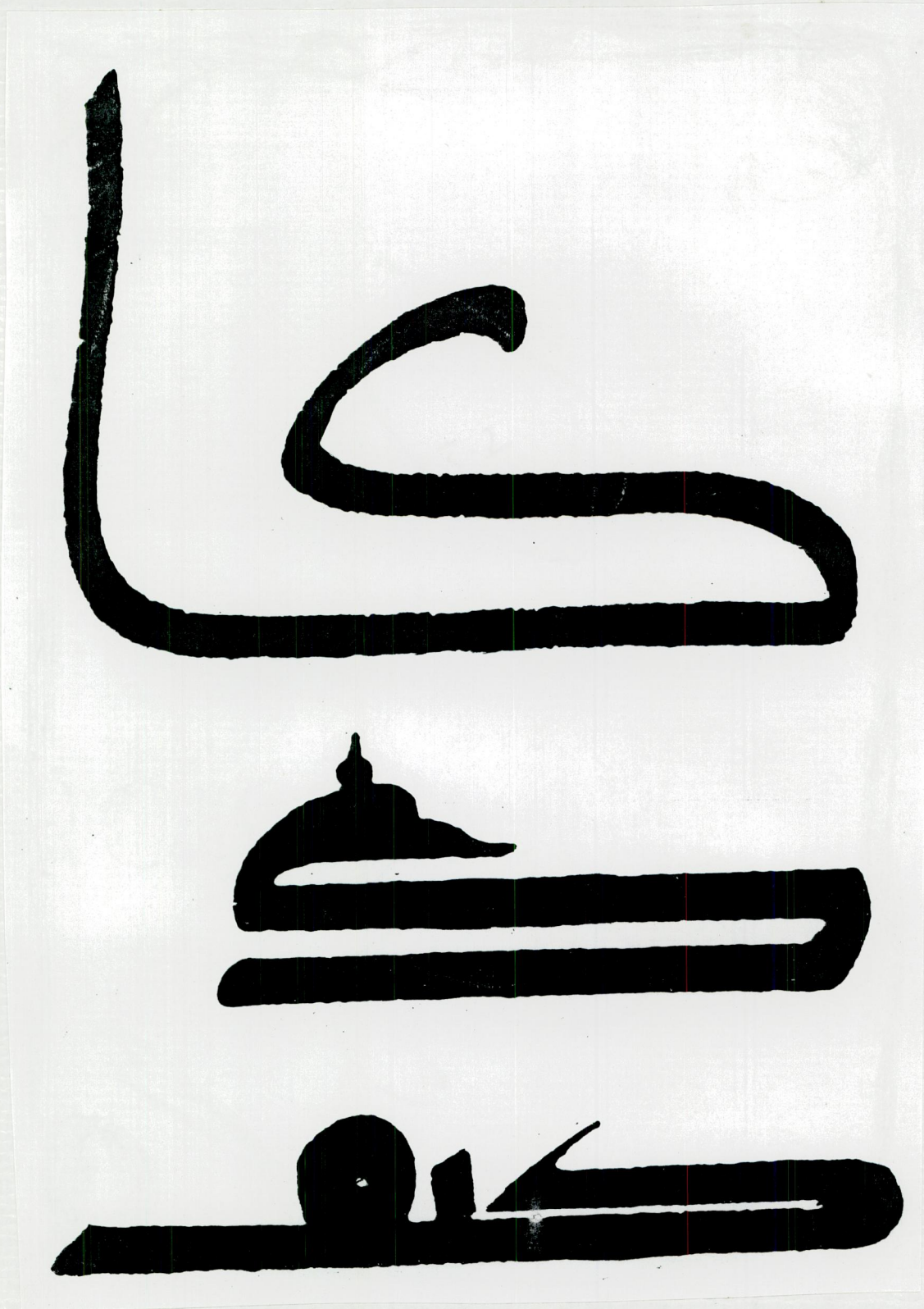


Fig. 3.2.

The letter 'K' (Kaf) written in Tuluth script. (top). Stylized Kufic (centre) and Orchaic Kufic (bottom).





Fig. 3.3

Kufic interwoven.

Fig 3-3

P.E. Pit

The Kufic script reached perfection in the eighth century and it remained the main script for 300 years. It became the Qur'anic script. Because of its' format, it came to be written on objects that were of greater length than width. This accounts for the oblong format of many early Kufic Qur'ans. These early Qur'ans also had illumination and it was not until the tenth century that ornamental devices were used. The geometric shapes, combined with the use of plaiting, knotting and interlacing, created intricate maze-like patterns. These patterns became more important than the letters themselves. Unless one knew what to look for, it was just a geometric pattern. (Fig. 3.4-3.5)

Ornamental Kufic was applied to every kind of surface, including stone, tile, wood, glass and textile. Eastern Kufic, a style developed by the Persians, is a more slender ornate type of Kufic. It was influenced by some cursive scripts.

Naskhi, unlike Kufic, is a more cursive script. (Fig. 3.6) It too, developed at about the same time as Kufic and was used in the Qur'an, but not until later did it gain the same popularity. It probably was a main influence on Eastern Kufic. The letters are fully formed and presented in a more flowing, elegant and distinguished style. It also existed before Islam. It became popular because it was suited to parchment, due to its' cursive and flowing style. Naskhi was used more after the eighth and ninth centuries, in administrative, as well as, in religious work. This script spread throughout the Islamic kingdom with the introduction of paper. It was an easy script to master due to the lack of conformities that other scripts had. There are more Qur'ans surviving in Naskhi script.

The Proportion of Line:

It is thought that the calligrapher Ibn Muqlah, dating from the ninth century, developed a geometric method for constructing the Arabic letters in the cursive script.

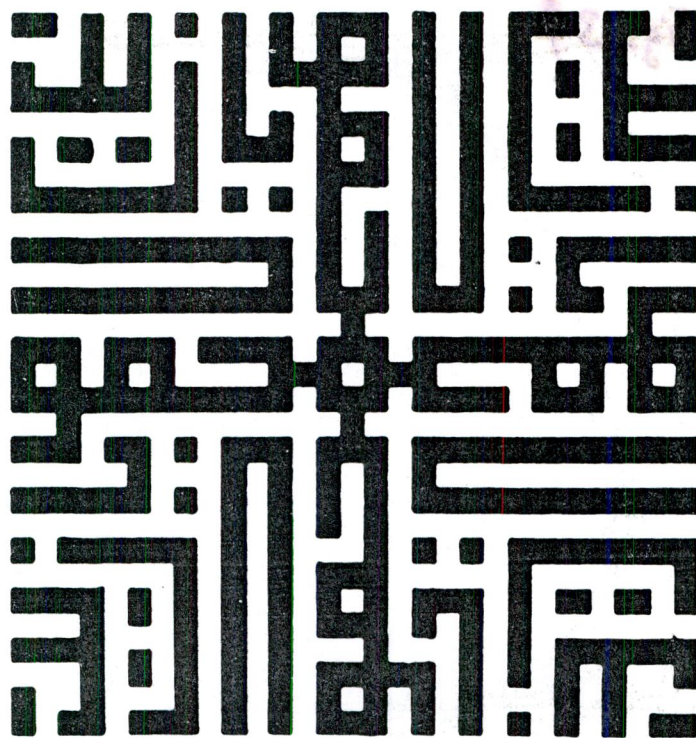


Fig. 3.4.

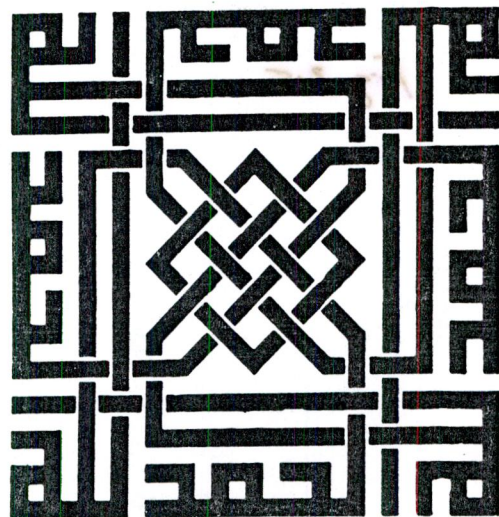


Fig. 3.5.

Geometric Kufic.





Fig. 3.6.

A page of the Quran in Naskhi script, opening of the Surat al-baqorah, in a stylized version of Naskhi.

Fig. 54



This was known as Nisbah Fadibh, or as the noble proportions of calligraphy. The thickness of the line drawn by the pen was used to measure the size of the letters and was referred to as the point known as Nugtah. It was actually formed by pressing the tip of the pen onto the paper. The basis of construction of the script was the proportion of the thickness to the length of the letter Alif (Fig. 3.7), which is written as a vertical line. Alif is made-up of between five and nine points and when it is encircled, all the other letters are taken from this circumference. (Fig. 3.8-3.9) These proportions are also used in architecture and town planning. All cursive scripts that have developed since Ibn Muqlah, have been based on these proportions and developed by numerous calligraphers. These include scripts like Naskhi, Thuluth and Muhaqqaq.

Even the pen used by the calligraphers was made to a specific size and depending on the style of calligraphy. The standard pen was known as a tomar, with approximately 24 hairs of a donkey arranged and set in it. But if a calligrapher was using the thuluth style of script, his pen would be cut to about one half of the standard tomar. (12, pp. 77) It is the tip of a pen that can make a difference between cultures.

The Arabesque:

Other elements of proportion besides the geometry type are; elongation, cursive and of course arabesque. (Fig. 3.10) It was originally an architectural feature and it found a privileged niche in the written word. The arabesque creates both the negative and positive form and these both play an equally important role. The negative shape or void created by the positive arabesque shape symbolises God or Allah. The geometric elements symbolise a permanent or masculine style, like heaven itself. The arabesque represents life and growth, everchanging side of life. (7, pp. 27) This negative space, which Moslems

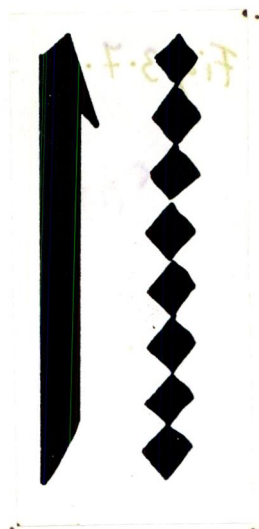


Fig. 3.7.

Alif.

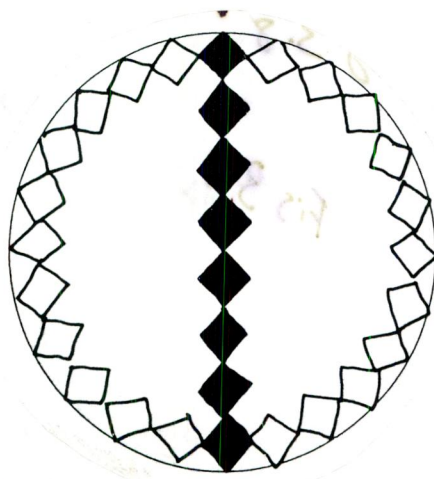


Fig. 3.8.

The circle around Alif.

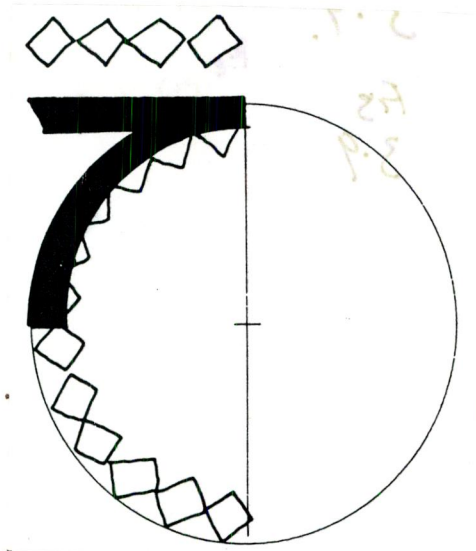


Fig. 3.9.

How the letters are formed around the letter Alif.

Fig 3-7
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2-1
Fig 3-9
Sept

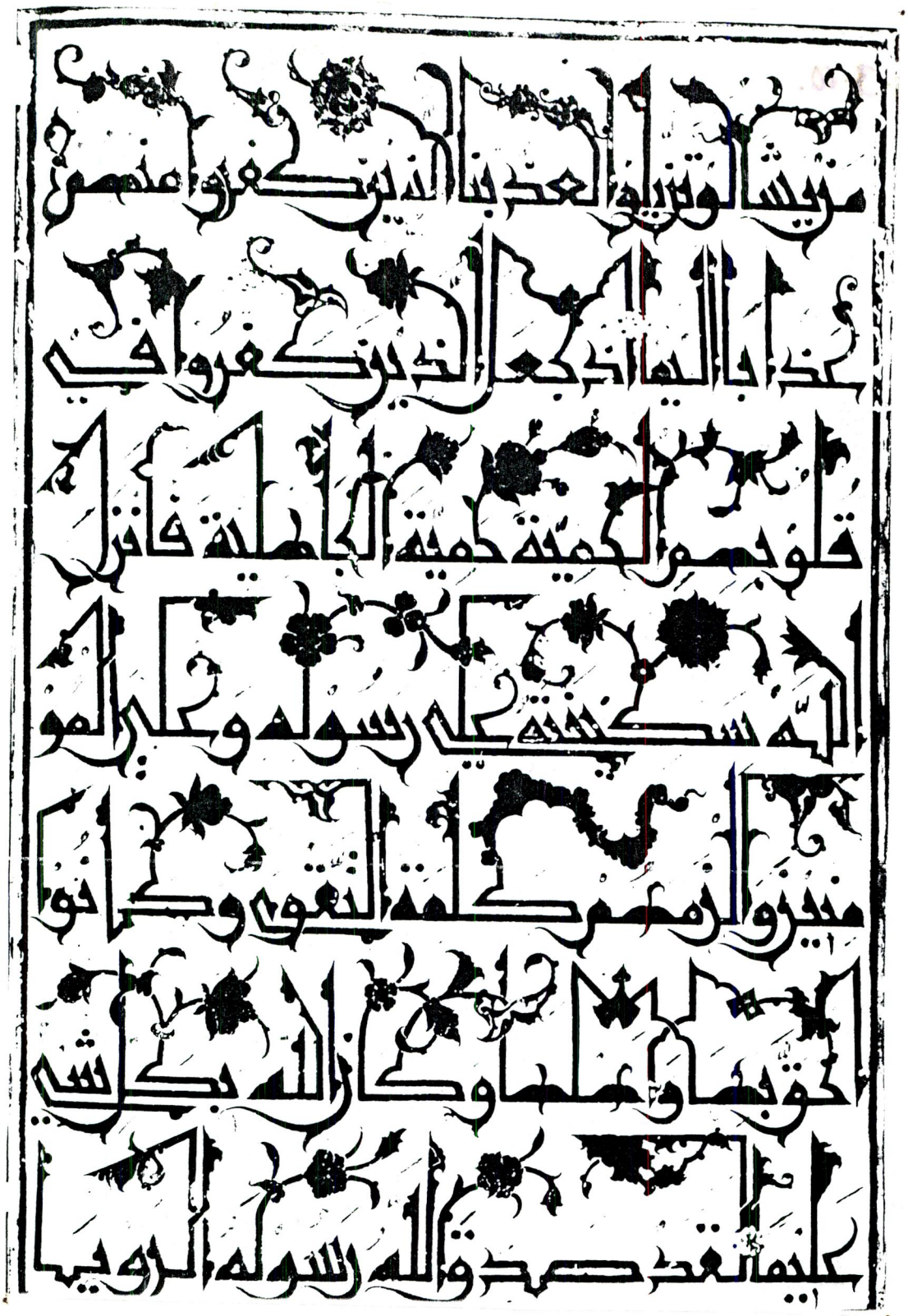


Fig. 3.10.

The Arabesque - Karmation Kufic from a Qur'an.

3-10.

create in their art is the symbol for divine light i.e. Allah. It is as important as the positive shapes on the page.

In the case of calligraphy, negative patterns are nearly as important as the positive word itself. This can be seen in the Kufic style. Within the margins you have an interplay of curves and straightness combined with open spaces, diacritical signs, vowel accents, floral and geometric motifs, with colours spread across all or part of the text. These colours are widely varied.

Colours:

Not all calligraphers used colour and it was not necessary to get that feeling of space needed in Islamic calligraphy. The employment of colour indicated that the manuscript was important or that the calligrapher wanted to put particular emphasis on that piece of work. But as time went on manuscripts became more illuminated. The margins, chapter headings and verse divisions were cases of such illumination. Black was mostly used as the base colour i.e. the actual script, with colours like gold, silver, blue, green, red and orange were used a lot too. The use of gold was very popular, giving manuscripts a very rich feeling, even the smallest amount of gold used was capable of producing this affect. (Fig. 3.11)

This chapter has outlined the uses of calligraphy from its' pre-Islamic roots. This involved examining all its' sources and creators, as well as some of the more popular styles and scripts which have evolved since its' pre-Islamic days. The next chapter will examine the calligraphy of the Mamluks in particular and its prevalence throughout their holy books of the Qur'an.



Fig. 3.11.

Arabic manuscript, opening chapter of the Qur'an opening chapter, (British Library). The use of blue and gold is pre-dominate in the illustration of this Qur'an.

Fig 3.11



Footnotes:

1. These people were close to Mohammed i.e. his disciples, they felt that the need for a written text of the Qur'an was unnecessary as they had carried on the oral tradition for many years. Due to fighting which broke out after Mohammed's death many of the Huffaz found themselves in danger for their lives and the need for a written version of the Qur'an became apparent.
(13, pp.13)
2. It was Caliph Abu Bakr who committed the first Qur'an to writing, urged on by Umar ibn al-Khattab. Umar ibn al-Khattab was one of Mohammed's close companions.
(13, pp.11)
3. These are the smaller black letters, or sometimes coloured letters, found surrounding the main body of script.
(12, pp.143)

CHAPTER 4: QUR'ANS OF THE MAMLUKS.

The Mamluks were the rulers of Egypt and Syria from the thirteenth century till about the late fifteenth century when they were conquered by the Ottoman Turks. With the Mamluks came prosperity and stability to Egypt. They also had peaceful contact with many of their neighbours. In addition they brought beautiful art and design. As a rich culture and nation, they built many beautiful institutions, mosques and palaces, all done in true Islamic splendour. The decorative elements which made up the artistic repertoires of the craftsmen included geometric and vegetal, and the introduction of new features such as the chinoiserie from the East. Also featured were inscriptions, such as the recording of the name of the patron or Qur'anic verses.

The Mamluks are also known for their magnificent Qur'ans. They are probably the most beautiful Qur'ans and were only rivalled, but never surpassed, by those made in Iran. There are no surviving Qur'ans from the early fourteenth century. The Qur'ans made in Egypt were of two types; there was a single volume type known as a Mushaf, and there were multi-part Qur'ans referred to as Rab'ah. The same word is used for the box the multi-part Qur'an is kept in. They used a small hexagonal metal container to keep the Qur'ans in, they were made for small sized Qur'ans. Many of the surviving Qur'ans produced were of the small single-volume type. Larger Qur'ans were kept in textile bags made of silk or some other luxurious material. These large format Qur'ans were usually single-volume manuscripts. Beautifully written and illuminated, they were used principally for ceremonies in mosques or whenever public reading of the sacred text was required. There are many of these large Qur'ans still surviving and in very good condition. Multi-part Qur'ans were subject to great wear and tear and this can account for their fewer numbers still in existence.

The earliest Qur'an dates from the beginning of the fourteenth century. It was copied and illuminated by a

team of craftsmen whose leader was Abu Bakr, known as 'sandal'. He appears to have had an important influence on Qur'an illumination until well into the middle and end of the century. In these manuscripts Abu Bakr pays special attention to the illumination of the frontispiece. (Fig. 4.1)

In the fourteenth century the Qur'anic frontispiece became a wondrous work of art. It was dominated by the star-polygon. It was Abu Bakr that started this tradition of great illumination of Mamluk Qur'ans. The most popular example of their work is the Qur'an commissioned by Baybars al-jashnagir. This Qur'an is copied in seven sections. It is the only surviving Mamluk Qur'an to be copied in this way. Because it is in multiple parts it does not seem likely that this Qur'an was made for personal use, but given instead to a mosque or religious institution, perhaps a mosque being built or sponsored by Baybars al-Jasnagir himself. The calligrapher was Ibn al-Wahid, a very skilled scribe. His manuscripts without illumination sold at as high a price as those with it. It would have taken him just over one year to copy the Qur'an and with illumination it would have taken much longer. This Qur'an is the only work that has survived as testament to the great work of Ibn al-Wahid.

Each section in the Qur'an is of equal length and it would have taken him about eight weeks to complete each section. Ibn al-Wahid used a thulth-ash'ar¹ script, which was outlined in black. (Fig. 4.2) This was an uncommon script for Qur'ans. At this time most other areas were using muhaqqaq script. (Fig. 4.3) It was in use in the royal Qur'ans of Baghdad and Mosul but there was no tradition of muhaqqaq script in the Mamluk period. They preferred Naskh or the thulth type. (Fig. 4.4-4.5)(11, pp.37)

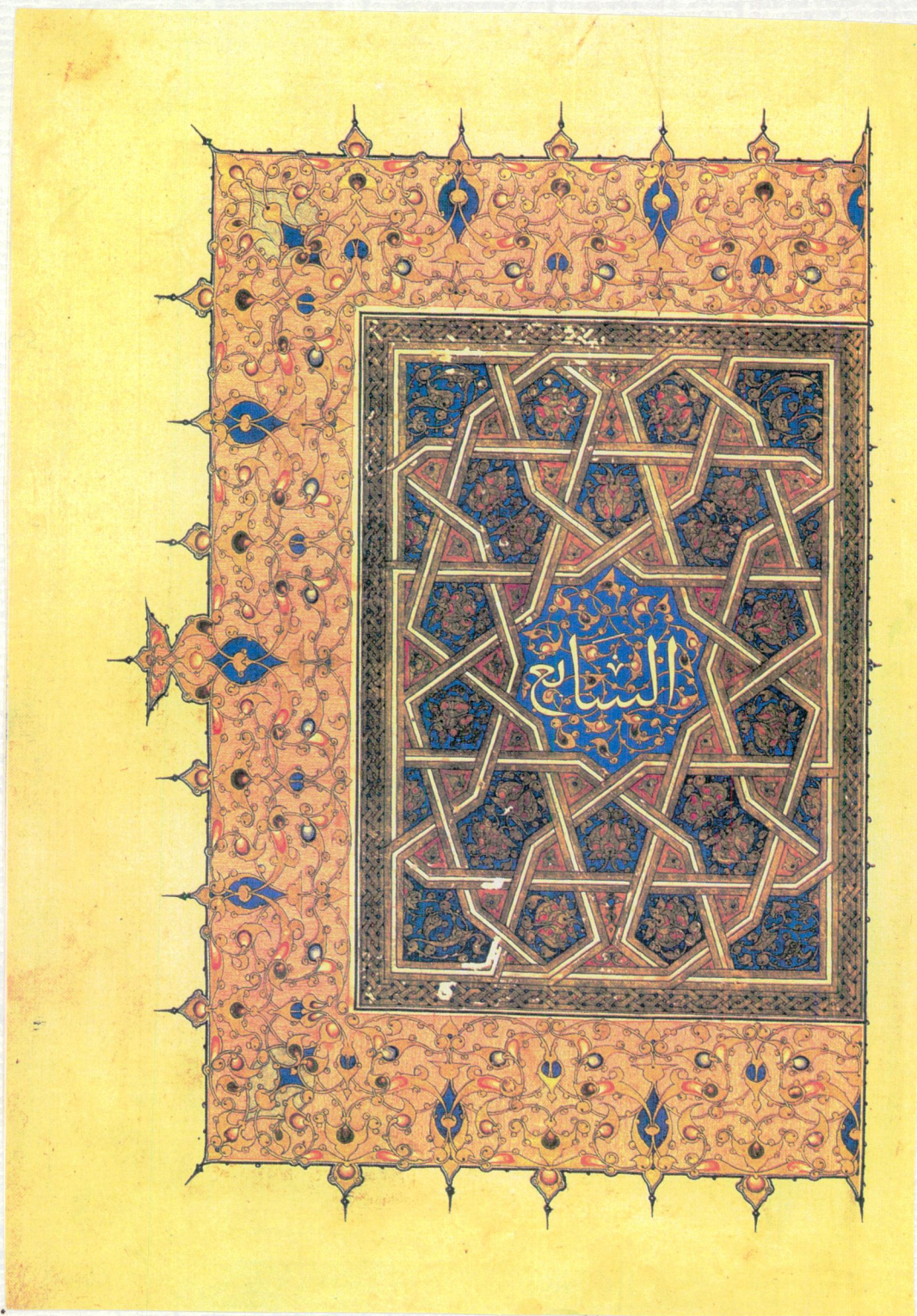


Fig. 4.1.

The Qur'an of Baybras, Frontispiece of volume 7. This is the work of Sandal, the master illuminator. The title is in Thulth. The trellis design is one framed by Sandal and associates.



فَرَحًا فَفَتَحْنَا فِيهِ رُوحَنَا وَصَدَقَتْ

بِكَلِمَاتٍ تَعَاوَنُكَ وَكَانَتْ مِنَ الْفَائِزِينَ



سُورَةُ الْمُلِكِ إِحْدَى قُلُوبِ زَايَةٍ

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

تَبَارَكَ لِلَّهِ مَلِكُ الْمَلِكِ وَوَعْدُ عَلِيٍّ

كُلِّ قَلْبٍ لِّلْذِي خَلَقَ الْمَوْتَ وَالْحَيَاةَ

Fig. 4.2.

Qur'an of Baybars, the text of the Qur'an is in Thulath-ash'ar i.e. Gold Thulth outlined in black. Diacriticals that are now black, were originally silver. It is the only Mamluk example of its type.

4-2

4.4

Handwritten signature or scribble

A sample of Muhaggag Script calligraphy. The text is written in a cursive style with a long horizontal line extending from the right. The text is 'بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ' (In the name of Allah, the Most Gracious, the Most Merciful).

Fig. 4.3.

Muhaggag Script: The main Qur'anic script.

A sample of Mamluk Naskhi calligraphy. The text is written in a cursive style with a long horizontal line extending from the right. The text is 'بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ' (In the name of Allah, the Most Gracious, the Most Merciful).

Fig. 4.4.

Mamluk Naskhi: In the first two decades of the fourteenth century manuscripts in Egypt and Syria were often copied in a robust fully developed cursive script, of which this is an excellent example.

A sample of Thulth calligraphy. The text is written in a cursive style with a long horizontal line extending from the right. The text is 'بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ' (In the name of Allah, the Most Gracious, the Most Merciful).

Fig. 4.5.

Thulth: A cursive script usually found in large format. It is rarely used for the main body of the Qur'anic text.

4.3 4

4.4 4.4

4.4 4.4

The Illuminators:

Abu Bakr was the chief illuminator of Baybars al-Jashnagir's Qur'an. Ibn al-Wahid probably knew him and employed him to work on his calligraphy. The overall design of the Qur'ans is the same but because of slight differences we know that Abu Bakr did not illuminate the entire script. The manuscript also bears the names of three artists; Muhammed ibn Mubadir and a lesser illuminator Aydughdi ibn Abdallah. Muhammed ibn Abdallah was probably an apprentice. The third and fifth folios are signed by (Sandal) Abu Bakr. The first is signed by ibn Mubadir. Although there are elements of each in all of the folios (11, pp.40), ibn Abdallah seemed to paint in or outline work done by others.

The frontispiece of the first volume shows some of the simplest illumination of the entire manuscript. (Fig. 4.6) This is also the only portion signed by Muhammed ibn Mubadir. The design of this frontispiece is similar to tile patterns that are found in other parts of the Islamic world.

In these manuscripts both ibn Mubadir and Sandal use new or unpopular ways of illuminating the script. The wide bands of strapwork seen in volume four did not become popular for several decades after this manuscript. (Fig. 4.7) The use of Iranian tile designs was uncommon in Egypt. The illumination in this manuscript appears, however, to be related to the work of Sandal rather than that of ibn Mubadir.

Abu Bakr: Sandal.

Sandal appears to have been the greatest illuminator of the Qur'an. Sandal's signature is found on volumes three and five. The final volume is not signed by Sandal but is illuminated in exactly the same manner as the other two. (Fig. 4.1)

The frontispieces produced by Sandal all take the same form, they have a central polygon which repeats itself in the four corners of a rectangular panel. Unlike the volumes illuminated by ibn Mubadir, Sandal's are not simply repeats of the opening folio. Another reason for thinking that the last volume of Baybar's Qur'an was illuminated by

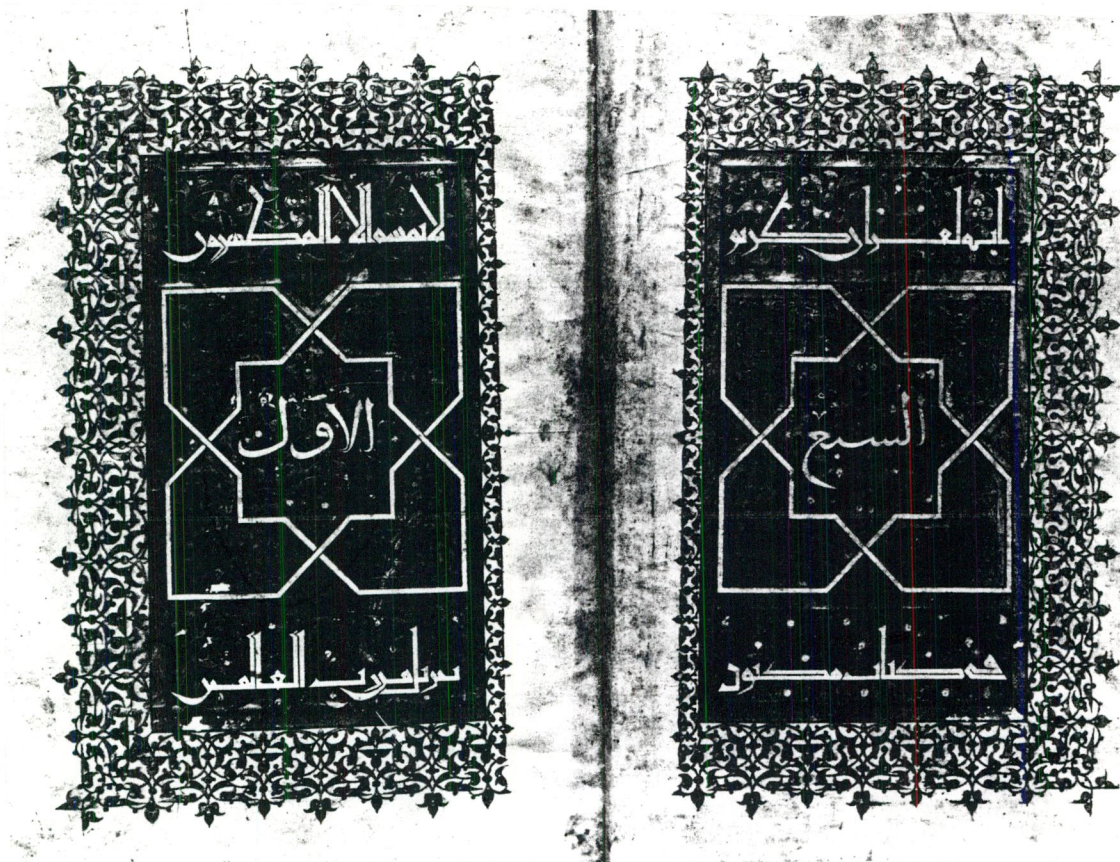


Fig. 4.6.

Qur'an of Baybars: Frontispiece of volume 1. Volume 1 is the only portion signed by Muhammad ibn Mubadir. The design is though to be from tile designs found in Iran.



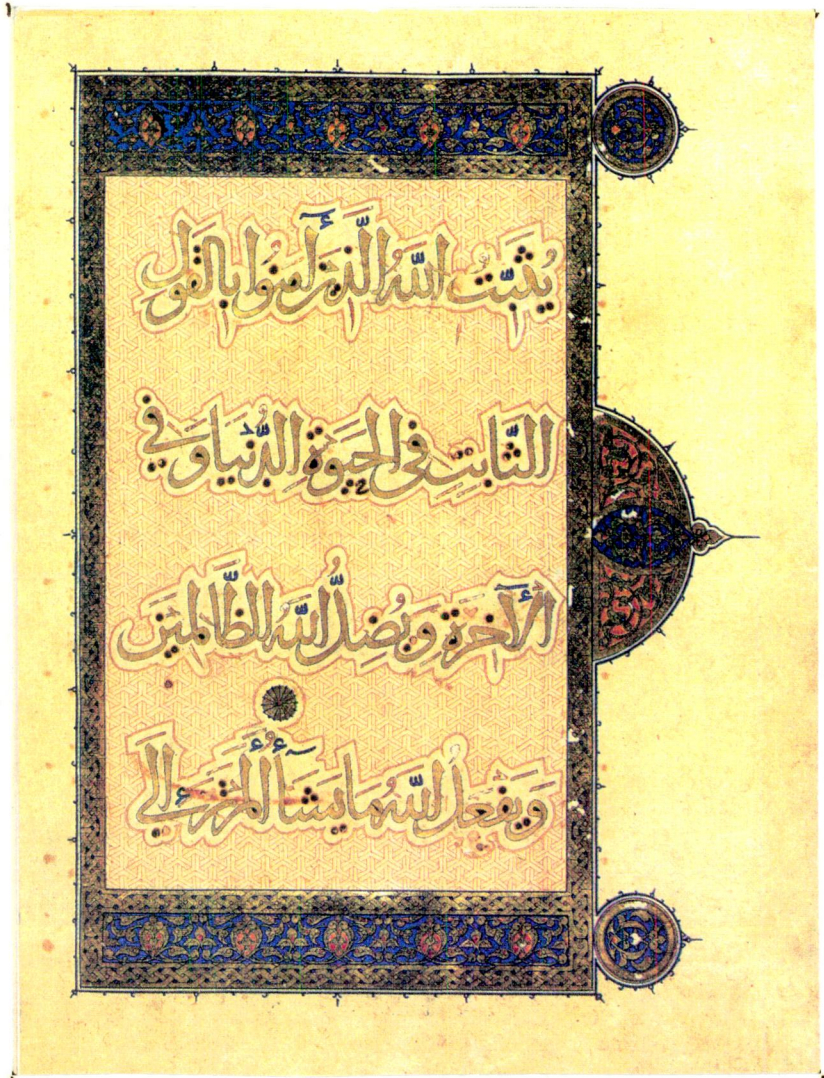


Fig. 4.7.

Qur'an of Baybars: Opening pages of volume 4. All opening pages of text are designed in the same way. The text is written by Muhammed ibn Mubadir, the artist inverted y-shapes whereas Sandal never uses geometric patterns in a background.



Sandal is the style used in another of his Qur'ans. (Fig. 4.8) Although it has not got the same dividing lines, the geometric shapes and the use of interlocking of these shapes are the same as can be found in volume three. Sandal uses the star-polygon and stylised foliage that were often found in relation with Sandal's work and that of his associates. The use of calligraphy over that of arabesque scrolls was typical of Sandal's work.

It is quite apparent that the Baybar's Qur'an differed significantly from all other Mamluk Qur'ans. They seem to relate to the Qur'ans of the Iranians or Iraqis in size, script and format. (Fig. 4.9)

Footnotes:

1. Thulth-ash'ar is a mixture between two scripts; thulth and muhaqqaq. Thulth is a cursive script found in large format but rarely used for the main body of the Qur'anic texts. Muhaqqaq is the principal Qur'anic script in which the semi-circular letters are flattened out.

(11, pp.19)

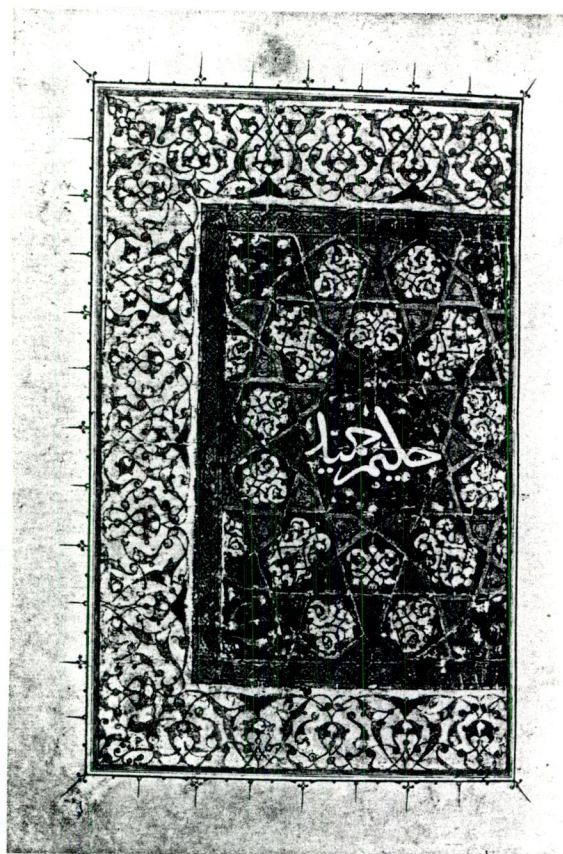


Fig. 4.8.

Frontispiece of a manuscript illuminated by Sandal it is almost identical to the frontispiece of volume 7 of the Baybar Qur'an.

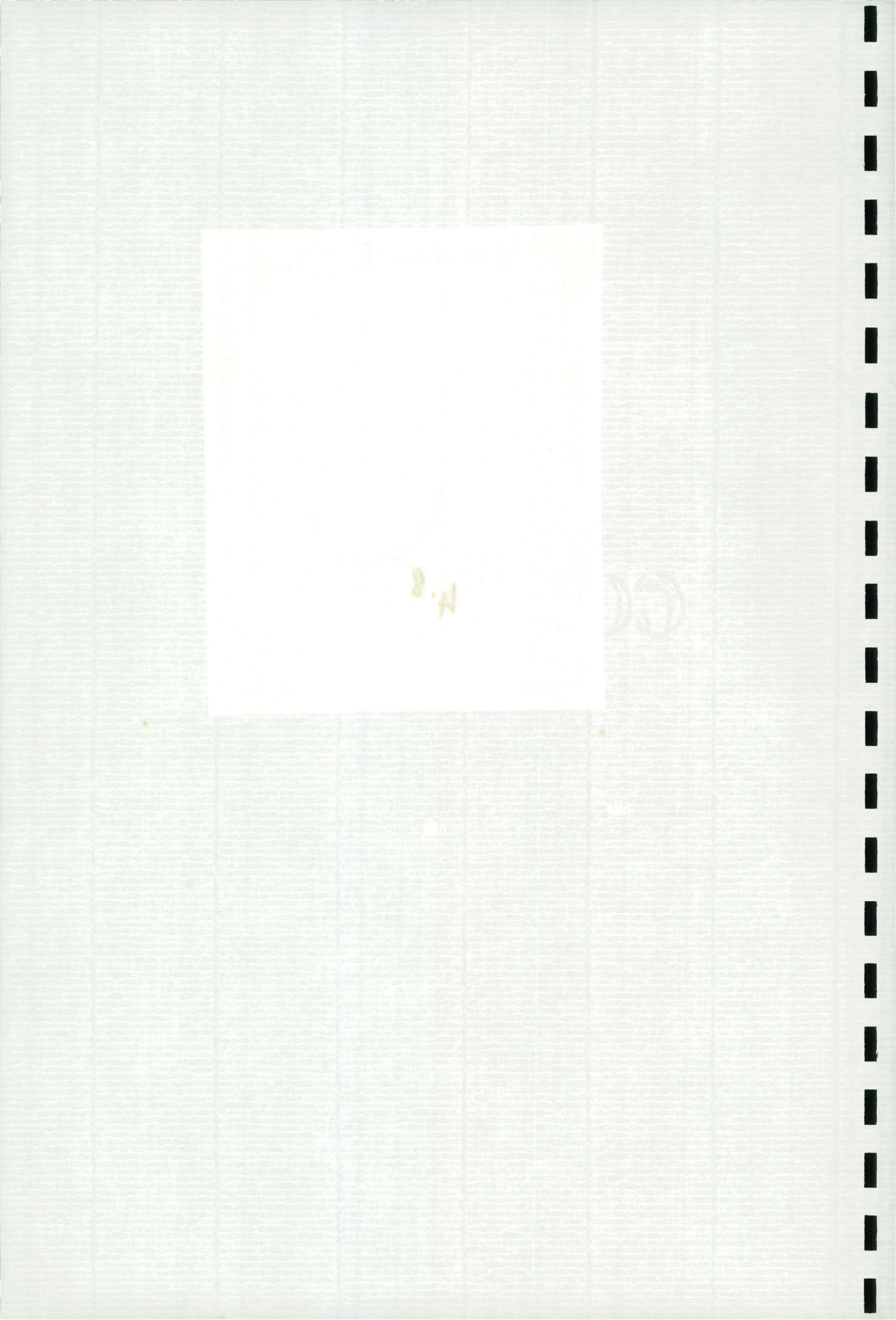




Fig. 4.9.

Olijaytus Baghdad Qur'an, the opening page copied in Muhaggag jali, over a bed of coloured scrolls on a red hatched ground.



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P.H.



CONCLUSION:

As mentioned in the introduction this thesis started life as an examination of religious art. This theme has been narrowed down within the confines of this work, to look at Islamic art and worship in particular. Islam is an excellent example of religious art because their religion pervades their lives to a far greater extent than many of our Western religions.

An understanding of the spirituality of this religion is the same as learning what drives these people and how they found their beliefs. All Islamic art has its' roots or relations to religion because it is so closely intertwined in their everyday life. In other words, to understand one is equivalent to understanding the other.

Islamic art as we know it came into existence with the coming of Mohammed. This saw a complete breaking-away from pre-Islamic art as Mohammed believed the pre-Islamic period to be pagan. However it was not possible to create an art-form overnight and in some cases the pre-Islamic form was used as a base to build on e.g. calligraphy. For other art-forms such as the secular arts, it was necessary to look further afield for influence and this period saw the interchange of artistic influences between countries.

Calligraphy is one of the more spectacular forms of religious art and it is a fine example of the religious fervour and painstaking hours of labour which were put into the creation of this holy writing. The holy books of the Qur'an did not confine calligraphy as it borrowed from nature, architecture and other sources, while lending itself in return.

Personally I feel that I understand these people and their religion more. But most importantly have enjoyed learning and researching their beautiful art. I hope you can gain an understanding of what their art is about and how important it is to them.

I hope you enjoy my thesis. Please excuse any small errors that you find in it.

BIBLIOGRAPHY:

1. ARTS COUNCIL OF GREAT BRITAIN, The Arts of Islam, London.
2. BLACK, David, World Rugs and Carpets, Middlesex, County Life Books, 1985.
3. E-SAID, Issam & PORMAN, Ayse, Geometric Concepts in Islamic Art, Scorpion publishing ltd; and World of Islam Festival Trust, 1988.
4. FIELD ENTERPRISES EDUCATIONAL CORPORATION, The World of Encyclopedia Q-R, New York, 1976.
5. GARDNER, Helen, Art through the Ages, San Diego, Harcourt, Brace, Jovanovich Inc., 1986.
6. GRABAR, Oleg, The Formation of Islamic Art, New Haven, Yale University Press, 1987.
7. HOSSEIN NASR, Seyyed, Islamic Art and Spirituality, Ipswich, Golgonooza Press, 1987.
8. HUGHES, Robert, Heaven and Hell in Western Art, London, Weidenfeld and Nicolson, 1968.
9. JAMES, David, Islamic Masterpieces of the Chester Beatty Library, London, World of Islam Festival Trust, 1987.
10. JAMES, David, Qur'ans and Bindings from the Chester Beatty Library, London, World of Islam Festival Trust, (A facsimile exhibition), 1986.
11. JAMES, David, Qur'ans of the Mamluks, New York, Thames & Hudson, 1988.

12. KHATIBI, Abdelkebir & SIJELMASSI, Mohammed, The Splendour of Islamic Calligraphy, London, Thames & Hudson, 1976.
13. SAFADI, Yasin Hamid, Islamic Calligraphy, London, Thames & Hudson, 1978.
14. SCHIMMEL, Annemarie, Calligraphy and Islamic Culture, London, Tauris, 1989.
15. SHERRARD, Philip, The Sacred in Life and Art, Ipswich, Golgonooza Press, 1990.
16. SULLIVAN, Sir Edward, The Book of Kells, London, Studios Editions, 1986.
17. TALBOT-RICE, David, Islamic Art, London, Thames & Hudson, 1975.
18. WELCH, Anthony, Calligraphy in the Arts of the Muslim World, Kent, Dawson & Sons Ltd;, 1979.

