THE PHILOSOPHY OF ISLAMIC ORNAMENT IN ISLAMIC ART

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Presented by

HANAN AL-OBAID

School of English, Communication and Philosophy

Cardiff University

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IN THE NAME OF GOD, THE MOST GRACIOUS, THE MOST MERCIFUL

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DEDICATION

I dedicate this study to my dear mother, Jawaher Al-Obaid, and sister, Etab, with love and appreciation for their support and encouragement

Also

To my brothers Mazin, Raed and Abdul Azaiz

And

Finally, to my husband Abdullah and our three little daughters Al-Jwhra, Rema and Jawaher.

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ABSTRACT

The view of Islamic art as a minor art and its various ornaments as without any purpose or meaning is questionable since such a perspective ignores the great influence of the Islamic religion on it. This study investigates in close detail the philosophy of ornament in Islamic art. Clearly, Islamic ornamentation plays a central role in Islamic art and architecture. It is divided into four main elements: Arabic calligraphy, vegetal and geometric ornament, and human and animal figural representation. Due to the significance of Islamic ornamentation, this study will examine its origins, development and impacts on the art and architecture of other cultures as well as the influence of other cultures on the development of Islamic ornamentation. It will also examine the rich historical and cultural background from which the art of Islamic ornament emerged in order to identify the characteristics of Islamic ornament in the context of history, its development, its aesthetic values and its underlying philosophy and forms of expression.

In this study the historical survey method is employed to examine the development of Islamic ornamental elements. This study also explores the various Islamic ornamental methods and techniques that artists used to create beautiful Islamic ornaments as well as the meanings of Islamic ornamental symbols in both Islamic art and architecture. This study identifies the most important factors contributing to the beauty of Islamic ornamentation. The nature of the relationship between Islamic artists and spectators and their roles in the context of Islamic art also is examined.

The thesis concludes that Islamic ornamentations are based on a divine philosophy that stimulates contemplation of God's Majesty and transcendence through wonder at the cosmos He has created. Another important characteristic of Islamic culture is its acceptance of cultural variations which it absorbed and then used to develop its own unique character and identity. Finally, the study identifies two types of Islamic ornamentation, namely, secular ornamentation and pure Islamic ornamentation, and offers a contrastive definition of both.

TABLE OF CONTENTS

DECLARATION..... i

DEDICATION..... ii

ACKNOWLEDGEMENTS..... iii

ABSTRACT..... iv

TABLE OF CONTENTS..... v

LIST OF FIGURES..... ix

GLOSSARY..... xix

ISLAMIC EMPIRE MAP..... xxii

CHAPTER ONE: INTRODUCTION

BACKGROUND 2

THE CHARACTERISTICS OF ISLAMIC ART AND ORNAMENT... 8

The Divine in Islamic Art..... 8

Avoidance of the Depiction of Living Beings..... 8

Asceticism..... 8

The Concern with Surface Decoration and Filling Space..... 9

THE THEOLOGICAL FUNCTION OF ISLAMIC ORNAMENTATION... 9

First, the reminder of *Tawhid*..... 11

Second, the transfiguration of materials..... 11

Third, the transfiguration of structures..... 12

Fourth, beautification..... 12

THE PHILOSOPHY OF ISLAMIC ORNAMENT IN ISLAMIC ART AND ARCHITECTURE..... 13

REASONS FOR THE SPREAD OF ISLAMIC ORNAMENTATION... 15

THE CORRELATION OF ISLAMIC ORNAMENTATION WITH ISLAMIC ARCHITECTURE..... 16

RESEARCH METHODOLOGIES AND JUSTIFICATION..... 20
The Study of Islamic Ornament..... 20
Significance of the Study..... 20
Study Aims..... 21
Study Methods..... 21
Research Questions..... 21
Study Limitations..... 22

CHAPTER TWO: ISLAMIC ORNAMENT ELEMENTS

INTRODUCTION..... 23
ARABIC CALLIGRAPHY..... 23
The Development of Arabic Calligraphy..... 30
VEGETAL ORNAMENT..... 40
The Development of Vegetal Ornament..... 44
GEOMETRIC ORNAMENT..... 53
The Development of Geometric Ornament..... 60
HUMAN AND ANIMAL FIGURAL REPRESENTATION..... 67
The First Aspect: The Holy Qur'an..... 68
The Second Aspect: The Prophetic Traditions (Hadiths)..... 69
The Third Aspect: The opinions of Western researchers on Islamic art 69
The Development of Human and Animal Figural Representation..... 74

CHAPTER THREE: ISLAMIC ORNAMENTAL METHODS AND THE MEANING OF ISLAMIC ORNAMENT

INTRODUCTION..... 80
ISLAMIC ORNAMENTAL METHODS..... 80
Overlay method..... 81
Covering the inherent qualities of the materials..... 81
Multi-unit structure technique..... 82
Meander structure..... 82

Movement of the ornamental unit..... 83
Framing and linking..... 83
Change and counter change..... 84
Geometric interlocking..... 84
THE MEANING OF ISLAMIC ORNAMENT..... 86
Ornaments Invoke Blessings..... 88
Ornaments with Metaphoric Qualities..... 89
Emblems Versus Ornaments..... 91

CHAPTER FOUR: THE AESTHETIC VALUES OF ISLAMIC ORNAMENTATION

INTRODUCTION..... 94
THE AESTHETIC VALUES OF ISLAMIC ORNAMENTATION..... 95
Forbidding production of images of living beings..... 95
Inconsistency with nature..... 96
Creating and shaping the impossible..... 96
Transforming the cheap into something valuable..... 97
Leaving embodiment and relief..... 98
Variety and unity..... 99
CHARACTERISTICS OF ISLAMIC ORNAMENTATION..... 100
The Unity of Islamic Ornamentation..... 101
THE INGREDIENTS OF ISLAMIC ORNAMENTATION..... 104
Geometric Ornamentation..... 104
Vegetal Ornamentation..... 106
Human and Animal Figures..... 106
Arabic Calligraphy..... 110
UNDERSTANDING ISLAMIC ART AND ORNAMENTATION..... 113
Understanding Islamic Art and Ornamental Expressions and Symbols... 117

CHAPTER FIVE: THE RESEARCH QUESTIONS

INTRDUCTION..... 124

The Historical Background of Islamic Ornament..... 124

1RQ: What is the historical background of Islamic ornament?..... 124

THE INFLUENCES OF THE ISLAMIC RELIGION ON ISLAMIC ORNAMENTATION, ART AND ARCHITECTURE..... 153

2RQ: Do Islamic ornament, art and architecture created by Islamic artists serve Islam as a religion?..... 153

THE IMPACT OF ISLAMIC ORNAMENT ON OTHER CULTURES.. 163

3RQ: To what extent has Islamic ornament influenced other non-Islamic cultures?..... 163

THE IMPACT OF OTHER CULTURES ON ISLAMIC ORNAMENT.. 183

4RQ: Are there other cultures which have influenced Islamic ornament? To what extent?..... 183

THE MOST IMPORTANT FACTORS THAT CONTRIBUTE TO THE BEAUTY OF ISLAMIC ORNAMENT..... 196

5RQ: What are the most important factors that contribute to the beauty of Islamic ornament?..... 196

CHAPTER SIX: THE ARTIST AND THE SPECTATOR

INTRODUCTION..... 210

THE ARTIST AND THE SPECTATOR..... 210

CHAPTER SEVEN: CONCLUSIONS AND RECOMMENDATIONS

INTRODUCTION..... 219

CONCLUSIONS..... 219

RECOMMENDATIONS..... 225

RECOMMENDATIONS FOR FUTURE STUDIES..... 226

REFERENCES..... 227

STUDY FIGURES..... 237

LIST OF FIGURES

Figure 1.1	Table of ornamental designs	237
Figure 2.1	Tiled panels on the exterior wall of the Dome of the Rock Jerusalem 691	238
Figure 2.2	Mosque of the Three Doors at Qairawan, 866	238
Figure 2.3	Inscriptions above the main door of the Jurjir Mosque in Isfahan	239
Figure 2.4	Decoration of the Gunbad-i Qabus Tower at Gorgan, 1006–7 Iran	239
Figure 2.5	Ceramic bowl with decoration from Nishapur, Iran, tenth century	240
Figure 2.6	Golden pitcher, Iran or Iraq, 10th century	240
Figure 2.7	Letter measurements using rhomboid dots	241
Figure 2.8	Facade of the Aqmar Mosque, Cairo, 1125	241
Figure 2.9	Inscribed slip-painted earthenware bowel, Iran, 10th century	242
Figure 2.10	The upper panels around the lower section of the tower of Masud III at Ghazna, Afghanistan	242
Figure 2.11	Detail of the entrance facade of the Ince Minare Madrasa at Konya, Turkey, 1260	243
Figure 2.12	Karatay Madrasa in Konya, Turkey, 1251	243
Figure 2.13	A corner of the Karatay Madrasa, Konya, Turkey, 1251 ...	244
Figure 2.14	Brass ewer inlaid with silver, Mosul, 1223	244

Figure 2.15	Left half of the double frontispiece to volume VII of the Qur'an of the Egyptian Baybars Jashnagir, 1304 – 06, illuminated manuscript...	245
Figure 2.16	Detail of the Glazed ceramic decorations on the doorway of the Friday Mosque in Natanz, Iran, 1304 – 6...	245
Figure 2.17	Stucco mihrab in the winter prayer hall of the Friday Mosque at Isfahan, Iran, 1310...	246
Figure 2.18	The "Animated" naskhi inscription on the Wade Cup in the Cleveland Museum of Art...	246
Figure 2.19	Cup, inlaid bronze, early thirteenth century...	247
Figure 2.20	Inscription on pottery plate from Nishapur, Iran..	247
Figure 2.21	Pottery bowl with barakah in ornithmorphic script...	247
Figure 2.22	(A) Barakah, ornithomorphic script on east Iranian dish, tenth century...	248
	(B) Human-headed kufic inscription on east Iranian ewer.	248
	(C) Human-headed naskhi inscription on pen box, Iran or Afghanistan...	248
Figure 2.23	Incense burner with name and titles of Sultan al-Nasir Muhammad ibn Qala'un written in radiating characters, Cairo, 1320- 1330...	249
Figure 2.24	A tray of sheet brass inlaid with silver and gold, Cairo or Damascus, 1345 – 6...	249
Figure 2.25	Square kufic script, repeating four times the name of the Prophet Muhammad, from a wooden minbar in the Friday mosque of Khva, 1502 – 3...	250
Figure 2.26	Angular kufic inscription on the iwan of the Friday Mosque in Isfahan, Iran, 17th century...	250

Figure 2.27	A text from the Qur'an in Sulus calligraphy, Dome of Hagia Sophia, Istanbul, 16th century	251
Figure 2.28	Dome of the Sulemaniye Mosque, Istanbul, 1550 – 1557	251
Figure 2.29	Tugra of Selim II, Istanbul, late 1560s	252
Figure 2.30	Calligram in the form of a horse, Iran	252
Figure 2.31	Floral ornaments adopted from pre-Islamic civilisations in Khirbat al-Mafjar, Palestine, 725-30	253
Figure 2.32	Sheet-metal tie-beam covering in the Dome of the Rock, Jerusalem, 691	254
Figure 2.33	Wooden soffit from Aqsa Mosque, Jerusalem	254
Figure 2.34	Stucco window grille from Qasr al-Hair al-gharbi, early 8th century	254
Figure 2.35	Detail of a wooden minbar in the Great Mosque, Qayrawan, Tunisia, 856 – 863	255
Figure 2.36	Samarra wall decoration styles A, B and C, ninth century, Samarra palace	255
Figure 2.37	Marble fragment from the mihrab area, Great Mosque Cordoba, Spain, 962 – 966	256
Figure 2.38	Mosaics in the mihrab area, Great Mosque, Cordoba, Spain, 962 – 966	256
Figure 2.39	Vegetal ornamentation from the Great Mosque, Cordoba and Medina al-Zahra, Granada, Spain	257
Figure 2.40	Casket, probably Medina al-Zahra, Granada, Spain, 961	257
Figure 2.41	Ivory pyxis of Subh, probably Medina al-Zahra, Granada, Spain, 964	257

Figure 2.42	Silver casket, decorated with gilding and black organic material, medina al-Zahra, Granada, Spain, 976	258
Figure 2.43	Decorative panel on the cenotaph of Mahmud of Ghazna, Afghanistan, 12th century	258
Figure 2.44	Masjid-I Jami' Mihrab, at Ardestan, Iran	259
Figure 2.45	Stucco panel from the palace at Ghazna, Afghanistan, 11th century	259
Figure 2.46	Luster decoration on the mihrab from the Maidan Mosque in Kashan, Iran, 1226	260
Figure 2.47	Iranian ljvardina dish, early 14th century, glazed ceramic	260
Figure 2.48	Folding Qur'an stand, from Konya, Turkey, 13th century	261
Figure 2.49	Right-hand side of the double frontispiece of a Qur'an made in Cairo, about 1368.	261
Figure 2.50	Glazed tile from the Topkapi Sarai in Istanbul, 16th century	262
Figure 2.51	Fritware mosque lamp painted in cobalt turquoise and black in the Kutahya style, Iznik, Anatolia	262
Figure 2.52	Fritware dishes painted in under-glaze, colours in the Damascus style, Iznik, Anatolia about 1550 – 70	263
Figure 2.53	Fritware spandrels painted in under-glaze colours in the Rhodian style, Iznik, Anatolia, 16th century	263
Figure 2.54	Stone window grille in the Great Mosque, Damascus, 8th century	264
Figure 2.55	Mosaic panel, Khirbat al-Mafjar, Palestine, 8th century	264
Figure 2.56	Mosaic floor, central panel, Khirbat al-Mafjar, Palestine, 8th century	265

Figure 2.57	Plate made for Amir Abrak al-Ashrafi, Syria, circa 1500 – 09	265
Figure 2.58	Banner, first half of the 13th century	266
Figure 2.59	Dome of the Friday Mosque of Yazd, central Iran	266
Figure 2.60	Mausoleum of Sultan Qaitbay, Cairo, 14th century	267
Figure 2.61	Door panel, Syria or Egypt, 14th century	267
Figure 2.62	Geometric composition in a tile mosaic decorating the principal iwan of the Friday Mosque of Isfahan, Iran	268
Figure 2.63	Detail of a Timurid Qur'an binding with shamsa (sun) rosettes, 15th century	268
Figure 2.64	Lozenges formed by bricks from the Tomb Tower at Demavand, Iran, 11th century	269
Figure 2.65	Geometric ornament on slip painted dish from Nishapur, Iran, 10th century	269
Figure 2.66	Lustre tile decoration on the Mihrab of the Great Mosque of Qairawan, Tunisia, 862	270
Figure 2.67	Tiled niche from the Masjid-I Shah, Isfahan	270
Figure 2.68	Domed side chamber of the Bibi Khanum, Friday Mosque, Samarqand, covered with a stucco stalactite decoration, 1399 – 1404	271
Figure 2.69	The hall of the Two Sisters in the Alhambra Palace, Granada, Spain, 14th century	271
Figure 2.70	Plaster ceiling over the hall of the Abencerrajes, in the Alhambra Palace, Granada, Spain, 14th century	272
Figure 2.71	Muqarnas covered with gold leaf in Hasht Bihisht, Isfahan, Iran, 1669	272

Figure 2.72	Silver dirham, minted 695, idealised portrait of the Caliph as Sasanian emperor	273
Figure 2.73	Carved and moulded plaster decoration from Khirbat al-Mafjar, Palestine, 8th century	273
Figure 2.74	Fresco from the Umayyad palace of Qaser al-Hair al-Gharbi, Syria, 8th centry	274
Figure 2.75	Mosaic floor in Kirbat al-Mafjar palace, Palestine, 8th century	274
Figure 2.76	Façade of the Mshatta palace, Jordan, 743 – 744	275
Figure 2.77	Wooden plaque, Egypt, 9th century	275
Figure 2.78	Ivory Plaque with hunter and harvester, Sicily, probably 12th century	276
Figure 2.79	Ceramic bowel, Egypt, 11th century	276
Figure 2.80	Central design on a metal tray, formerly in the collection of M. d'Allemagne, Paris	277
Figure 2.81	Frieze of identical animals, from the Wade, Cleveland Museum of Art Cup	277
Figure 2.82	Decoration of a dragon in Foliage from Istanbul, Turkey, 16th century	278
Figure 2.83	Panels of glazed tilework from the Topkapi Sarai, Istanbul, 16th century	278
Figure 3.1	Tile work in prayer hall of the Abdullah Ansari shrine, Gazur Gah, Afghanistan	279
Figure 3.2	Lustre painted jug decorated with dovetailed hexagons, Kashan, Iran, 13th century	279

Figure 3.3	Panel from the cenotaph cf the Mausoleum of Imam al-Shafi, Cairo ... ...

Figure 4.2	Bronze door in the *madrasa*-mosque of Sultan Hasan in Cairo 1356-63	287
Figure 4.3	One of the four doors with bronze ornamentation that give onto the courtyard of the *madrasa* of Barkuk, Cairo	288
Figure 4.4	Sculpture from the north portal of the Great Mosque of Divrighi, Anatolia, 1228-29	288
Figure 4.5	The fresco from Qasr Amra in Jordan, early 8th century	289
Figure 4.6	Incense burner in the shape of a standing lion, cast brass pierced and inlaid with silver and copper, Khurasan, Afghanistan, 11th century	289
Figure 4.7	A minaret decorated with Arabic calligraphy and *muqarnas* pattern, and the ribbed dome of the Gur- i Emir in Samarqand, 1398-1404	290
Figure 4.8	System polychromatic bands sculpted with vegetal, geometric and calligraphic patterns that frame a portal of the 'Ala' i Darwaza in Delhi	290
Figure 5.1	Large pattern Holbein carpet, Anatolia, 15th century	291
Figure 5.2	Hans Holbein, *The Ambassadors*, 15th century, the design of the carpet is based on large octagons within squares, Ottoman Empire	291
Figure 5.3	Cloak of the Norman King Roger II, later used as a coronation robe of the Holy Roman Emperor, Palermo, 1133-34	292
Figure 5.4	Glass vessel in the form of an Arab mosque lamp, Philippe J. Brocard, Paris, 1869	292
Figure 5.5	The court of the lions, Al-Hamra Palace, Granada, Spain, 14th century	293

Figure 5.6	Interior of the Church of Santa Maria la-Blanca, Toledo, Spain, 13th century...	293
Figure 5.7	The Cathedral of San Miniato near Pisa, 12th century. The church facades and towers are decorated with Islamic earthenware bowels called bacini...	294
Figure 5.8	Bowl painted in blue and brown, bacino from the cathedral of San Miniato, Pisa, 12th century...	294
Figure 5.9	Window grilles above Porta Sant' Alippio Saint Mark's, Venice, 13th century...	295
Figure 5.10	Marble panels carved in shallow relief with an endless variety of flowering plants, Taj Mahal, India, 1631 – 47...	295
Figure 5.11	The main architectural ornament of the Taj Mahal, India, 1631 – 47...	296
Figure 5.12	Jean Leon Gerome (1824 – 1904), men at prayer in the Amr Mosque, Cairo. Oil on canvas...	296
Figure 5.13	Arab Interior by Arthur Melville (1855 – 1904) – showing the *mashrabiyya* allowing filtered light into a sumptuous interior...	297
Figure 5.14	The Imam Mosque in Asfahan, Iran, 16th century...	298
Figure 5.15	Sheikh Lutfallah Mosque in Isfahan, Iran, 16th century.....	298
Figure 5.16	Ascension of the Prophet Muhammad, from the copy of Nizami's Khamsa, Tabriz, Iran, 1540....	299
Figure 5.17	Tile picture, Isfahan , Iran17th century...	299
Figure 5.18	Coloured engraving of Fath Ali Shah, Paris, Circa 1807...	300
Figure 5.19	Tilework panel depicting Fath Ali Shah and his court, Iran, 19th century...	300

Figure 5.20	Mihr Ali, portrait of Fath Ali Shah, Iran, 18th century...	301
Figure 5.21	Pen box with a portrait of Manuchihr Khan Mutamid al-Dula, Isfahan, Iran, 18th century...	301
Figure 5.22	Miniature enamel paintings of Fath Ali Shaha, Iran, Circa, 1820...	302
Figure 5.23	Mughal painting from the Minto Album, India, 1630.....	302
Figure 5.24	Court coat for the Mughal prince or emperor, India, 17th century...	303
Figure 5.25	Decorative pages with calligraphic Zoomorphic animal forms...	303

GLOSSARY

Almohad art: features of this art are large suspended conical arches, small *muqarnas* vaults, and fine stucco decoration. *Muqarnas* domes are almost exclusively found in Almohad buildings, particularly the coloured accentuation of every element.

Ayyubid: Kurdish dynasty in Egypt, Syria and Iraq.

Baraka: blessing.

Caliph: title given the leader of a Muslim community, in Arabic *Khalifa*, successor or deputy of Muhammad.

Hadith: an account of an act or saying of the Prophet Muhammad and one of the principal sources of Islamic law.

Haqa'iqh: truth.

Hatayi: a type of ornament distinguished by the Ottomans as coming from Cathay or China.

Hikmah: wisdom.

Iwan: a vaulted hall opening onto a courtyard, a traditional element of Islamic architecture.

Iznik: pottery known as Iznikware was produced from the fifteenth century onwards using the quartz method with coloured paint applied beneath a transparent tin glaze.

Ka'ba: the most sacred shrine of Islam, a cubic monument situated in Mecca.

Kufic: Arabic script named after the city of Kufa in Iraq. An angular calligraphic style.

Lajvardina: this term was adopted to denote a particular technique used in Iranian ceramics, characterised by the intense blue or turquoise achieved using cobalt constituents in the glaze.

Madrasa: college for theology and law

Mamluk: The Mamluks dynasty was the Turkish slaves of the Ayyubid rulers of Egypt. They ruled Egypt and Syria.

Mashrabiyyah: an oriel window allowing filtered light into an interior.

Mausoleum: a large and grand tomb.

Mihrab: a niche in a mosque used to show the direction of Mecca.

Minai: the minai process seems to have been first developed for glassware. The minai technique and its range of colours allowed dishes and pots to be decorated with detailed figurative imagery similar to manuscript miniatures.

Minaret: tower attached to a mosque.

Minbar: raised enclosed platform in a mosque from which the Imam addresses worshippers.

Muqarnas: a stalactite architectural decorative motif.

Naskhi: a cursive calligraphic style.

Qiblah: direction to which Moslems turn in prayer (towards the Ka'ba).

Qur'an: the sacred book of Islam.

Rumi: type of ornament distinguished by the Ottomans

Saz: a long, supple, denated leaf used in Ottoman art in the sixteenth century.

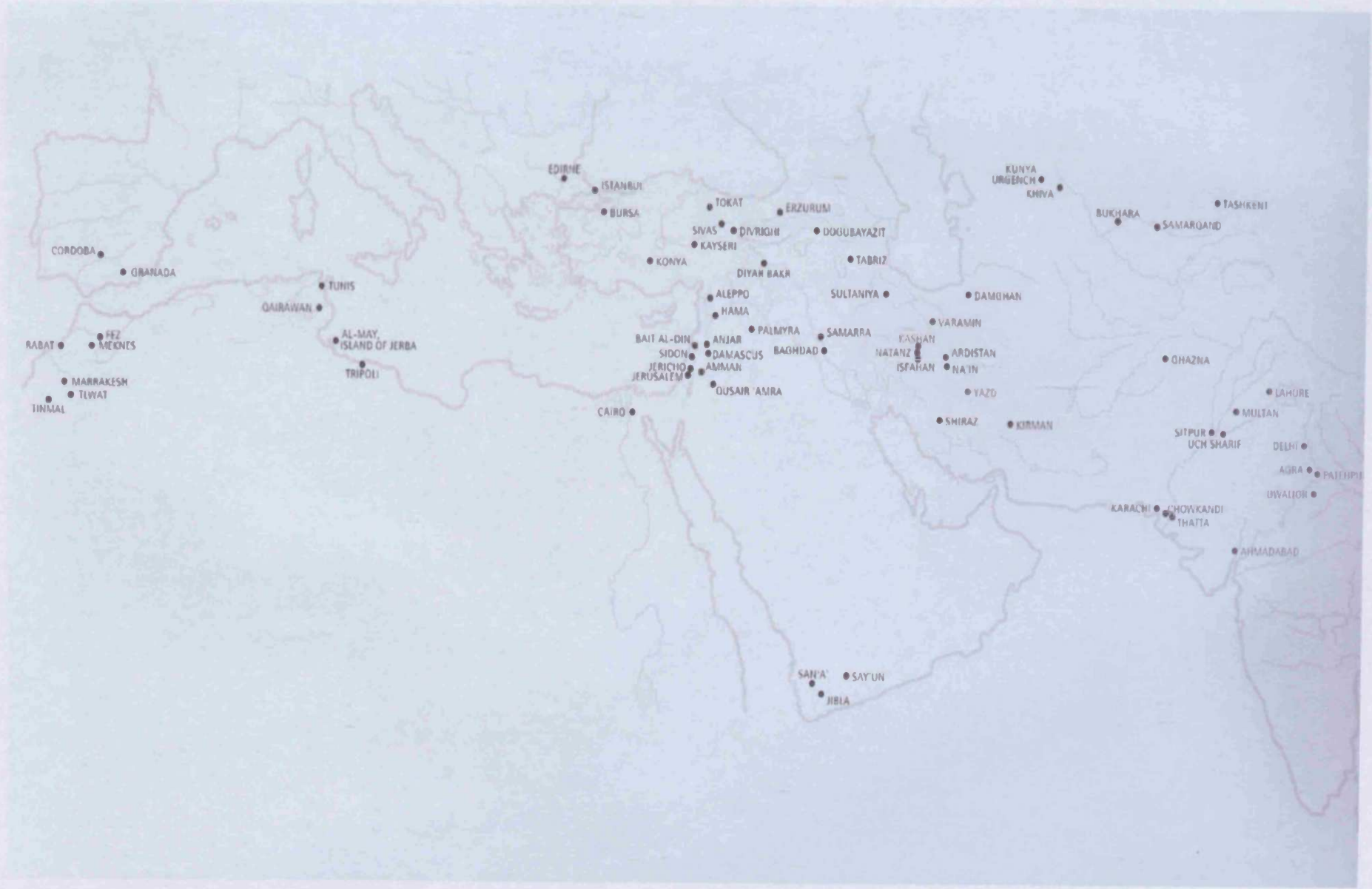
Shahada: profession of faith affirming the unity of God and the Prophetic mission of Muhammad.

Sura: a chapter of the Qur'an.

Tawhid: the Oneness of God, Monotheism.

Thuluth: a cursive calligraphic style.

Zellij: ornamental technique of glazed tile mosaic.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ERZURUM
SIVAS
DIVRIGHI
DOGUBAYAZIT
KAYSERI
KONYA
TABRIZ
DIYAR BAKR
ALEPPO
SULTANIYA
DAMGHAN
HAMA
PALMYRA
SAMARRA
VARAMIN
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LAHORE
MULTAN
SITPUR
UCH SHARIF
DELHI
AGRA
FATTHPUR
GWALIOR
KARACHI
CHOWKANDI
THATTA
AHMADABAD
SAN'A'
SAY'UN
JIBLA

CHAPTER ONE

INTRODUCTION

BACKGROUND

Islamic art is considered one of the most beautiful art forms. In addition, it has its own unique philosophy that distinguishes it from the art of other cultures. Islamic ornamentation is regarded as the most important element contributing to Islamic art. Without this significant and essential ornamentation, Islamic art would be like other arts based on a complete imitation of nature and not on the Creator of creation. In order to obtain a clear idea of Islamic ornament, a definition of Islamic ornament, the philosophy and function of Islamic ornament in Islamic art and architecture, and other important issues will be highlighted in this chapter. To clearly understand Islamic ornament, a brief review of the concept of Islamic art and how it differs from other arts is necessary.

The region of Arabian culture that extends from the Atlantic Ocean to the Arabian Gulf is characterised by the special spiritual philosophy of its people, which is quite distinct from Roman and Greek philosophies. This philosophy is reflected in the arts of the region's peoples, who have created a special and particular style of art which upholds the values espoused by the prevailing creed. The East has a unique philosophical perspective that considers man as a small part of the vast universe, which differs from the Western view of man as the centre of the universe. Man, animals and plants are viewed as artistic elements that the Eastern artist arranges to express his ideas, convey his feelings, and satisfy his artistic desire without considering their natural forms (FAA, 2003).

According to Burckhardt (1987), the European and Islamic conceptions of art are so different that one may wonder whether their common use of such words as 'art' and 'artistic' does not create more confusion than understanding. Images appear to be everything in European art. Consequently, the highest rank in the hierarchy of European art is held by figurative painting and sculpture. From the European point of view, the criterion of artistic culture is its capacity to represent nature, and even more its capacity to portray man. From the Islamic point of view, in contrast, the main aim of art is not the

imitation or description of nature since the work of man will never equal the art of God, but the shaping of human ambience. Islamic art does not add something alien to the objects that it shapes; it merely brings out their essential qualities. It is essentially objective since neither the search for the most perfect profile for a cupola nor the rhythmical display of a linear ornament have much to do with the personal mood of the artist. Taking into account the general Islamic resistance to figurative art, the viewer is made aware of a tremendous respect for the Divine origin of the human form.

Also, Islamic art does not present figures similar to the images of human beings found in European art. In Western civilisation, which has been influenced by Greek art and Christian iconography, the image of man occupies a central position in all visual art, whereas in the world of Islam the image of man plays a secondary role and is, in general, absent from the liturgical domain. Generally, in Muslim culture, the depiction of human and animal images is frowned upon, due to respect for the divine essence contained within every creature (Burckhardt, 1976; Burckhardt, 1987).

As a result of the strict prohibition against depictions of human and animal forms, to avoid idol-worship, Islamic art has developed unique abstract patterns using geometric, arabesque, vegetal, and calligraphic elements. Because Muslim artists sought to avoid mimicking God's creation in their art, what they endeavoured to do was to invent new artistic themes and create amazing art and ornamentational motifs. Through Islamic art and ornamentation, the Muslim artist aims to encourage contemplation on the wonders of creation and to glorify God.

Much has been written about ornament since the early decades of the nineteenth century, so that thinkers, educators, and creators involved in all the arts, except possibly painting, had to develop a position on whatever was considered ornament. Ornament clearly plays an important role in the formation of art decoration (Grabar, 1992). The significant role played by ornamentation in the art and architecture of the Islamic world has been widely acknowledged by scholars as well as connoisseurs. References to vegetal

patterns and to geometric and other shapes of adornment can be found in almost every book on Islamic art, and various studies on the concept and history of the arabesque, on geometry, calligraphy and floral motifs have been published in recent years (Baer, 1998).

One might therefore question why no comprehensive studies on the history, function, and importance of ornament in Islamic art and architecture have yet been written (Baer, 1998). Baer (1998) suggests that the problem originates with the definition of ornament itself. What are the limits of ornamentation, what does it involve, and what does it not include? Can any design on a surface, or art objects such as metal and ceramic, be regarded as ornament? Can non-figural art be categorised as ornament? To what extent is Islamic ornamentation used for decoration or to convey the very essence or meaning of beauty itself? Finally, should ornament be regarded as a language, which can be learned, read and understood, and therefore tells us something comprehensible?

Another important question is how should ornament in Islamic art be defined? According to Grabar (1992), ornament is not a motif nor is it a pattern or a way of displaying motifs, but is perhaps both. Ornament may involve representations of images or may not. It may be the result of an attitude of the spectator or of a decision by the artist. Ornament is also quite different from decoration in the sense that decoration is anything, even whole mosaics or sculpted programmes, applied to an object or to a building, while ornament is that aspect of decoration which appears to have no other purpose than to strengthen the underlying form.

It is worth discussing other definitions of Islamic ornamentation and how Islamic ornamentation has been viewed by scholars. Baer (1998) regards Islamic ornamentation as neither essential to the underlying structure of an object or building, nor to its serviceability. Trilling (2001) on the other hand, considers ornament as one of the fundamental categories of art, along with architecture, sculpture and painting. He defines 'ornament' as an art with its own history, comprising all the shapes and patterns that human beings have

applied to their buildings, their furniture, weapons, and portable objects, their textiles, clothing and their bodies since prehistoric periods. However, unlike architecture, sculpture and painting, ornament has no recognised place in today's cultural landscape.

Regarding Islamic ornament, it appears to be remarkably consistent for such a wide realm. As far as can be expressed in words, its features favour stylisation over naturalism, small forms over large, symmetry over asymmetry, elegance over strength, predictability over spontaneity, and hypotactic patterns over all other types. What is more, the artist in producing and creating his art objects, combines motifs of different sizes in such a clever way as to allow the smaller forms to function simultaneously as decorative elements. Therefore, the purpose of ornament seems to be to stop our gaze in its tracks with a sudden small revelation of beauty, or humour, or wonder at an artisan whose name we may never know, but who can shape stone or metal as though it were wax (Trilling, 2001). Grabar (1987) defines decoration themes that appear in Islamic architecture as 'ornament', reserving the term 'decorative' for all the themes that are applied to the simple design of a building or an object. The role of ornament as a formal aesthetic property of the artwork seems to be as a "carrier of beauty" explained through the pleasure it provides. Grabar (1992) argues that although some monuments are exclusively conveyors of pleasure this does not in fact explain them but only identifies a reaction to them. In other words, it does not explain how ornament varies from the non-ornament, as its role as defined appears to apply equally well to all shapes of decoration, to almost anything that we call art.

Interestingly, ornament possibly has a purpose of ordering and making sense of the environment. According to Gombrich (1979, p. 1), "one of the most elementary manifestations of our sense of order is our sense of balance, which tells us what is up and down in relation to gravitation and therefore to our perceived environment". According to Brend (1991), a deep sense of order in Islamic art may be rooted in the Islamic view that everything that exists is willed by God and has its place in the divine scheme of things. In the field of art, a very evident expression of this sense seems to be the great confidence

reposed in geometry, both in decoration and architectural designs. Also, the sense of order can be seen in the high degree of organisation implicated in ornamental surfaces, in repeated patterns, or in systems of delimited zones and panels.

Grabar's overall argument concerning the meditation of ornament is that "it is an exercise in the sense that it consists for the most part in isolable formulas; yet it is also a meditation for there always is in it, to use a colloquial expression, more than meets the eye. But, like the beads of the holy man, the meditation it suggests is not in itself but in the mind of the beholder" (Grabar, 1987, p. 191).

In the context of discussing Islamic ornament, a key question may be raised: how should ornament be interpreted and assessed? Grabar (1992) states that the difficulty of using the word 'ornament' appears to be increased by considering two of the most commonly used approaches to ornament, namely, their grammar, styles or dictionaries, and their philosophical meanings. On the one hand, grammars and dictionaries seem for the most part lists of designs with properly drawn plates arranged either typologically, such as vegetal, geometric, calligraphic, and so on, or culturally and topologically, such as English, French, Chinese, and Baroque. They appear to be quite valuable resources for any artist or designer seeking inspiration, but their actual usefulness to the historian or to the critic seems to be that of providing the correct or an accurate name for some plant or for a sequence of geometric forms, such as circles and squares (Figure 1.1).

On the other hand, there are the philosophical approaches to ornament. Three approaches are suggested by Grabar. The first approach considers ornament as a diagnostic tool for the elaboration of a monument's originality. In other words, ornament is the detail in which the artist requires training, so that his cultural signature appears in various art objects in every place or region. This approach stresses that "it is easy enough to parody and to scoff at an art history that considers ornamental details stirring cultural connections and identifying the presence of workers from one area in another area and

therefore contributing to the pernicious vision of the history of art as a bundle of influences". This approach was inspired by Riegl, and used by the first major collectors of Islamic art, for instance, E. Kuhnel, M. Dimand, G. Flury, and J. Strzygowski (Grabar, 1992, p.38).

The second approach regards ornament as something to be recognised and praised due to the fact that it shows the pleasure of work. Further, this approach implies that ornament and its perception lead to a sense of what is beautiful and of what is good. However, in this approach, aesthetics and ethics appear to be the issues of ornament, while painters and sculptors obfuscate the beautiful and good with distracting themes and designs. Ornament on objects created by artisans and on monuments of architecture seems to be what offers value and importance to buildings. What is more, labour, cost, and usefulness factors appear to predominate in the creation of ornament. Finally, motifs require two elements, beauty and morality, as adequate categories for analysis and judgment. This approach was taken by Ruskin (Grabar, 1992).

The third approach focuses on avoiding the classification of forms as a pure activity and identifies the practical influence of an ornament. More precisely, methods such as framing, filling, and linking are extremely significant. These methods appear to be adequate definitions of three common features of ornament. This approach also significantly stresses the point of identifying ornament through processes connected with the maker and user of some object, for example, a picture to be framed or a wall space to be covered or decorated. This approach has been demonstrated by Gombrich (Grabar, 1992).

From what has been discussed above of the definitions and evaluation of Islamic ornamentation, the most important ideas can be summarised as follows: Islamic ornamentation has a unique place in Islamic art and architecture. Islamic ornamentation is characterised by its abstractive character due to the influence of the Islamic religion. Also, the ornamental components employed in Islamic art and architecture as artistic elements are used to convey the artist's feelings without consideration of their natural shapes. Further, the aesthetic values of ornament and the pleasure we get from it,

whether in Islamic art or architecture or elsewhere, are important considerations which will be discussed in detail in subsequent chapters.

THE CHARACTERISTICS OF ISLAMIC ART AND ORNAMENT

The general characteristics of Islamic art and ornament, which give it its distinctive, as well as unique character, are briefly summarised below:

The Divine in Islamic Art

Islamic art demonstrates the philosophy that man is part of the vast universe and that it is the divine power of God that controls the universe. The character of Islamic art and its power developed spontaneously into important phenomena within the frame of general Eastern philosophy (FAA, 2003).

Avoidance of the Depiction of Living Beings

Another characteristic is the avoidance of the depiction of human and animal figures in Islamic art and ornamentation, due to the desire to eliminate elements having to do with paganism. In fact, Islam came to eliminate paganism that took the form of worshipping persons and idols. This practice started to disappear with growing awareness of the dictates of the Islamic faith. Nevertheless, figural images still appeared in many art works, such as wall drawings and paintings, but the ornamentations of the Holy Qur'an and mosques remained without human or animal elements (FAA, 2003). According to Bloom (2002), one of the most striking features of Islamic art is the relative unimportance of human representation. The absence of human representation in Islamic art is, however, exaggerated, since human figural images can be observed in early periods of Islamic history.

Asceticism

Another characteristic of Islamic art is Muslim artists' use of cheap materials, such as wood and clay, in their art works, and their enrichment with beautiful

decorations and inventions that gave them a luxurious new appearance. This may be described as altering or transforming the cheap materials into valuable artworks. Some Muslim caliphs were able to decorate the special parts of the mosque with gold, silver, and jewels, but in fact used cheap materials for the decorative patterns and engravings that made the *Mihrab* (the niche in a mosque used to show the direction of Mecca) a wonderful *qiblah*, (direction to which Moslems turn in prayer towards the Ka'ba) that conveyed both the simplicity and wonder of Islam (Al-Alfe, 1967).

The Concern with Surface Decoration and Filling Space

A further characteristic of Islamic art appears to be the Muslim artist's concern with the surface decoration of buildings, vessels, containers, and sculptures and covering every space with decoration. When inventing a container or an antique, whether in the form of an animal or a bird, he would cover its surface with decorations devoid of their natural appearance and abstracted, while giving them unique charm and gracefulness (FAA, 2003). According to Leaman (2004), the dislike of empty spaces in Islamic art possibly arises from the fact that much Islamic art is highly decorative and the space which is available to the artist is heavily used. The use of vegetal ornament and geometric shapes encourages this, since the more they are used in the space the more can interesting shapes and combinations of spatial concepts be displayed.

THE THEOLOGICAL FUNCTION OF ISLAMIC ORNAMENTATION

The function of ornamentation in Islamic art and architecture is important. According to Muhammad (1996), one of the main features of Islamic ornamentation is the total covering of fillings, the high density of detail, modification of plant shapes, the combination of floral and geometrical formations, and the high density of its surface appearance without projecting masses, so as to be in harmony with its main function of covering. Further, there is a clear desire to cover all the surfaces of buildings, weapons, clothes,

and materials. There may also be a desire to hide the shapes that express the constituents of the materialistic world. The Muslim artist may try to weave on the surface of the material that contains ornamentation, interlaced lines to stimulate contemplation and meditation. Finally, as an independent language, this art stirs the material itself to raise up, together with all the other entities of creation, a universal anthem, which is the rhythm of a hymn that repeats forever the glorification of God, The Almighty. This is exactly what is mentioned in the Holy Quran: "The seven heavens and the earth, and whatever is in them exalt Him. And there is not a thing except that it exalts (Allah) by His praise." *Qur'an* [17/44]

In discussing the theological function of Islamic ornamentation two important points should be mentioned: first, the principle of unity, and second, the Islamic concept of the cosmos and its link to Islamic architecture and ornamentation. According to Nasr (1987), the unity of Islamic architecture is related not only to the unity of the cosmos and beyond that realm to the Unity of the Divine Principle, but also to the unity of the life of the individual and the community which the Divine Law makes possible. By refusing to distinguish between the sacred and the profane, by integrating religion into all facets of life, and life itself into the rhythms of rites and patterns of values determined by religion, Islam creates a wholeness that is reflected in its architecture.

Regarding what the Islamic concept of the cosmos means, and what is its relationship with Islamic decoration and architecture, Nasr (1987, p.41) suggests that the Islamic cosmos appears to be based on the concept of God as the:

> *"Unique Origin of all beings in the hierarchy of existence which relies upon the One and is ordered by His Command, on the levels of existence which relate matter to the subtle world, the subtle world to the angelic, the angelic to the archangelic, the archangelic to the Spirit, and the Spirit to God's primordial creative act".*

Further, this cosmos is based on order and harmony that is the result of the direct manifestation of the One. It displays a peace and quietness which dominate the active features that are due to the patterns of change within nature, and the unchangeable archetypes which belong to the higher states of universal existence and ultimately reside in the Divine Nature. These and many other Islamic cosmological ideas are reflected in Islamic architecture and ornamentation, particularly, in the sacred architecture of the mosque (Nasr, 1987).

Al-Faruqi and Al-Faruqi (1986) indicate that Islamic ornamentation has four significant functions.

First, the reminder of *Tawhid* (The Oneness of God)

The patterns of beauty which originated in the Islamic arts are "concretisations of that ubiquitous" aesthetic attempt of the Muslim peoples to produce art products, which will lead the spectator to the perception of sacred transcendence. The adornment of the art works seems to be the outcome and the very substance of that endeavour. Notably, in view of Islamic belief in one God without beginning or end, are everywhere to be found the never-ending patterns that adorn Islamic arts, which are used to symbolise the infinity of God.

Second, the transfiguration of materials

A transfiguration technique appears to be the second function of ornamentation in the Islamic arts. Islamic artists concentrate on abstraction in their selection of artwork topics. However, art topics and designs seem to be determined not only by Muslim artists' desire to express monotheism. Their utilisation of materials is influenced considerably by the desire for a mode and type of expression that accorded with their belief system.

The term 'transfiguration' implies that the object transfigured by adornment has been modified in shape or appearance but not in substance. In addition, this term suggests that the modification is not mere change, but a glorifying, or

spiritualising change. This fits with the inclusion of decoration in Islamic arts. Indeed, the artwork ornamented with numerous designs and motifs has an enhanced position in the Muslim's mind, and particularly if the ornamental design consists of Qur'anic or calligraphic elements.

Third, the transfiguration of structures

The technique of transfiguring structures may be considered a third function of ornamentation in the Islamic arts. While many art traditions in the world may seek to stress the basic structures of a particular work, Islamic art instead attempts to cover that essential framework. This method seems to be another aspect of the art product created to draw the attention away from mundane features to a superior order of expression, sense and meaning. To stress the design structure of an Islamic work of art is constantly desirable since it promotes a monotheistic (*tawhid*-based) aesthetic perception of the artwork. Emphasis on the actual building structure is rejected due to the fact that this would emphasise the naturalistic, the rude earthly factors, and the stick and stones organic form of the object or architectural structure. It could not present an aesthetic reminder of the supernatural qualities of the Divinity. Consequently, Muslim artists have tended to cover structure details with overlays of transfiguration adornment. Thus, the transfiguration of structure may be linked to the divine or aesthetic philosophies (see Dakhel, 1993, below).

Fourth, beautification

The fourth function of ornamentation in the Islamic arts seems to be shared by the artistic traditions of all cultures, and therefore appears to be a universal in aesthetic creation. This is the utilisation of adornment to beautify and embellish art objects and architecture. Islamic adornment can be said to achieve this role with outstanding success, since the designs it creates on the ornamented objects are themselves satisfying to the eye. This reality, based on their balance, their pleasing colours, and their beautiful and various forms, has been recognised by non-Muslims unable to evaluate these arts from within the

Islamic cultural matrix, as well as by Muslims themselves. Moreover, the ornamentation found in these works of art conveys a supplementary dimension of beauty for the Muslim perceiver "for any figure or object, any phrase or movement, any line or anecdote that expresses *tawhid* is for the adherent of Islam an expression of truth and goodness. It is, therefore, a fortiori, an expression of beauty" (Al-Faruqi and Al-Faruqi, 1986, p.383).

THE PHILOSOPHY OF ISLAMIC ORNAMENT IN ISLAMIC ART AND ARCHITECTURE

When discussing the topic of Islamic ornamentation, a question that constantly arises in the mind of any person who observes Islamic artistic objects, or who contemplates the vegetal and geometrical ornament forms that decorate corners of Islamic architecture, is: are these ornaments governed or controlled by a particular philosophical or conceptual belief and faith? Other questions, are: was the Islamic artist motivated by the divine philosophy or by the aesthetical philosophy related to art and beauty? Did he aim by creating these ornaments to remember God and glorify Him? Finally, are there in other arts or cultures, philosophies that are similar in their function to Islamic philosophy?

Importantly, Muhammed (1996) suggests that the shapes and elements which comprise Islamic ornamentation are subjected to a particular philosophical ideology and dogmatic faith. These elements seem to be like temporary aggregations of atoms that are eventually decreed to perish or die. A line has no existence, as it is nothing other than a moving point. This Sufi perception affirms that God is the only one existing eternally and having power over life and death. Islamic art confirms the variation and diversity of His creation and also His power through the infinite variety of geometric shapes, whether they are circular or have sides.

On the other hand, Muflih (2002) indicates that the author Sameer Sayigh in his book: *Islamic Art: A contemplative reading in its philosophy and aesthetic characteristics,* suggests that Islamic art rises from an aesthetical and

philosophical view of the place that man occupies in the universe, which inspires the religious Islamic view and transforms inspiration into a pure artistic language that is particular to the arts that are inspired by this philosophy and religion. While this art reflects its religious and artistic dimensions, it does not neglect the everyday life with all its fine details. Hence, Islamic art is able to act as a bridge between the unseen and the seen, between heaven and earth, and between abstraction and feeling.

He also adds that the arts of ornamentation, engraving, calligraphy, and texture cannot be perceived apart from the vision of beauty and philosophy that is deeply inherent in Islamic art. In other words, this art cannot be understood without appreciating the Islamic understanding of the human being, society, existence, and the unseen. When this philosophical vision is known to be an expression of the unity of existence, and a pointer to the fact that the whole universe is organised by a perfect divine system, which is manifested in extensive space as well as in the leaf of a plant and a drop of water, one may understand that ornamentation in Islamic art is nothing more than an artistic testimony that is equivalent to the great monotheistic testimony raised by Islam. The secret of this art resides in its aims and ultimate goals.

Finally, Dakhel (1993) argues that Islamic art may be regarded as an interpretation of Islamic philosophy and the mystic spirit. He believes that Muslim artists achieved a deep understanding of the relationship between the artistic forms and their essence, and the necessity of harmony among them. Thus, the artistic performance of Muslim artists is generated from the deepness of their thoughts and beliefs and the power of their emotions and faith. Hence, the splendour and sophistication of Islamic ornamental works are observed whenever they appear on buildings, carpets and pictures.

Dakhel (1993, p.9) comments:

> *"The philosophy of the Muslims and their beliefs met with the nobility of the Mystic mind and unified itself with nature. Thus, these reactions created an artistic structure within a specified frame where personal differences and errors were avoided. In*

spite of the expansion of the Muslim world where everyone used to work freely, rules and principles were established to respond to the Muslim's beliefs and faith".

REASONS FOR THE SPREAD OF ISLAMIC ORNAMENTATION

Reasons for the spread of Islamic ornamentation are varied and worth discussing. Hussain (1996a) states that researchers differ on the cause of the spread of Islamic ornamentation. Some of them attribute it to the desire of the Muslim artist to achieve a unique production differing from the preceding, pre-Islamic arts. The artist intended to produce a great variety of ornamentations until the products of this art came to be known as ornamental products. Other researchers, however, link the dislike or aversion of Islam to the imaging of living beings to the spread of Islamic ornamentations, such as arabesque motifs. They believe that the turning away of the artist from painting and depicting living beings led to the creation of a new field in which the artist showed high creative skills and a great artistic ability, and this new field was the field of Islamic ornamentation.

Other reasons for the spread of Islamic ornamentation may be related to the urge to ornament. The artistic endeavours of many ethnic and religious groups show a strong tendency to decorate surfaces. In traditional societies, the themes are usually symbolic or representational, while in the West until the arrival of the Renaissance, they were less frequently of a merely ornamental nature. In Islamic art, the decorative urge is much more pronounced than elsewhere and purely ornamental motifs predominate (Ettinghausen, 1976b).

There therefore appear to be a variety of reasons for this remarkable feature of Islamic art. A further reason may perhaps be the psychological response to the enormous, featureless, and barren landscape around towns and villages. A plain surface on an object of daily life subconsciously evoked the bare, surrounding world, its unpleasantness, and its dangers due to lack of water, food, and comforts, and the presence of ever lurking robbers and jinns. By

being ornamented, the object lost this bothersome association and the mirror image of a fearful and primitive world became so to say tamed and cultivated and was also made enjoyable (Ettinghausen, 1976b).

In fact, three factors appear to have reinforced the ornamental urge. The first factor appears to be the production of a vocabulary of abstract ornamentation that was accepted by everybody everywhere and which could be easily applied. As most artistic efforts were gauged to this general artistic language, there was comparatively little particular figurative art and rarely any influence from local folklore. The second factor is that the cost of artisan labour was extremely low, so that most of the price paid for a work was for the raw material. The third factor is that a richly ornamented object offered more opportunities for social pretension. The resulting high standard of adornment was naturally, thus, influential in a religious context (Ettinghausen, 1976b).

THE CORRELATION OF ISLAMIC ORNAMENTATION WITH ISLAMIC ARCHITECTURE

A connection between Islamic ornamentation and Islamic architecture decoration appears to be clear. Decorating religious buildings, such as mosques, with Islamic ornamental patterns adorned with extremely complex ornaments may attract the eyes of the spectator. A question that may be asked is: how is Islamic ornamentation correlated with Islamic architecture? Another question that requires an answer is: to what extent does employing beautiful and intricate ornaments, forms, and designs on the surface of religious buildings, such as mosque walls and domes, have value in Islamic architecture?

Regarding the question of the relationship between the artist's or architect's purely aesthetic motivation and his religious or spiritual motivation, in other words, whether or not Islam as a religion played an important role in inspiring Muslim architects, Hillenbrand (1994), suggests that such inspiration was not explicitly acknowledged. However, there seem to be several elements that create the aesthetic of Islamic ornament, for example, a sense of hierarchy, a

readiness to exploit symbolism, a love of lavish decoration whose functions go beyond mere display, and leaning towards the use of colour. As Al-Faruqi (2001) points out, for Muslim, representations of ideas about transcendence, as well as factual figures from nature was inappropriate. *Tawhid* (the Oneness of God) determined the inherent meaning of Islamic artwork by reminding Muslim artists of the need to develop various artistic forms and structural methods for the formation of vast designs and motifs. Complicated and small details, division into units, and organisation into successive modular arrangements represent essential characteristics that make the artwork from Islamic culture characteristically "Islamic". Also, the effect of the *Tawhid* appears to be found throughout Islamic art and ornamentation. For the Muslim, the aesthetic and beautiful tends to be that which directs attention to God.

The art of architecture, as Burckhardt, (1987) indicates, occupies the central position among the arts, since it shapes the human environment, thus it corresponds to the Islamic *baraka* (blessing). Further, most of the small arts, for example, woodcarving, mosaics, and sculpture, are attached to architecture. Some may call them 'minor arts' according to the conventional terminology, nevertheless, they never occupy a lower rank in the Muslim world, for they tend to be used to express the dignity of the 'representation of God on earth'.

Generally, to understand the correlation of Islamic ornamentation with Islamic architecture it is necessary to briefly mention its characteristics in Islamic architecture. According to Al-Aloosi (2003), it has a distinctive and important role, since the Muslim architect added its aesthetic elements to Islamic buildings, possibly to realise pleasure. Architectural ornamentation flourished in the Islamic era and gained features that characterise it in terms of design and artistic production as well as subject and style. The artistic production included painting and drawing on stucco, either by direct engraving or instrumental moulding. Engraving on stone and wood was made either using the smooth fluent style or the punctured style where ground was emptied, and the use of mosaic and colourful stone was widespread. Regarding the subjects

that characterised architectural ornamentation, plants were the main source for inspiration, including stems and single, doubled, and entangled branches; leaves whether whole, halves, in twos, threes, and fives, in full, or punctured style; palm leaves, and various fruits. Notably, it is rare to find that the Muslim artist inspired in architectural ornamentation to depict any shapes of animals or human images. Regarding styles and methods of expression in Islamic ornamentation, Al-Aloosi (2003) states that Islamic ornamentation was characterised by mixing geometrical shapes with plant ornaments, such that these forms, in one aspect, are restricted to a definite geometrical frame where they renew and alternate and hence are interlocked in a way that makes it difficult to know their start or their end points. Such expressions dominate the space and are united with the constituent elements of Islamic architecture throughout the Arab world, thus attesting to the unified practice of the arts, in both external features and in their essence, suggesting that Arabs were united and unified, no matter how their countries varied.

As regards Islamic ornamentation's correlation with Islamic architecture, according to Dakhel (1993), ornamentation can sometimes cover large surfaces of a building, which surfaces can be divided into smaller areas, and in the pursuit of artistic magnificence, they can disrupt continuity with their many fine details in such a way that the architectural surface appears as two identical designs. The first is an architectural design with obvious lines running in perspective and distinct intersection lines, while the second is an ornamentation with fine and intensive lines. Therefore, through the correspondence of both pictures, the simplicity and generality in design are combined with speciality and fine artistic touches. What appears therefore to be important is that ornamentations do not tend to harm the simplicity of the design or to break its main lines, but emphasise these lines and stress the beauty of buildings and their architectural aesthetic.

What seems important about Muslim architects and their efforts to create beautiful forms in decorating Islamic architecture is that they develop the art of ornamentation and adapt it in keeping with their great immortal architecture, thus, ornamentation becomes a significant means for the architect

to enhance his imagination, emotions, and expression. The architect was probably the first to use ornamentation to express his feelings and belief and then he began to develop it. What is more, ornamentation plays a significant role in the structure of architecture and possibly participates in the psychological effects of architecture, since it may guide people's movement inside and outside buildings, as ornamentation and architectural forms attract the eye and the mind, and focus the interest of the spectator on some particular architectural characteristics, precisely as the architect intends them to (Dakhel, 1993).

A final and important point that deserves mentioning is that there is a correlation between Islamic architecture and ornamentation and Western architecture and decoration in that we as spectators derive pleasure from them. Graham (2000) contends that any building, whose purpose is pure ornamentation, has been constructed exclusively with the aim of being admired and enjoyed, and is therefore more nearly sculpture. Admiration and enjoyment are not utilitarian purposes and hence not purposes of the sort that the 'art for art's sake' principle means to exclude. Graham asserts that ornaments of the eighteenth century (such as the follies found in many formal landscapes) are clearly parasitic. They are delightful copies of buildings whose original purposes were not primarily to delight. Most are imitations of the temples of Greece and Rome, which did have a purpose. In addition, even in cases where we admire buildings, what are they 'admired and enjoyed' for, surely for the economy of their structure and the cleverness of their design.

Appreciation for architecture as an art is not so easily developed, possibly due to the fact that architecture has features that appear to set it apart from the other arts. Architecture is useful in a way that the other arts are not, the architect's products are essentially functional, whereas those of the painter and musician are not. Music and painting can serve either practical purposes or aesthetical purposes. For example, the sound of an orchestra can be used to drown out a baby crying or painting can be used to cover an ugly crack in the wall (Graham, 2000).

RESEARCH METHODOLOGIES AND JUSTIFICATION

The Study of Islamic Ornament

Due to its unique characteristics, there is a lack of studies on Islamic ornament that can be correlated with others examining Islamic art. In this study, through research and a review of the literature on Islamic art, Islamic ornament and Islamic architecture will be examined and used to demonstrate the unifying features and elements of Islamic ornamentation. Since this study will deal with a specific cultural context, it will provide background information about Islamic ornament, its history, and the impact of the religion of Islam on its development. Identification and descriptions of specific Islamic ornamental objects from Islamic culture will be presented and justified. It is clear that factors influencing Islamic art are numerous and complex, therefore, this study will focus only on Islamic ornament which has been found to be linked to cultural issues in Islamic society.

Significance of the Study

Islamic ornamentations are considered among the most important elements and constituents of Islamic art. Therefore, there is a real need for a scientific and academic study of Islamic ornament as to its origin, development, and impacts so as to provide a foundation for future studies on Islamic art. This will satisfy the need for improved cultural knowledge and enrich resources in university and public libraries. Moreover, this philosophical investigation will help to clarify the nature of this art and show its status relative to other arts. It may also shed light on other aspects relating to the origin and development of Islamic ornamentation through a comparison of Islamic and other cultures to achieve knowledge of the historical and ideological development of Islamic ornamentation.

Other important reasons for the researcher to undertake this study include the desire to investigate, criticise, and document issues that relate to Islamic ornamentation. Also, the researcher will explore the importance of Islamic

ornamentation as a characteristic feature of early Islamic civilisation throughout the Islamic world. These are the most important reasons that have led the researcher to choose this subject.

Study Aims

The aim of this study is to investigate the cultural context of Islamic ornament, and to identify the influence of Islamic culture on it. This study also aims to examine the rich historical and cultural traditions from which the art of Islamic ornament emerged. Consequently, it will identify the characteristics of Islamic ornament in the context of history, development, and in terms of elements, methods, and symbolic meaning.

Study Methods

The researcher's work is within the tradition of philosophy and the history of ideas, thus the researcher will use the historical survey as a research methodology to examine the development of Islamic ornamentation elements.

Research Questions

Based on the study aims, the following research questions are formulated:

1. What is the historical background of Islamic ornament?
2. Do Islamic ornament, art and architecture created by Islamic artists serve Islam as a religion?
3. To what extent has Islamic ornament influenced other non-Islamic cultures?
4. Are there other cultures which have influenced Islamic ornament? To what extent?
5. What are the most important factors that contribute to the beauty of Islamic ornament?

Study Limitations

Islamic ornamentation in particular has not been extensively studied by researchers in the last few years, and the few studies that do exist lack wide coverage and comprehensive academic and philosophical methodologies.

Grabar (1983) pointed to a lack of contemporary Muslim writing on Islamic art in general. Turkish scholars write about Islamic art in Anatolia or the Ottoman Empire; Iran, Egypt, and the Indian subcontinent have produced their share of local histories and descriptions of monuments. However, with the exception of a little book by A. Bahnassi on Arab aesthetics, and the broad generalisations on painting developed over the years by M. S. Ipsiroglu, there has been no continuation of the work begun nearly half a century ago by B. Fares, M. Zaky Hassan, M. Mostafa, and A. Fikri. The disquieting thought that then arises is that the need to identify an Islamic art is a Western one, and one not shared by the contemporary Muslim world. We need a series of factually sound and intellectually challenging works of what might be called "intermediate" scholarship; regional, technical, chronological, and thematic surveys that will bridge the gap between monographs and broader works of ideas. Pitifully, few such surveys exist, and the vast majority that do have been written in the past fifteen years.

Also, the present study will provide an overview of the problem of Western 'Orientalist' art. The need to investigate the matter of Orientalist art in this study is due to several important factors. First, is the need to examine the extent to which Islamic art and ornament influence Western art. Second, and most importantly, is the need to examine how the West views Islamic culture, peoples, and art works in the context of art. The present thesis is consequently devoted to the study of Islamic ornamentation from philosophical, analytical, descriptive, and historical perspectives.

CHAPTER TWO

ISLAMIC ORNAMENT ELEMENTS

INTRODUCTION

Islamic art is composed of several principal elements that create its aesthetic and distinguish it among the other arts as Islamic. Islamic ornament patterns can be divided into four basic elements: calligraphy, vegetal and geometric motifs, and figural representation. These patterns of ornament play an important role in Islamic art and architecture. The Muslim artist, in decorating his art products, depended on these elements due to the Islamic religion prohibiting the depiction of human and animal figures or the sculpting of living beings. Hence, the Muslim artist selected abstract styles to express his personal philosophy of his relationship with God, to glorify Him, and to express his wonderment as he contemplated His Creation.

In this chapter, the research method that will be used to examine the development of Islamic ornamentation is the historical survey. Examples from both Islamic art and architecture, from the early periods of Islamic civilisation until the late periods, will be presented and discussed in this survey. The first element of Islamic ornamentation that will be discussed in this chapter is the Arabic calligraphy pattern, regarded as the most highly developed element of Islamic art. Its importance in Islamic art and how it relates to other forms of ornament will be examined.

ARABIC CALLIGRAPHY

Arabic calligraphy is regarded as one of the most significant elements of Islamic ornamentation. It is considered, in comparison to the other arts, the most typical expression of the Islamic spirit. Due to its important connection with the Islamic religion, Arabic writing is regarded as of Divine origin. The Qur'an stresses several times the significance of writing, for instance, in the earliest Sura (96/3-4), God is described as the Almighty Who "taught man with the Pen" (Schimmel, 1970, p.1). Muslims quite early started writing down the Qur'an in a way worthy of its eternal beauty, and the fact that everybody who embraced Islam had to learn Arabic, at least to the extent of uttering correctly his or her prayers and reciting the Qur'an, made knowledge

of the Arabic alphabet the distinctive feature of all Muslim peoples, from West Africa to Indonesia (Schimmel, 1970).

Arabic calligraphy has a very particular place in Islamic art due to the Qur'anic revelation in two ways. First, God's words in the form of the Qur'an provide unique evidence of divine revelation, which was conveyed orally to the Prophet Muhammad and then recorded in writing by his companions and circulated through writing. Second, this revelation in the Qur'an is viewed as an "elegantly proportioned script", and "beautiful" (Niewohner, 2000). According to Rosenthal (1976), the Qur'an, the Muslim's Holy Book, was transmitted in Arabic, and inherent within the Arabic script lies the possibility for developing a variety of ornamental forms. The employment of calligraphy as an ornament tends to induce a perception of beauty in both the artist and the beholder of the art form. Arabic calligraphy in Islamic culture is regarded as the primary form of art for Islamic visual expression and creativity, and is viewed as a symbol representing unity, beauty, and power. The aesthetic principles of Arabic calligraphy reflect the cultural values of the Muslim world, and Arabic calligraphy is to be considered a means of their transmission. It may assert directly or indirectly, by its existence, the power of God or a ruler. Further, this type of art can be a mediator that expresses the quality and skills of its creator and affects the sensitivity of its viewer (Grabar, 1992).

Generally, many questions may arise with regard to the importance and development of Arabic calligraphy as an ornamental art. For example, why is Arabic calligraphy such a respected art form? And why does Arabic calligraphy appear to be the main art form in divine buildings such as mosques? Is it significant due to its direct relationship with the Islamic religion? Or is it important due to the fact that Islam discourages Muslim artists from creating human and animal images through art, since this might lead to idolatry, so that Muslim artists employ this art as a substitute for figural depiction. In other words, instead of drawing pictures or human images, Muslim artists quote from the Qur'an the various names of and blessings from God to decorate their mosques and art objects.

According to Brend (1991), calligraphy has been viewed as an art form in the Islamic world that has a sacred feature, since it can carry the Qur'an's messages or the word of God. Arabic inscriptions thus occupy a considerable position due to the fact that they are a means of expressing meaning based on a tradition known to everyone who is able to read Arabic. The importance of Arabic calligraphy, Gonzalez (2001) believes, is probably due to the prohibition against the depiction of human and figural images in Islamic culture, thus inscriptions perform as a substitute for figurative motifs in art objects.

The role of Arabic calligraphy art as an aesthetical element in Islamic architecture serves decorative purposes since sacred buildings are decorated with calligraphic scripts that make reference to selected passages from the Qur'an and these inscriptions transmit important messages to Muslims. They express Islamic ideas and themes in the form of non-figural images (Ettinghausen *et al.*, 2001). Also, Arabic calligraphy in Islamic architecture may be viewed as a method to express meaning, to impart both the Divine Word and the Divine presence, and to make them visually apparent. Therefore, for these functions it is not important for the viewer to be capable of reading, he simply needs to observe, to be satisfied and pleased. This distance from the initial function of writing means that the letters, because they are regarded as artificial forms endowed with sanctity, and used in ornamental configurations, can sometimes be difficult to read (Clevenot and Degeorge, 2000).

Commenting on the role of the sacred character of writing as the carrier of Divine revelation, Schimmel (1970) suggests that the inscriptions that appear on Islamic religious architecture, for example, mosques, *madrasahs* (schools for teaching Islamic theology and law), and mausoleums, became the most significant means of beautification. In the mosque, the minarets are covered with elaborate bands of writing containing both Qur'anic verses and historical dates. Inside mosques, the prayer niches (*mihrab*) and the pulpits (*minbar*), particularly on their fronts or sides, are often embellished with Qur'anic inscriptions. Also, the mosque lamps made of enamelled glass bear texts in colourful *thuluth* scripts. Moreover, inscriptions that appear on sacred

buildings may refer to historical facts, the names of those who ordered the construction of the building, or the builders themselves, the date of construction or restoration, or they may be poetry as in the Alhambra Palace, or they may include Qur'an verses that signify the religious building's function and meaning (Clevenot and Degeorge, 2000).

Arabic calligraphy, as a typical Islamic art form, has been widely analysed by scholars from the point of view of its sacred character as well as its symbolic perceptual values, depending on the function of the art object or the building it decorates (Gonzalez, 2001). According to Hillenbrand (1994), incorporating Arabic calligraphy in the decoration of divine buildings may serve to illustrate religious symbolism. It may be executed to beautify the building that bears it. Its value is probably due to a combination of its attractive quality of lettering, and its colour and characters in bands that serve to articulate decorative themes and ideas. Further, it serves to draw attention to another field, which gives scope for religious symbolism, namely, architectural decoration, and the double role it plays in Islamic ornament.

In the context of discussing the art of Arabic calligraphy, an interesting point needs to be emphasised, namely, that a calligrapher is required to follow certain rules in order to write Arabic calligraphy. Niewohner (2000) points out that the art of Arabic calligraphy is not just learned by memorising the rules, it also needs a special talent if real mastery is to be achieved. The calligrapher is required to practise copying many examples of beautiful artworks for years to master this art, and the masterpieces created in this way are widely admired, collected, protected, highly valued, and traded at collectors' prices. What is also interesting about the calligrapher's practice is that he requires training to become proficient in the six Arabic script styles. This involves not only learning the theoretical basis of each style but foremost practising as well as developing an eye for the proportions of the surface that have to be filled with writing.

According to Schimmel (1984), to become known as a calligrapher requires long study with a master, until he graduates by receiving the permission that

gives him the right to sign his products with his own name. What is more, the Arabic calligraphic rules that had to be followed in this practice are very like those by which the medieval Muslim studied poetry and music. The person who was interested in calligraphy had to find a master to instruct him, individually or in a small group, letter by letter. Under the master's guidance the trainee learned how to sit appropriately on the floor, usually squatting, and sitting on his heels. The paper had to rest on his left hand or on the knee, so as to become slightly flexible, due to the fact that round endings can be written more easily in this way than if the paper is put on a hard desk or low table, as had to be done for large pieces. Then he learned the measurement of the letters by the dots and circles introduced by Ibn Muqla and had to practise the swinging of the long ends. (This will be discussed and explained fully in the next section 'The Development of Arabic Calligraphy').

Notably, the idea that a calligrapher is required to follow rules in writing Arabic calligraphy resembles a key argument in Kant's aesthetics: that the artist requires genius and cannot acquire this merely by studying many examples of beautiful art works. Kant states:

> *"...genius (1) is a talent for producing that for which no definite rule can be given: and not an aptitude in the way of cleverness for what can be learned according to some rule; and consequently originality must be its primary property. (2) ... its products must at the same time be models, i.e. be exemplary; and, consequently, though not themselves derived from imitation, they must serve that purpose for others, i.e. as a standard or rule of estimating"* (Kant, 1911, p.168).

With regard to the aesthetic and beauty of Arabic calligraphy, Grabar (1992) points out that there are two important purposes entailed in employing writing in art. The first purpose is likely to relate to the viewer and to the aesthetic reaction that may be one of satisfaction. Further, writing can be a carrier of beauty that brings pleasure and due to the effect of psychological or emotional reactions, beauty becomes pleasure. What is more, the enjoyment of seeing

fabulous calligraphic works may lead to labelling these wonderful items as beautiful.

The second purpose is related to the transmutation of the simple action of connection and communication through written form, but through a sequence of devices this transmutation may become confused so that the communication may not be easily received or becomes meaningless. Grabar (1992) suggests that there are two important factors which might cause difficulties in understanding the writing: an individual trying to understand what beauty is and the lack of appropriate distinctions between writing in a number of scripts, which may be aimed to be read in order to produce further effects. Another reason relates to the absence of publications on calligraphy, which discuss the aesthetic value of Arabic calligraphy as an art form. Those that are available on calligraphy are likely to be mere catalogues or educational books, teaching "how to" perform beautiful writing.

The issue of 'genius' in an artwork, something that should be rich in aesthetic ideas, is also important. Western philosophers of the aesthetic argue that the artist requires genius to execute and create his artworks. Kant comments: "one of the considerations to which regard must be paid when taking note of the contribution of 'genius' to a work is the wealth of aesthetic ideas. A wealth of aesthetic ideas is, however, simply 'rich material for products of fine art'... A man of genius must not only have ideas, he must be able 'to hit upon the expression for them' " (McCloskey, 1987, p.111).

Linking the perception of beauty and the experience of pleasure that the spectator gets from art objects seems an essential part of the character of Arabic calligraphy. According to Gonzalez (2001), Islamic ceramics' production, such as Samanid wares, never ceases to amaze viewers because of the high quality of their aesthetics and the visual impact of the calligraphic shapes. They show the ability of the artist to transform a simple item into a genuine work of art simply by skilfully utilising the properties and possibilities of the material at hand. Their great aesthetic effectiveness proceeds from the simple character of their decoration and form that

ultimately permits the calligrapher to use a maximal power of expression. What is more, in line with their capacity for aesthetic metamorphosis and together with the ambiguity of the meaning they are supposed to convey, inscriptions can blend completely with other elements of the artistic vocabulary. They tend to be pure ornaments or ornaments with a deliberately hidden or induced meaning. In addition, inscriptions can completely lose their custodial function of objective linguistic signalling in favour of their decorative capability, transforming themselves into the epigraphic type, for example, metalwork objects, or the animated style of calligraphy characterised by zoomorphic letters.

The relationship between the perception of beauty and the experience of pleasure that it gives us may be regarded as an important point of discussion in Western aesthetics. Perhaps most importantly, it is Kant who makes a distinction between the pleasure we get from beauty and the mere agreeableness that objects of sensual satisfaction give us. Kant states:

> *"... impressions of sense, which determine inclinations, or principles of reason, which determine the will, or mere contemplated forms of intuition, which determine judgement, are all on a par in everything relevant to their effect upon the feeling of pleasure, for this is agreeableness in the sensation of one's state"* (McCloskey, 1987, p. 19).

Finally, with regard to Arabic calligraphy, the way in which titles and inscriptions to works of art change the way in which we perceive and judge them may be considered a significant issue. Nasr (1987) suggests that letters, words, and verses of the Qur'an are not just elements of a written language, but characters for which the calligraphic form is the physical and visual vessel. Through writing and reading Arabic letters, words, and Islamic verses, the person enters into contact with those beings, which have come ultimately from the far 'other' shore of universal existence to guide the person back to the abode of the One. The importance of the Qur'an in both its verbal and written

shape appears to be that not only is it composed of sentences which transmit feelings and thoughts, but its verses seem to be powers.

The letters and words not only create a possible visualisation of the Qur'anic verses, they also play a role in displaying powers of their own. In other words, the visible shapes of the calligraphy may represent 'beings' and also serve as direct symbols of spiritual realities to the Muslim mind. Each letter has a character of its own and represents in its visual shape a certain Divine Quality because the letters of the sacred alphabet correspond to characters and qualities of God as the Divine Scribe. For example, the letter *alif* by its verticality symbolises the Divine Majesty and the Transcendent Principle from which everything originates. In the case of the letter *ba*, which is the second letter of the alphabet, its horizontal shape represents the receptivity of the maternal principle as well as the dimension of beauty that complements the Divine Majesty, so that, according to Nasr, "the intersection of the two letters constitutes the point which stands below the *ba'* and which symbolises the Supreme Centre from which everything issues and to which everything returns" (Nasr, 1987, p. 31).

The Development of Arabic Calligraphy

The evolution of Arabic calligraphy as a considerable element of ornament utilised in Islamic art and architecture appears to have developed over many stages. The considerable position of writing in Islamic civilisation possibly led to a widespread utilisation of inscriptions in architecture and other decorations. Possibly the earliest example of the utilisation of Arabic calligraphy in Islamic architecture is the Arabic inscriptions in Kufic script, which appeared for the first time in an Islamic building, in the Dome of the Rock mosque in Jerusalem around 691. Inscriptions run in a band of mosaics above the arcades around the inner ambulatory. A variety of sections display texts from the Qur'an (Enderlein, 2000) (Figure 2.1). Another example of the early employment of written script in Islamic architecture is in the al-Aqsa mosque in Jerusalem and the Great mosque of Damascus, built twenty years after the Dome of the Rock mosque. There appear identical epigraphic bands

created from designs made by Khalij ibn Abi al-Sayyaj based on the model of the copy of the Qur'an he produced for the Caliph al-Walid (Clevenot and Degeorge, 2000).

Characteristic features of early architectural inscriptions are to be found in the great mosque of Susa in Tunisia in North Africa, in which distinguished bands of calligraphy carved into the stone occur above the walls of the prayer hall and the courtyard arcades (Mazot, 2000). In another example from the eighth century, simple Arabic inscriptions are used for ornamenting the façade of the Mosque of the Three Doors at Qairawan (Mazot, 2000) (Figure 2.2). An early example of the appearance of calligraphic ornaments in the *mihrab* area is also found in the Great Mosque of Cordoba, regarded as the earliest surviving *mihrab*, which is decorated with Qur'anic scripts made of gold mosaics on a blue background (Baer, 1998; Kubisch, 2000).

During the tenth century, written scripts have another function, seemingly to convey information and at the same time to identify the Muslim artist's taste in using Arabic calligraphy for architectural decorative purposes. For example, inscriptions containing figures appear above the main door of the Jurjir Mosque in Isfahan (Figure 2.3), and inscription bands exist in the *mihrab* at the Mosque of Nayyin (Baer, 1998; Ettinghausen *et al.*, 2001). At the Nayyin mosque in Iran, inscriptions are shaped in a Kufic script and Qur'anic verses appear on most arches. Another example is the decoration of the Gunbad-i Qabus Tower at Gorgan in Iran, which involves two simple inscribed bands that encircle the tomb (Stierlin, 2002), (Figure 2.4).

With regard to art objects, calligraphy appears on most craft products, such as ceramics and glass. By the mid eighth century, early art objects, such as a bowl of unglazed clay and a glass goblet from Egypt, have as a design feature a moulded or lustre painted inscription around the exterior of their rim. The large bowl is ornamented with bold angular Arabic inscriptions, which are applied in a circular style (Ettinghausen *et al.*, 2001) (Figure 2.5), while the glass is painted in three colours and ornamented with an Arabic inscription and circular and arched panels, each involving abstract vegetal styles. Arabic

writing may also be used on a dish as a decoration as well as information. For instance, on an earthenware bowl painted in blue with an opaque white glaze from the ninth century (Bloom and Blair, 1997), or a golden jug decorated with an inscription around the neck from Iran or Iraq (Gladib, 2000) (Figure 2.6).

Generally, various Arabic calligraphic styles appear with the development of Arabic writing. Ibn Muqlah is viewed as laying down the rules for beautiful writing by using circular and straight lines and rhombic points in order to give the letters the right or accurate form and relationship. He is regarded as the creator of the six main Arabic writing styles that remained in use over many centuries. These Arabic calligraphic styles are the *thuluth, naskh, rihan, muhaqqaq, tauqi and riqa* (Schimmel, 1970). The six Arabic writing styles invented by Ibn Muqla tend to relate the proportions of the letters to the *alif*. Measurements are made based on rhomboid points produced by the pen so that an *alif* will be, according to the style, 5, 7, or 9 points high, while the letter *ba* will be 1 point high and 5 points long, and so on. The geometric proportioning of the letters, which was perfected by observing the relationships existing between the different constituent parts of the letters and representing them by circles and semi-circles, has remained binding on calligraphers to this day, and the accomplishment of a script is judged according to the relationship of the letters to each other and not on their shapes alone (Schimmel, 1984) (Figure 2.7).

According to Baer (1998), Arabic calligraphy has achieved a high level of sophistication. Islamic calligraphers invented different kinds of Arabic writing styles, which carry local distinctions. Among these different sorts of writing styles, the most common used in architecture and art objects is the angular script called Kufic and the Thuluth style. The different styles of Arabic calligraphy, Nasr (1987) suggests, represent an expression of the Divine qualities of the Islamic message. Moreover, they offer particular regional variations related to the ethnic genius of a certain part of the Islamic world. Further, they display a universality which carries them beyond the borders of a specific cultural region within that world. They indicate through their

continuation over an extensive period of time the stability of different Arabic calligraphy styles in Islam, according to the nature of Islam itself, which after the normal period of elaboration created a civilisation marked by unchanging principles and sacred shapes which have guided its adherents down through the stream of time.

One may question the way in which Islamic calligraphers understand the nature of beauty, and whether their understanding of beauty changes? Gonzalez (2001) believes that Samanid ceramics play upon the ambivalence resulting from a dialectic tension between the abstract and the formal, between the ideality of sense and the reality of the sign that characterises the art of the inscriptions. These objects display the pure material beauty of calligraphy by producing maximum visual impact as a result of emphasising their perceptual qualities through various aesthetic techniques. By contrasting dark values with the clear underlying colour, the inscription allows the body of its linguistic units to show up on the blank space. It further variously works its outlines, thickness and decorative elements, becoming in this way much more a thing itself than an abstract sign. Such working gives to the letters the substantiality and aesthetic features of figurative elements and assigns to them the artistic role of iconography, in the full sense of the term.

Regarding the development of Arabic calligraphy during the early periods of Islamic art, artists started to ornament their inscriptions by interlacing letters or foliating the ends of letters or plaiting them (Baer, 1998). The best example of this period is Fatimid art and architecture, particularly, the al-Hakim Mosque in Cairo. The niche-heads of the entrance decoration and the windows of the dome are composed of symmetrical styles of leaves and complex arabesque designs. Further, the mosque is decorated with a stone concentrated in a series of horizontal and vertical bands, which stress the minarets. The style involves vegetal, geometric and calligraphic designs (Ettinghausen *et al.*, 2001). Another example is the façade of the Aqmar mosque in Cairo dating from the twelfth century, which is decorated with an inscription in stone. The upper part of the arch over the gateway contains a circular design with an inscription repeating the name of Muhammad (Mazot, 2000) (see Figure 2.8).

Between the tenth and twelfth centuries, Samarqand and Nishapur became extremely important centres of pottery production. Artists embellished their writing with Kufic inscriptions, which typically appear as circles inside the sides of dishes and sometimes are shaped horizontally (Brend, 1991). Whether slip-painted potteries are designed with vegetal ornament, animal images or interlaced letters, writing is the main decorative theme on these potteries (Ettinghausen and Grabar, 1987). For instance, in the decoration of an inscribed slip-painted bowl, which was executed in the tenth century, the Kufic script has been arranged as a circle inside the bowl and some floral ornaments have been added in the centre of the bowl (Ettinghausen *et al.*, 2001) (Figure 2.9).

That many different designs of a plaited Kufic script, developed in the Islamic world, have been found on Muslims' architectural monuments is worthy of mention. The letters of the script become more ornate by adding floral motifs, and are plaited and interlaced, for example, letters are combined with foliated arched triangle shapes or stars and other geometric interlacing, especially in eastern Islamic lands (Baer, 1998). An excellent example of this period is the tomb of Pir-i 'Alamdar in Damaghan in Iran, decorated with Qur'anic inscriptions, in which Kufic lettering is combined with floral designs (Hill and Grabar, 1964; Baer, 1998). Further, during the twelfth century, another type of inscription, a 'bordered' inscription, is used in decorating Muslims' monuments, for instance, the tower of Masud III in Ghazna in Afghanistan of the early twelfth century. The upper panels are decorated with an inscription displaying the name and titles of the patron Masud III (Figure 2.10). The script is written in Kufic calligraphy and arranged against a background of carved terracotta scrolls. Also, the inscription, which frames the portal in Shah-i Mashhad in Iran, was produced in a beautiful Kufic script with plaited stems (Blair and Bloom, 2000).

Importantly, by the early thirteenth century, plaited Kufic script seems to have spread from the east to the western regions of the Islamic world (Baer, 1998). Good examples of this period are Anatolia's monuments, such as Karatay and Ince Minare madrasa in which the interlaced Kufic style appears to be used to

express blessings. The entrance façade of the Ince Minare madrasa at Konya in Turkey is decorated with ribbon-like bands of calligraphy (Irwin, 1997) (Figure 2.11), while the ornamentation of the Karaty madrasa contains a rich tiled work and the dome is decorated with mosaic tiles, geometric and floral patterns, as well as calligraphic friezes (Brend, 1991; Gierlichs, 2000) (see Figures 2.12 & 2.13). Other examples of plaited Kufic script are found on Ayyubid inlaid metal products, for example, basins and water ewers are decorated with interlaced Kufic inscriptions and some figurative representations have been added, in which the names of the rulers for whom they were made, appear (Ettinghausen and Grabar, 1987; Gladib, 2000) (Figure 2.14).

However, by the fourteenth and fifteenth centuries, the popularity of Arabic writing, such as Kufic and plaited Kufic script had begun to wane in the Western part of the Islamic world. Because of delicacy of this script, it was retained in precious illuminations and other artefacts and set in separate panels, which by their size or form were particularly appropriate to highlight the ornamental qualities of these letters (Baer, 1998). For example, the heading in the double frontispiece of the illuminated Mamluk Qur'an is ornamented with Kufic writing (Irwin, 1997) (Figure 2.15). At Natanz, the entrance of the mosque is decorated with Kufic inscriptions, while the niche above is ornamented with tile work and fewer inscriptions (Hill and Grabar, 1964) (Figure 2.16). Another example is the *mihrab* in the winter prayer hall of the Friday Mosque at Isfahan, which is decorated with a marvellous double-coiled arabesque and deeply-under-cut plants using several kinds of calligraphy (Irwin, 1997) (Figure 2.17). Also, the Madrasa of Ulugh Beg at Samarqand is decorated with sacred names in symbolic shapes, for example, the words 'Allah' and 'Muhammad' are frequently repeated, indicating a profession of faith addressed to God. Further, the Madrasa is decorated with bands of large cursive thuluth or naskhi scripts, whose designs are constructed in Kufic scripts, which display Qur'an verses or quotations (Stierlin, 2002).

What is important to mention, with regard to the development of Arabic calligraphy, is the remarkable transformation of its character or form, which at

times becomes very difficult to read. An artistic technique is employed in ornamenting the Arabic calligraphy, whereby the whole letter is designed as a human or animal shape. This technique is found primarily on metalwork objects. The Muslim artists created unusual designs that include human and animal forms. The upper parts of the letters appear to be formed from human figures and some of the lower parts from animal shapes. In spite of the clear and frank God given prohibition against depicting human figures and animal images, artists, nevertheless, employed human motifs in decorating their art objects, particularly Arabic calligraphy as ornament. Explanations for the appearance of human image designs and their association with Arabic calligraphy are not easily obtained. Possibly, Arabic letters were favoured or viewed as sacred in Persia because they were the letters of the Qur'an and were accordingly viewed as figural forms imbued with blessings and consequently employed in ornamenting metal containers to indicate blessings. However, many questions remain. Why did artists use human and animal depictions in designing and ornamenting their art objects? Were they influenced by other cultures' traditions or even artistic themes? Were these art objects produced by non-Muslim artists? And, finally, to what extent were artists aware of the veto on using human and animal images as artistic elements according to the dictates of the Islamic religion? (The controversial issue of the employment of human and animal figural images in Islamic art and ornamentation will be discussed later in this chapter, in the section headed 'Human and animal figural representation').

Clearly, Arabic letters were transformed into human-headed shapes. The important feature of this style is that the letters' ends are designed as human or animal heads. These ornamental letters do not occur in the Qur'an, but do appear in inscriptions on buildings or on art objects, such as vessels or metalwork, which might be used for ornamentation purposes (Irwin, 1997; Niewohner, 2000). Interestingly, as Ettinghausen (1976a) (Figure 2.18) points out, the naskhi inscription, which expresses good wishes using letters which incorporate human and animal figures, is not only regarded as a clever transformation of the Arabic letters but also provides a clue as to its date and

place of origin. Grabar (1992) nevertheless argues that due to the incorporation of writing into the decoration of art objects, such as ceramic plates and silver inlaid cups on mosque walls, the Arabic letters and words eventually become unclear and even meaningless (Figure 2.19). However, some scholars have claimed that the aim of this form of writing is not to convey an actual message through the words but rather to convey Islamic mystical meanings. The ambiguous letters may be part of the Qur'anic message and all kinds of supernatural meanings may be attributed to them. Letters are also transformed into designs such as floral motifs, fighting heroes, happy faces, or strict linear compositions. Ettinghausen *et al.* (2001) suggest that these inscriptions, which are found on dishes and vessels, might indicate a worldly wisdom, and perhaps a secular use of Islamic art, which is intended for customers in an urban environment (Figure 2.20).

Four varieties of script styles can be distinguished, according to the type of figural images. In the first style, known as ornithomorphic script, the whole letter is transformed into a bird or the vertical tails of the letters end in a bird's head. In the second script style, known as the human-headed style, human heads are interwoven with the upper parts of the letters. In the third style, known as zoomorphic script, the heads of creatures or birds are fused with the letters and the upper and lower ends carry various types of creatures' heads, almost playfully arranged against each other. In the final script style, the entire letter is transformed into a human image, or scene of human activity, for example, a motif of dancers and drinkers, or hunting scenes showing men armed with swords or shooting with bows (Baer, 1998) (Figures 2.21& 2.22).

The human-headed scripts typically occur in and around the twelfth century and are mostly restricted to metalwork. In one of the earliest objects displaying ornithomorphic script, not a metalwork object but a piece of pottery decorated with figural inscriptions, the integral parts of the Kufic letters are endowed with bird heads (Ettinghausen, 1976a). The earliest surviving object representing both the third and fourth styles is the 'Bobrinsky' bucket which is decorated with bands of zoomorphic naskhi scripts expressing good wishes to the owner of the object and ornamented

with scenes of human activity, including riding, drinking, music making, and fighting (Ettinghausen, 1976a). An early example of a combination of the second and third styles occurs on a pen box, on which the Kufic inscription letters are decorated with human-headed shapes, while the date and artist's signature are ornamented in foliated and bird-headed Kufic (Ettinghausen, 1976a; Baer, 1998). It is suggested that the appearance of the human-headed script technique may have been due to "a new affluence in the large mercantile cities of north-eastern Iran, reflecting the urge for conspicuous consumption among the *nouveaux riches*" (Ettinghausen and Grabar, 1987, p.337). Further, human-headed inscription bands represent lively human figures that can be read as animated script. These motifs might express scenes of royal pleasure or astrological symbols (Brend, 1991).

Generally, the human-headed script style seems not to have developed further. By the early thirteenth century, this technique was occurring in Syria and Mesopotamia, where artists used both Kufic and Naskhi script styles on most brass objects. However, this script style was replaced by the Mamluk Naskhi and Thuluth calligraphic styles in which animal heads and birds still occurred but only on the margins of the background scrolls (Baer, 1998).

What is particularly important about the development of Arabic calligraphy is that, by the early fourteenth century, inscriptions had become the dominant feature, occupying a large part of an object. The characteristic features of the letters' shape occur in a new style and are arranged in circular forms in which the shafts of the letters point towards the centre. Further, whether arranged in roundels or polylobed medallions, these radiating inscriptions were favoured by Mamluk rulers who used them in order to enhance their names and reputation. An example is an ornamental incense burner decorated with an inscription, which is richly inlaid with gold and silver. It was designed to have a removable lid, which allowed it to be filled with exotic perfumes that were burnt at court festivities (Baer, 1998) (Figure 2.23). Another example is a tray of sheet brass inlaid with silver and gold. The Mamluk ruler's name and titles are boldly inscribed around the tray and inside each medallion (Ward, 1999) (Figure 2.24).

Generally, during the fifteenth century, calligraphic characters were transformed into a geometric style. Inscriptions were used as a frame along and around the main parts of buildings, such as portals, or might be used in decorating panels. These inscriptions were designed in the same way as square or rectangular Kufic forms and were possibly used for religious purposes, such as repeating the name of the Prophet Muhammad and the names of Imams (Baer, 1998) (Figure 2.25). An example of this type of ornament appears in Timurid architectural decoration, with its Kufic and Thuluth inscriptions and its geometric borders, where designs are used which contain the shapes of the names of Allah, the Prophet Muhammad and Ali (the Prophet's cousin) (Stierlin, 2002) (Figure 2.26).

Finally, by the sixteenth century, a new and great period of Islamic arts, particularly Arabic calligraphy, had emerged. In the Ottoman period, Arabic calligraphy appears in new circular arrangements. This style is similar to Mamluk's radiating inscriptions, used to decorate different art objects. The architectural decoration of Ottoman mosques is magnificent, with domes ornamented with roundels of Qur'anic scripts, and several circular calligraphic medallions hang on the walls, portals, and pillars of mosques. A good example that illustrates the beautiful calligraphic ornamentation employed in decorating Ottoman buildings, is the interior of Hagia Sophia in Istanbul, which was transformed from use as a church to a mosque. It is decorated with massive medallions, in which the names of Allah, Ali and the Prophet Muhammad are painted in gold script, which are visible on the huge pillars that support the dome. Also, the dome of Hagia Sophia is decorated with Qur'anic scripts in a wonderful *thuluth* calligraphy of the sixteenth century. Another example of an Ottoman mosque is the Suleymaniye Mosque, whose architectural design is borrowed from Hagia Sophia. This mosque is decorated with beautiful Qur'anic inscriptions, which are arranged in circular medallions and the domes are ornamented with roundel Qur'anic texts (Gladib, 2000) (see Figures 2.27 & 2.28).

Ottoman calligraphers are regarded as the greatest artists of the later Islamic period, and sultans were proud to consider themselves their students. Their

work was directed to the copying of the Qur'an, the design of inscriptions for mosques, and the production of single specimen pages for collection in albums. Their calligraphy is particularly strong in the dynamism and subtlety of the curved line (Brend, 1991). A special feature of Ottoman calligraphy is the *tugra*, a monogram giving the name of the sultan and of his father, together with the Turkish title *Khan*. The *tugra* was used as the sign of the sultan on documents, coinage, and inscriptions on buildings (Brend, 1991) (Figure 2.29).

The later development of Arabic calligraphy, however, shows a decline in its form and character since it becomes completely ornamental and even the religious texts are designed in the form of a bird. Although magnificent complicated Arabic calligraphy designs appear in the late period, they are no longer tools for conveying or carrying information but have simply become mere delineations of shape and form. According to Brend (1991) (Figure 2.30), later developments of Arabic calligraphy appear to be in the form of *shikasteh* (broken) scripts, which evolved during the seventeenth century and are frequently disposed on the page in swirls. From the eighteenth century, the calligram uses script to depict a person or animal shape.

VEGETAL ORNAMENT

Another element of Islamic ornament is the vegetal motif. Plant ornamentation is widely considered an important area in which the Muslim artist created a variety of art objects, inventing forms and designs according to his aesthetic sense that differed and were abstracted from natural forms. Riegl (1992) argues that all ornamental art is linked to nature. All styles and patterns are based on models in nature. This applies not only when they are similar to their natural prototypes, but also when they have been considerably changed by the human beings who create them, both for practical purposes and pleasure.

Muslim Arab artists created vegetal ornamental elements, such as leaves, flowers and fruits, and abstract modified plant forms that have a unique Islamic identity. They interlaced them with each other and connected them

with Kufi inscriptions and geometric units to produce, as a group, wonders that dazzle the eyes (Baqir, 1986). According to Yusuf (1995), the concern with plant ornamentation appears in the early period when Islamic artists were first influenced by the interest in nature of pre-Islamic styles, and their plant ornamentation elements were subsequently modified and simplified. Artists practised their art skills in transforming plant ornamentation comprising branches and leaves into ornamental patterns connected in an infinite variety of ways.

Interestingly, it is suggested that the development of the arabesque pattern originated from the Muslim artist's desire to realise ornamental formations saturated with beauty in a manner that accorded with the teachings and principles of the pure Islamic faith. This ornamentation was not only based on intellectual understanding and knowledge, but on revelation and intuition. It was not meant to imitate nature, since the artist was searching for an eternal essence, so he discounted the natural, materialistic manifestations from his ornamental consideration and strove to surpass them to draw near to an absolute abstract world (Judy, 1996). According to Al-Faruqi (2001), the forbiddance of human and animal depiction and the utilisation of abstract designs in Islamic art resulted not from legalistic restrictions from within the society, nor from exterior effects, but from an inner order arising from the culture's beliefs and creed. Hence, Islamic art shows little concern with factual imagery due to the fact that the Islamic religion expresses belief in a Supreme Being who exists above and beyond the limitations and confines of the material and human worlds.

What is important to mention about vegetal ornament, as Al-Faruqi and Al-Faruqi (1986) point out, is that the arabesque pattern should not be viewed as limited to a particular kind of leaf design perfected by Muslim artists, as has sometimes been suggested. It is not simply any abstract two-dimensional pattern that uses calligraphy, geometric figures, and stylised plant forms. Instead, it is a structural entity that accords with the aesthetic principles of the Islamic ideology. The arabesque patterns generate in the spectator an intuition of the quality of infinity. Through contemplation of their infinite patterns, the

meditative mind is turned towards the Divine, and art becomes a reinforcement and reminder of religious belief.

Thus, what matters about Islamic ornament is not its content, whether calligraphy, vegetal ornament or geometric structure, but actually its structure. With reference to the structure of ornament, Trilling (2001) indicates that not all ornamental styles are similarly accessible. Comparing them to foreign languages would be an exaggeration, in view of the fact that the intention of language appears to be to communicate, and ignorance of both vocabulary and grammar may defeat that goal. Unfamiliar styles of ornament appear to be similar to unfamiliar styles of music, in that we can derive pleasure from them without entirely understanding them. What is more, we cannot appreciate the image until we recognise the most important elements, watch the interaction of smaller shapes within each of them, then mentally step back and allow all the elements, large and small, to come together.

Aesthetically, a question that may arise is: is there any possible link between vegetal ornament and musical tones. How can the visual expression of floral ornament turn aesthetic elements, such as rhythm and harmony, into a wave with different forms and characters? In other words, do these floral and vegetal ornaments become akin to melodies and therefore evoke enjoyment and satisfaction? Hussain's (1996b) opinion on this issue is that the arabesque pattern has an enormous power to evoke pleasure, growth, and diversity in beautifying the areas that need to be ornamented. This takes place in a planned harmonic form similar to what happens in musical composition, which is subject to definite basic tones together with a stimulation produced by overtones. The Muslim artist diversifies the arabesque ornamentation in an ordered way within a definite boundary. The ornamentation may include a stem and leaves of either grape or acanthus, and when the artist inserts it into the arabesque, there may be no definite relationship between the stem and leaves. They may be branching or diverging, soft or coarse, defined by simple but powerful lines that always convey the idea of continuous growth and are coiled in successive waves in a spiral form. They grow from a leaf or renew themselves, therefore, they are always characterised by organisation and

vitality; organisation in this case includes successive order, repetition from top to bottom, or appears in the form of a covering flower, a palm leaf, or a propeller plant shape.

In Burckhardt's (1976) view, the arabesque tends to be the most direct expression of rhythm in the visual order. It appears in all its perfection in the form of sculptured work on the windows of mosques and palaces. The arabesque in floral shapes seems to be derived from the image of the vine, whose interlacing leaf-scrolls and branches wind back on themselves, inclining naturally to stylisation in rolling shapes. These floral shapes wonderfully transform the laws of harmony into visual expression. Their unfolding seems to be permanent, like a wave with different forms having a variety of characters. Although, this style does not require coherence, nevertheless, it often has a particular continuity, whose harmonic feature seems to be the sounds and the silences that are aesthetically equal. The arabesque organises visual elements in harmonies and melodic patterns, implicitly maintaining their connection with the vegetal world. What is more, the stylistic structure and the craftsman's genius, or the cultural group, serve to determine the degree to which the motifs represent the natural world without losing their harmonic continuity or natural character.

Finally, before leaving our discussion of the relationship between vegetal ornament and music, let us seek Kant's opinion, especially his notion of pure beauty, as this is what links the beauty of music and the beauty of the arabesque, the key point being that what matters in both music and the arabesque is the organisation of the audible or visual elements in patterns of harmony and melody. According to Kant "The charm of colours, or of the agreeable tones of instruments, may be added: but the *design* in the former and the *composition* in the latter constitute the proper object of the pure judgement of taste" (Kant, 1911, p. 68).

The Development of Vegetal Ornament

The vegetal ornament, which was employed in Islamic art and architecture as a major ornamental element, took many stages in its development. The characteristic feature of the development of vegetal ornament from the early periods of Islamic art, beginning in the seventh century, appears to be a transformation of the pre-Islamic floral ornaments into a distinctive Islamic style. This included a range of motifs that appeared in these centuries and were adopted from pre-Islamic civilisations, such as the Late Antique and ancient Iranian. These motifs include natural acanthus leaves, vine plants with or without tendrils, and palmette trees, pomegranates and buds. A combination of floral motifs, such as rosettes and lotuses, and fruit motifs, such as grapes, are also included (Baer, 1998) (Figure 2.31).

The stylistic feature of vegetal ornaments is likely to consist of a combination of various motifs, for instance, garlands of laurel leaves holding grapes, pine cones and bunches of grapes, which might be designed on heart shaped leaves (Baer, 1998). A good example is the style of the mosaics of the Dome of the Rock, which typically consists of trees and acanthus tendrils, trees of palmette flowers and winged palmettes, which might suggest the influence of the Sassanian art of Iran on Umayyad decorative themes (Enderlein, 2000). According to Ettinghausen *et al.* (2001, p.61) (Figure 2.32), the wooden beams of the Dome of the Rock "are covered on their undersides and outer faces with repoussed sheet metal (a copper alloy) fixed by large nails. The layout of a central band bordered on each side by a narrower band bearing a repetitive pattern is to be found on all such coverings of the arcade". Other examples are the wooden beams of the Aqsa Mosque in Jerusalem and the design of a carved stucco window grille from Qasr al-Hayr in Syria, which consist of palmette tree motifs, which are symmetrically designed as pairs of branches, both scrolling to encircle leaf shapes or grape clusters (Ettinghausen *et al.*, 2001) (see Figures 2.33 & 2.34). Also, another early Islamic period style frequently involves a single floral motif, which is composed of a number of varied elements, such as split palmettes, vine and acanthus leaves, and fir cones. Hybrid flowers of this pattern are found in the carved stone and stucco

ornamentation at Khirbat al-Mafjar in Palestine, and on the ninth century wooden planks of the Great Mosque at Qairawan in Tunisia (Baer, 1998; Ettinghausen *et al.*, 2001), (Figures 2.31 & 2.35). The wooden *minbar* of the Great Mosque at Qairawan is decorated with thirteen vertical rows in rectangular panel form, which display a variety of shapes that relate to Umayyad work (Ettinghausen *et al.*, 2001).

Another important development of vegetal motifs is the bevelled style that flourished from the early periods of the ninth century in Greater Mesopotamia and then spread to Egypt and other Islamic world lands. The character of this abstract ornament consists of a sequence of vegetal motifs, such as blossoms, trefoils, buds, vine leaves, palmettes, rosettes and the three-petalled lotus, in which floral elements are arranged according to definable principles (Baer, 1998). Generally, the abstract patterns are defined in terms of forms transmitted from particular models through a process of modification and abstraction. Their features involve a tension between lightness and darkness or line and size through different methods, such as symmetry and repetitiveness (Grabar, 1992). (See the above comments of Hussain, 1996b, and Burckhardt, 1976 concerning the link between the arabesque and music, since they nicely illustrate the notions of melodic variation and harmony.)

Regarding the bevelled style, it is divided into three abstract decorative styles, which exemplify the art of Samarra in Iraq. The first style's characteristic feature is a carving technique derived from the vegetal decoration of the Umayyed period. In this style, a field is divided by decorated bands into compartments, the vine leaves have five lobes separated by four eyes like holes, and stand out against a dark and deeply carved ground (Blair and Bloom, 2000). The vine leaf's parts are sharply outlined, with four deep holes, frequently with incised veins (Ettinghausen *et al.*, 2001).

The second stylistic feature is identified as the use of cross-hatching for surface details. Simple bands are divided into compartments and the leaves do not grow naturalistically from a vine, but have become abstract forms (Blair and Bloom, 2000). According to Ettinghausen *et al.* (2001), this style was

frequently carved freehand, with a greater range of themes, motifs, and forms. Also, the contrast between the topic and the background appears to be much less apparent than in the first style due to the design taking over the whole surface more or less, and seemingly heightened by the deep grooves around individual shapes.

The third style is a moulded technique particularly suitable for covering large wall surfaces. This style is typically filled with symmetrical repetitions of curved lines with spiral endings, which create patterns of abstract leaves (Blair and Bloom, 2000). It is suggested that one of the most remarkable features of this style is the unifying factor through which the relationship between this style's elements to each other becomes a significant factor. Also, in this style, there is an absence of ornamental elements, such as geometric, vegetal and animal themes, and the background has disappeared, so that in effect the whole surface of the wall appears to be ornament. This style's main features are repetition, bevelling, and abstract themes, total covering, and symmetry. It is widely held that Samarra's third style simplifies forms to the point of total abstraction due to the requirement to avoid the representation of living beings in public monuments. The extent of its abstraction may possibly explain its impact on the rest of the Muslim world (Ettinghausen *et al.*, 2001) (Figure 2.36).

The art of Samarra has long been recognised as a significant element in Islamic art. The transmutation of floral elements into intricate patterns occurs in various artistic media, and all over the Islamic lands. However, it is suggested that some Islamic lands, such as Spain, were less affected by the Samarra style. A good example is the Great Mosque of Cordoba, which is regarded as a most extraordinary religious site, in which the fascination of early Islamic designers for a perfect combination of architecture and decoration finds one of its most magnificent expressions. The tenth century architects of al-Hakam developed structural and decorative forms similar to Samarra. The fabulous display of arches and domes is typical of the Spanish-Islamic character. The marvellous architectural designs of this mosque successfully reflect and articulate the distinction between light and shade

(Ettinghausen *et al.*, 2001) (Figures 2.37 & 2.38). The mosque's borders are decorated with winding scrolls, which hold a variety of deeply engraved flowers and fruit, and its arches are ornamented with deeply engraved rosette flowers (Baer, 1998; Ettinghausen *et al.*, 2001) (Figure 2.39). Another example of Spanish floral ornament on Umayyad monuments is the magnificent carving in marble of the *mihrab* area at the Qayrawan mosque. Its decoration appears to be a further working out of Umayyad themes. The *mihrab* is designed as semicircular with marble panels. A central vertical row has shell head niches, whereas side panels are typically decorated with vine scrolls and geometric designs with circular elements (Brend, 1991).

In the field of Islamic art, the earliest art objects and masterpieces ornamented with floral motifs appear to be ivory carved pieces carrying vegetal designs. Their quality lies in their creative style, in which the vegetal ornament, such as leaves and branches, grows and is twisted so that its form appears to be an internal movement. This might reflect a superior sculptural sense (Ettinghausen and Grabar, 1987) (Figure 2.40). Further, there is an ivory Pyxis from Madinat al-Zahra in Granada, Spain, which is decorated with vegetal ornaments and several kinds of animal figures, such as peacocks, doves and deer. The ornamental elements of these ivories are heavily endowed with animated movement. Vegetal ornament is also found on other kinds of art objects, such as a silver casket from Madinat al-Zahra, which is decorated with relief inscriptions and covered with palmette motifs (Gladib, 2000) (Figures 2.41 & 2.42). However, what appears to be an important factor in the aesthetic character of these items is the artist's sense of the ornamental structure of the ivory's surface (Ettinghausen and Grabar, 1987). It is interesting to note the artist's aesthetic motivation for exploring ornament, i.e. the artist responds to the potential which is inherent in the material provided by the ivory. This is an important theme in much Western formalist aesthetics (Adorno, 1984).

As regards the development of vegetal ornament, a new and wonderful type of vegetal pattern appeared in the late tenth century. A highly abstract pattern and a fully Islamic style developed known as the arabesque style. A variety of fully developed arabesque patterns appear on different art objects, with

fabulous sophistication (Baer, 1998). One characteristic feature of arabesque ornamentation, which flourished from the tenth to the fifteenth centuries, is that it appeared in fully geometrised designs. In other words, the vegetal scroll patterns or foliate ornament, such as the vine or acanthus scroll, are interlaced within geometric frameworks. Also, stems, buds and leaves are likely to be designed to incorporate geometric shapes (Blair and Bloom, 2000). Another feature of the arabesque pattern is that it became quite abstract due to the Muslim designers' discovery of repeated patterns of ornament, such as coils and spirals, as means to fill the surface to be decorated. Moreover, arabesque designs may be interlaced or overlap to create more complex effects and to give the illusion of depth in a one-dimensional decorative surface (Irwin, 1997). According to Nasr (1987), through utilisation of the arabesque pattern in its various shapes, in different aspects of Islamic art, material objects are lifted from their suffocating heaviness, allowing the spirit to breathe and expand.

The development of the arabesque in eastern Islamic regions is considered to be highly significant. Between the eleventh and twelfth centuries, architectural decoration under the Ghaznavid rulers reached its peak. Buildings were decorated with engraved stone, marble, stucco and cut terracotta. For example, the marble panel on the cenotaph of Mahmud of Ghazna is decorated with a horseshoe-formed arch and a complex engraving (Blair and Bloom, 2000), (Figure 2.43). Also, the Masjid-i Jami' *mihrab* at Ardestan in Iran is decorated with a magnificent arabesque ornament of stems and leaves. The arabesque style is arranged symmetrically, which creates movement in depth (Ettinghausen *et al.*, 2001) (Figure 2.44).

A curious feature in the development of the arabesque ornamental pattern is that this pattern can be formed by merging and separating vegetal elements, such as palmettes and stalks, with other floral ornaments, which may be combined with various types of arches, arcades, or linked star-medallions. Moreover, an interesting point is that the geometric shapes, for instance, stars and arches, may be interwoven with the arabesque pattern, which enhances the arabesque style and emphasise its fluidity, for example, the stone mouldings at

the al-Hakim Mosque in Cairo (Baer, 1998). This mosque is decorated with possibly rare flat ornamental panels, which appear on the niche-heads of the entrance and on the windows of the dome. They are composed of symmetrical forms of leaves and very complex arabesque patterns (Ettinghausen *et al.*, 2001). A further example is a stucco panel from the palace at Ghazna, from around the twelfth century, which is decorated with complex carved ornamental elements, such as leaves, stalks and blossoms, which are combined with geometric forms of intersecting trefoil arches (Blair and Bloom, 2000) (Figure 2.45). Also, the development of arabesque patterns can be seen in the decoration of the Azhar mosque in Cairo. It is ornamented with stucco panels on the wall spaces and the *qibla*, similar to the Samarra style technique, and these are used to cover almost the entire surface area. The leaves and flowers are symmetrically arranged and the techniques of notching and dotting appear to be correlated with the art of Samarra, perhaps due to the impact of the Samarra style on Tulunid Egypt (Ettinghausen *et al.*, 2001).

The most important feature of the development of the arabesque in eastern Islamic lands appears to be the application of arabesque stylistic themes on art objects and architectural decoration, and utilisation of coloured adornment and glazed ceramic tiles in decorating Islamic architecture (Blair and Bloom, 2000). In the course of the early thirteenth century, bands and panels of tiles were employed to embellish the minarets of mosques or to decorate walls, arches and the *mihrab* with complex geometric tile designs and vegetal ornaments. For example, the magnificent *mihrab* of the Maidan mosque in Kashan, in Iran made by al-Hasan ibn Arabshah, is decorated with lustre tile work (Blair and Bloom, 2000) (Figure 2.46). In the field of Islamic art, spectacular arabesques and floral designs were employed in decorating Islamic art masterpieces; tulips, blossoms, and sometimes tiles appear to be enclosed in a trefoil arch (Baer, 1998). Iranian potters decorated many art objects, such as ceramics, vessels, and dishes with several overglaze techniques, for instance, lustre, *minai* and *lajvardina* (Irwin, 1997) (Figure 2.47).

Generally, what seems to be particularly important about the development of the arabesque pattern is that, between the twelfth and thirteenth century,

decorative art production in Asia Minor reached a climax, with a number of great art objects ornamented with floral and geometric designs. The most beautiful example is the folding Qur'an stand from Konya, which was crafted from a single piece of wood. It is carved with arabesque patterns and decorated with geometric and floral ornaments, and its central area is ornamented with interlacing Kufic scripts (Gierlichs, 2000) (Figure 2.48).

The arabesque's popularity lasted until the fourteenth century when, due to the Mongolian invasion and new trade with China, arabesque patterns were displaced by Chinese-inspired designs and floral motifs, such as peonies, leaves, lotus plants, and cloud bands. These new designs are typically combined with arabesque and geometric designs (Blair and Bloom, 2000). Because of this new development and the influence of Chinese traditions and designs, the arabesque pattern became integrated with other vegetal patterns, for instance, the lotus and the peony. This pattern was distinguished by its aim of giving importance to the forms fashioned by the flowers rather than to the structure formed by the stems (Clevenot and Degeorge, 2000). For example, the Mamluk Qur'an frontispiece is decorated with lotus and peony motifs of Chinese origin. The design is dominated by a central star-polygon and with great clarity it combines dynamism with order and complexity and is regarded as a masterpiece of religious art (Brend, 1991) (Figure 2.49).

Importantly, the way in which one culture borrows from another, or is influenced by it, is worthy of discussion. At one level this can be due to a simple historical accident of two cultures coming into contact with each other. At another level, questions may be raised as to why these Chinese designs were viewed to be attractive and worthy of incorporation into Islamic ornamentation. Did they perhaps open up new possibilities, at a time when Islamic artists were beginning to exhaust the possibilities that were inherent in their current practices or did they perhaps appear as superficially similar to Islamic ornament, so that they could be easily incorporated. Regarding the way in which one culture borrows from another or is influenced by it, Hussain (1996b) points out that the Seljuk period is considered one of the most important periods in which arabesque ornamentation flourished in Iran. As

time passed, the creators of the arabesque were able to replace all plant ornamentation in the different materials of Islamic arts and architecture. In the period of dominance of the styles of the Far East after the Mongolian invasion of the eastern areas of the Muslim world, the arabesque maintained a distinctive presence. This may be due to artists during the thirteenth century being able to comprehend the new concepts arriving from the Far East and mixing them with their traditions through the art of arabesque. Artists in the east of the Muslim world added, with great harmony, additional concepts and ornamental elements to the arabesque.

In the Ottoman period, Muslim artists transformed vegetal ornaments into a more naturalistic style called the reed style, which combined long, feathery, saw-toothed leaves with composite blossoms, as well as Chinese inspired dragons and fewer geometric designs (Blair and Bloom, 2000). In the field of Ottoman architecture, natural floral ornamentation can be observed through ceramic art, which indicates the influence of pottery on the development of taste. For example, the glazed tile panel from the Topkapi Sarai in Istanbul from the sixteenth century, fashioned in Iznik, on which bird images perch between the floral ornaments, possibly reveals the influence of Chinese ceramics during the Ottoman era (Clevenot and Degeorge, 2000) (Figure 2.50).

Three Iznik styles of ornamentation appeared in the course of the sixteenth century. The first stylistic characteristic is that of blue lotuses and their wavering tendrils, and cloud scrolls from Chinoiserie ornamentation which were connected to the adornment from the Islamic tradition, such as inscriptions and arabesque scrolls with split palmettes. Two types of adornment within this style were distinguished by the Ottomans as *hatayi* and *rumi*. These two styles are found incorporated, to various degrees, in other media and objects, for instance, large dishes with a flattish rim, basins, jugs, and mosque lamps (Brend, 1991). A good example that illustrates this type of ornament is a mosque lamp in cobalt turquoise and black, dating from the early sixteenth century, decorated with inscriptions, cloud scrolls, and *rumi* arabesques (Brend, 1991) (Figure 2.51).

The second Iznik stylistic feature, which flourished from the mid-fifteenth to the sixteenth century, is the decoration of mainly large dishes with a blue, green, black and purple palette. Due to the influence of Chinese themes and designs, objects were ornamented with a wave and rock border and sometimes their ornamentation was directly copied from Chinese designs, for example, bunches of grapes occur on a number of dishes. More precisely, the designs employed in decorating objects appear as real or imagined flowers, which are mixed structurally and shaped boldly. Further, a variety of flowers and trees, whether natural or from the world of the imagination, are designed as curved plumes, such as the leaf called '*saz*' and derived from the flower of the reed. Designs may be shaped and arranged in a circular swirling movement, to portray flowers swaying in the breeze of a heavenly garden (Brend, 1991) (Figure 2.52).

The third and final Iznik stylistic feature is known as 'Rhodian'. Objects such as large dishes, vases and jugs are ornamented with flowers, such as rose-buds and carnations, and vessels may be decorated with a dull salmon or bluish slip. These flower designs seem naturalistic or may appear as conceits, since some stalks may be twisted inversely so that flowers fit into the selected spaces. What is more, some objects are ornamented with green scales, perhaps derived from the Chinese-Persian dragon tradition, and some are designed with a triple dot image, reminiscent of the Buddhist *chintamani*, or three jewels. Finally, some objects are decorated with a single element from a traditional arabesque style (Brend, 1991) (Figure 2.53).

In summary, regarding the development of vegetal ornament, various influences on it have been identified. The religious prohibition against images may be considered a significant factor in the development of vegetal ornaments. Also, the influence of theological and spiritual ideas on the artist's expression of the infinite and transcendent frequently conveyed through various ornamental elements in general and the arabesque pattern in particular, may be linked to the philosophical conception of the perfection and permanence of God's attributes. Further, the influence of earlier ancient cultures on the development of vegetal ornaments can be observed and

identified in the forms and styles of floral motifs used as well as the possible link between vegetal ornament and elements of music. The use of materials, such as stucco, wood, metal and ceramic, for creating vegetal ornament, and the influence of Chinese culture's art, themes and motifs on the development of vegetal ornament are among several factors that contributed to the decline in vegetal ornament, distance from abstraction, and the move towards imitation of nature.

In short, from what has been discussed in this section, it seems that the vegetal ornaments utilised in Islamic art and architecture to adorn both sacred and secular buildings, underwent a range of changes and developments. One of the major developments was the transformation of vegetal form into an outstanding abstract ornamental pattern known as the arabesque. Also, floral and plant ornaments were intricately designed using various artistic methods and can be found on numerous art objects.

GEOMETRIC ORNAMENT

Geometric ornamentation is considered a basic element in Islamic ornament. The use of geometric patterns is one of the distinctive features of Islamic art and architecture. The basic forms used by Muslim artists in their ornamentation include straight lines, squares, triangles, circles, crossed circles, hexagonal shapes, and octagonal shapes (FAA, 2003).

When discussing geometric pattern, one might ask: what are Islamic geometric ornamentations? What are the meanings and significance of this type of ornament? Further, is this type of pattern employed in Islamic art and architecture for beautification or simply for covering empty spaces? Moreover, is there any special philosophy influencing the forms of geometric ornament? In other words, philosophically, is the purpose of the geometric forms of the ornamental motifs, such as squares, triangles, circles and star patterns, designed by artists and repeated and connected together for decorating art objects and architecture, simply to create beauty, or to arouse wonderment in

the spectator, and remind him/her of the cosmos and its creator, Almighty God, and the need to glorify Him?

Clevenot and Degeorge (2000) point out that it is not easy to provide an accurate answer to questions seeking the meaning of Islamic geometric ornamentation due to there existing various intergrading levels of meaning, including the philosophical, aesthetic, and symbolic. Gonzalez (2001) claims that, although we continue to enhance our understanding and knowledge of Islamic geometric pattern, its history and all that relates to its structural features, geometric rules, constitutive variation, and its overall philosophical inspiration, considerable problems still remain, mostly within the field of visual aesthetics. Hence, the aesthetic of geometric ornament, its function, and its logic in terms of the language of material expression, has yet to be satisfactorily explained.

Generally, geometric patterns in Islamic art can be defined as "the practical experiments of designers and artisans [using] basic devices [such] as repetition, rotation, and reflection, rather than their conscious attempts to make abstract statements about the harmoniously patterned nature of a divinely ordered universe" (Irwin, 1997, p.198). These patterns can be considered an exploration of spatial order through the measure and relationship of forms. The practice of geometry can be viewed as an approach to reflect the way in which the universe is ordered and sustained. Meditating on its order and infinite variety and utilising geometry to reflect these, appears to be a journey of technical and psychological self-development (Lawlor, 1982). Riegl (1992) points to the variety of geometric forms and their artistic application, for example, straight lines can be shaped as triangles, squares, and zigzag patterns, while curved lines can be designed as circles, rolling lines, and spirals. He suggests that even if the geometric pattern shapes do not appear to be based on actual objects, they are not totally separated from nature. The laws of coherence and harmony that administrate geometric forms are to be found in the natural shapes of humans, animals and plants.

Several questions might arise with reference to the development and uses of geometric ornament in Islamic art and architecture. What is the reason for the extraordinary development of geometric designs and forms in Islamic art and architecture? Why is geometric pattern significant to the Islamic religion, and is this development correlated with this religion? In other words, did the Islamic religion influence Islamic art, such that the designs and motifs of Islamic ornament became abstract and the spaces of art objects had to be covered with, for example, geometric or vegetal ornaments but not human or animal images? Did Muslim artists perfect this pattern for religious or aesthetic reasons? Were geometric forms and patterns used to produce a desired level of abstraction or was their use due to the Islamic religion and its influence on art, such that artists selected geometry as a medium to communicate worship of God?

Regarding the development of geometric patterns, Burckhardt (1987) suggests that the prohibition against the depiction of human and animal images produced an empty space that had to be filled by another sort of art or abstract motifs. In addition, the Muslim artist, in ornamenting his art object, utilised geometrically interlocked forms that both displayed an intellectually pleasing shape and expressed the concept or a view of the Divine Unity (Burckhardt, 1976). In answering the question of whether or not geometric ornaments in Islamic art might involve cultural or religious meanings, Grabar (1992) suggests there might be a cultural explanation for the geometric pattern. Geometric designs and forms appear to visually represent "a set of truths that dominated the traditional life of Muslims until the appearance of contemporary disruptions. Thus, astrological configurations, magical squares, cosmological considerations, and the central Muslim notion of Unity (*tawhid*) are all seen as numerical ideas for which a geometric formulation is not only possible, but even desirable" (p.151).

Aesthetically, Islamic geometric ornaments may have three basic functions: to serve as a network into which other shapes are interlaced, to produce harmony and infinity, and, finally, to be a significant factor in the artwork. Geometric ornamental styles may stem from dividing and expanding the linearity of the

geometric system and from continually intertwining and partly covering shapes that convey new sub-units and new forms (Baer, 1998). According to Leaman (2004), in Islamic art, balance appears to be one of the striking characteristics of the geometric pattern. Many geometric forms would create the illusion of fragmentation and small forms might make observers focus on specific areas of spaces. Therefore, in many geometric motifs or styles, the application of a network supplies a strong formal arrangement that provides the sense of being continuously and considerably repeatable. Larger areas are joined together by colour and form rather than by topic and repetition within a particular part, or a part is rephrased within the whole, creating a fine harmonic pattern of similarity and variation. These techniques are essential to avoid boring repetitiveness and a steady loss of aesthetic and artistic unity.

Regarding the role of geometric ornament in Islamic art, geometric pattern appears to be ornamentally employed to a degree unrivalled in the arts of other cultures. According to Clevenot and Degeorge (2000), geometric pattern offered a mixture of mathematically distinct shapes that attracted Muslim craftsmen. In different times and parts of the Islamic world, the rules and standards of embellishment, the designs of art works, and common patterns imposed themselves with increasing intricacy. Thus, non-figurative or abstract art tended to become the aesthetic ideal of Islam. According to El-Said (1993), one of the principal features contributing to the distinct character of the artistic inheritance of the Muslim world is the employment of geometric patterns in Islamic art and architecture. Their universal use in metalwork, woodwork, ceramics, textiles, carpets, and architectural adornment suggests they were fashioned according to a creative method combining a correlated and modifiable scheme of masterpieces, allowing both distinction and novelty.

One of the most common ways in which geometric ornamentation was employed appears to be in the formation of the essential patterns of design. Employment of a remarkable variety of geometric forms in art objects, such as star patterns, squares, circles, and a wide range of net motifs based on geometric standards, demonstrates the wonderful imagination, cleverness and creativity of Muslim artists (Hill and Grabar, 1964). A possible link between

this and Western formalist aesthetic theory may be noted. A major concern of formalists is the significance of form in both theory and practice, since, according to Clive Bell, it evokes aesthetic sensations:

> *"... lines and colours combined in a particular way, certain forms and relations of forms, stir our aesthetic emotions. These relations and combinations of lines and colours, these aesthetically moving form, I call 'Significant Form'; and 'Significant Form' is the only quality common to all works of visual art"* (cited in Hanfling, 1995, p. 145).

Kant similarly argues:

> *"In painting, sculpture, and in fact all the formative arts, in architecture and horticulture, so far as fine arts, the design is what is essential. Here it is not what gratifies in sensation but merely what pleases by its form, that is the fundamental prerequisite for taste. The colours which give brilliance to the sketch are part of the charm. They may no doubt, in their own way, enliven the object for sensation, but make it really worth looking at and beautiful they cannot"* (cited in Hanfling, 1995, p. 144).

Briefly, the key point is that in contrast with a view that links Islamic ornamentation to specific ideas in Islamic theology, culture or science, a more universal account of the aesthetic experience suggests that it is not the contents of any particular culture that is the appeal. Whether Western or Eastern art, the important point is the aesthetic or artistic creation and the extent to which viewers get pleasure from the design in the art.

Geometric patterns in Islamic religious architecture may result from Qur'anic inspiration and its stress on the extraordinary features of the craftsman's mind or mental powers, and perhaps the holiness of virgin nature whose rules and arrangements are linked to the world of geometrical forms (Nasr, 1987). Whether or not the Muslim craftsman designed geometric forms as a result of

knowledge of these rules and arrangements, El-Said (1993) points out that artists and craftsmen have continued the practice of creating and designing geometric patterns over the centuries with three significant resources. First, with a general thought of work and rules of design; second, with a system for work understood and accomplished by artists that combines the employment of traditional tools like rule and compass and the information relating to mathematical knowledge; and third, with a method of measurement, which is a basic feature of composition and design and therefore necessary to the practice of creating geometric motifs and forms.

Referring to the significance of the craftsman's knowledge of geometric measurement, Muslim thinkers, such as Ikhwan al-Safa, comment in their *Rasa'il*:

> *"Geometry occurs in all the arts (sana'i); every craftsman (sani), carries out measures in his art prior to proceeding to practice ('amal), it concerns a type of theoretical geometry ('aqliyya), namely, the knowledge of dimensions and their content ....Applied geometry consists of the knowledge of measures and... binding them to each other, being comprehended by sight (basar) and perceived (yudrak) by touch. Theoretical geometry is the reverse, namely, knowledge and pure understanding"* (Gonzalez, 2001, p. 75).

Notably, in discussing the development of geometric ornament in the context of Islamic art, most of what has been written about geometric patterns for use in Islamic art tends to be a simple description of patterns as ornamental elements or as visual representations for artist and designers to copy or otherwise reproduce. Some scholars have, however, offered their own interpretation and analysis of geometric patterns in Islamic art and architecture. For example, Keith Critchlow (1976) has presented a cosmological analysis of geometric patterns in Islamic art and architecture. He indicates that from the circle originates the three most fundamental shapes in Islamic art, the triangle, square and hexagon. A square may symbolise the

"earth or materiality and the hexagon of heaven" (Critchlow, 1976, p.24). Critchlow's cosmological analysis of geometric patterns in Islamic art and architecture is based on the correlation between a number of patterns in Islamic art and Pythagorean rules, which present a useful method to reproduce the patterns and combine them into divine geometry. He defines Islamic art in relation to geometric patterns as:

> *"predominantly a balance between pure geometric form and what can be called fundamental biomorphic form: a polarisation that has associative values with four philosophical and experiential qualities of cold and dry – representing the crystallisation in geometric form - and hot and moist – representing the formative forces behind vegetative and vascular form"* (p. 8).

Issam El-Said (1993) offers the theory that most Islamic geometric patterns are based on repeated units. According to him, Islamic geometrical patterns are based on the "Square and Hexagonal Repeat Unit and the Root Two and Root Three System of Proportion." The circle provides the base for reconstructing geometric patterns found in Islamic art and architecture. A circle can be divided into four, or multiples of four, equal parts. Geometric patterns are derived from the resulting shapes.

Another interpretation of Islamic geometric ornamentation is that proferred by Nasr (1987), a well-known Muslim intellectual. He attributes a Divine significance to different geometric shapes in Islamic architecture. For example, the dome symbolises "the heavenly vault and its centre the *axis mundi*, which relates all levels of cosmic existence to the One" (p. 49). The octagonal dome may symbolise "the Throne and Pedestal and also the angelic world" (p. 50). The stalactite or *muqarnas* structures may symbolise "the descent of the heavenly abode towards the earth and the crystallisation of the celestial substance in terrestrial forms" (p. 50). He refers to the external form of the Dome as an aspect of "Divine Beauty" and the minaret as symbolising "Divine Majesty".

The Development of Geometric Ornament

In order to understand the way in which geometric pattern developed, one must start by considering the early history of this type of ornament. According to Irwin (1997), geometric ornament in the early Islamic period followed Greek and Roman designs and elaborated upon them. Elements such as octagons and star shapes were used for decorating art objects and architecture in the earliest centuries of Islam. However, these patterns, from the beginning, appear to have been modified and developed by artists working under Muslim rule, and no other culture utilised geometric repeat patterns in such inventive and imaginative ways (Ettinghausen *et al.*, 2001).

In this section, because of difficulty in examining the historical development of geometric ornamentation due to it differing from other Islamic ornamentation patterns, I will follow Baer's (1998) classification of geometric ornamental units. Baer separated the forms of geometric units into circles, polygon and star patterns, squares and lozenges, and stalactites or *muqarnas*. Their prominence in certain periods or areas will be specified where appropriate.

The Forms of Geometric Units

Circles

One of the most common geometric forms used in decorating Islamic art objects and architecture is the circle shape. In Islamic art, three essential geometric forms arise from the circle: the triangle, square, and hexagon (IAO, 2003). According to Baer (1998), when designing circular shapes, artists drew simple and complex repeated patterns by freely using compasses and producing intertwining lines adjustable to border motifs and large surfaces. Moreover, they frequently omitted particular parts of the circles, therefore, patterns may convey an inner tension, an illusion of expansion, rotation or movement around a central axis.

In the Islamic period, units of circles and semicircles were utilised to define the compositional structure of a surface decoration. Umayyad stucco borders, window grilles, and floor mosaics appear to be among the early Islamic ornaments of this kind, which either as single or as repeating patterns were retained in architectural and other decorations up to at least the sixteenth century. The linear and structural elements of designs are frequently highlighted and emphasise the continuous intertwining and overlapping of circles, exemplified, for example, by the window grilles of Qasr al-Hayr al-Gharbi in Syria, or some of the wooden panels in the minbar of Qairawan (Baer, 1998) (Figure 2.54).

Early utilisation of circle units appears most frequently in mosaics and closed geometric units fitted into available spaces, for example, at Khirbat al-Mafjar. The intricacy of these geometric patterns seems extraordinary for mosaics. In one example, circles diminish proportionately in size as they move from the periphery to the centre. Another example transforms circles into rounded polygons. Further, in a stunning display of virtuosity, the central medallion of the bath floor appears to be a dizzying pattern of movement that requires considerable geometric knowledge (Grabar, 1992) (Figures 2.55 & 2.56).

Regarding development of this type of ornament between the second half of the thirteenth century and about the middle of the fourteenth century, intertwining circles become one of the favourite designs of Syrian and Egyptian metalworkers. They figure on the sides of a Syrian thirteenth century wallet, and decorate the walls or base of various Mamluk brasses, on which they have become a frequent boldly designed standard motif (Baer, 1998). An example illustrating the employment of circle units in art objects is a plate from Syria, dating from around the fifteenth century, made for Amir Abrak al-Ashrafi. The interlaced circles are engraved in the centre of the plate (KFCRIS, 1985) (Figure 2.57).

Polygons and Star Patterns

According to Lee (1987), star ornaments are regarded as the most attractive and complex of all Islamic patterns and they owe their splendour and magnificence to a high degree of symmetry at all levels.

Octagons and star forms were employed in decorating buildings in the early periods of Islam. Egyptian designers from the mid-twelfth century developed magnificent complex patterns in compartmentalised geometric designs; some based on parts of circles and others on star forms (Irwin, 1997). For example, Qur'anic frontispieces commonly feature designs based on the star polygon and use interlacing and interlocking forms to elaborate upon the original polygonal shape (Irwin, 1997).

As regards the geometric signification of Islamic star adornment, Lee (1987) points out that, despite the fact that several studies on the construction and analysis of Islamic patterns have been published, not one has investigated the topic in sufficient depth, and no inclusive research has dealt in a systematic way with the entire variety of patterns, geographically or historically.

Moreover, Lee claims that views and attitudes have varied as to the role played by mathematics in the formation, improvement and structure of the more intricate Islamic patterns. Some have observed a steady, convergent evolution from various different types of pre-Islamic decoration, to entirely distinct Islamic patterns. This would appear to be due to the extensive practice of trained and skilled artisans, who selected the paths taken at every stage of growing elaboration. On the other hand, others have observed obvious proof for the involvement of skilled mathematicians in the design and creation of these patterns, or have attributed to artisans a significant knowledge of theoretical geometry and a capability to use this information to produce new kinds of geometric embellishment (Lee, 1987).

An example that illustrates the use of Islamic star forms in art objects is a banner dating from about the thirteenth century. The star pattern invokes ideas from contemporary Qur'anic illumination and quotations from the Qur'an

(sura 61, 10-12) which promote *holy war* and promise paradise to believers (Gladib, 2000) (Figure 2.58).

The dome of the Friday mosque of Yazd (1325) in central Iran is another example of geometric decorations including the star form. The tile mosaic in the prayer hall with radiating stars on a blue ground seems to be an allusion to the starry firmament and the almighty power of God (Blair and Bloom, 2000) (Figure 2.59).

A further example is the Mausoleum of Sultan Qaitbay in Cairo, dated around the fourteenth century. This dome is regarded as a masterpiece of the increasingly refined, elaborate masonry of the late Mamluk period. Two types of decorative pattern were used to ornament this dome, an interlaced geometric star pattern and floral arabesque. The star pattern is made up of smooth lines that divide up the surface of the dome. It is laid over a delicate arabesque consisting of hollow-moulded lines that create interesting textures and effects (Gonnella, 2000) (Figure 2.60).

Also, the carving of a door panel (from Syria or Egypt) of the fourteenth century features a 12-pointed star that extends almost indefinitely by means of an elaborate geometric growth pattern. This geometric form can be applied to the surfaces of any area (Grabar, 2000) (Figure 2.61). Geometric composition on a tile mosaic decorates the principal *iwan* of the Friday Mosque of Isfahan, and dates probably from the fifteenth century. This panel is a skilful composition around a ten-pointed star (Clevenot and Degeorge, 2000) (Figure 2.62). In a Timurid Qur'an binding displaying shamsa (sun) rosettes, dating from about the fifteenth century, the design features an eight-pointed star enclosed in eight petals (Grabar, 2000) (Figure 2.63).

Squares and Lozenges

Squares are regarded as the most simple and common geometric ornaments and may be parted diagonally or inset within each other (Baer, 1998). Lawlor (1982) suggests that in geometric philosophy the circle is the symbol of unmanifest unity, while the square represents unity poised, as it were, for

manifestation. The square represents the four primary orientations: north, south, east and west, which make space comprehensible, and is formed by two pairs of perfectly equal oppositional linear elements, thus graphically illustrating the description of universal nature found in Taoist and other ancient philosophies.

Square and lozenge ornamentation is to be found on different Islamic works of art. The bricks that make up the Tomb Tower at Demavand, dating from the eleventh century, are decorated with lozenges (Baer, 1998) (Figure 2.64). Another example is a slip painted dish from Nishapur ornamented with geometric patterns and dating from around the tenth century (Baer, 1998) (Figure 2.65). Another fine example is the square forms which appear on the lustre tiles that frame the *mihrab* of the Great Mosque of Qairawan (Ettinghausen and Grabar, 1987) (Figure 2.66).

Stalactites or Muqarnas

One of the most distinctive creations of Islamic architecture is the *muqarnas* architectural element, and one of its most unique expressions is the *muqarnas* dome or semi dome. Domes have been identified in the Near East Sassanian periods, but may have existed before this. However, the *muqarnas* dome appears to be an Islamic invention that may not have existed in any other civilisation. Whether created from materials, such as wood, stucco, brick, or stone, *muqarnas* vaults are distinctive features of medieval Islamic architecture from Iran to Spain (Tabbaa, 1985).

The *muqarnas* stalactite or honey comb is regarded as the single most common architectural element in ornamentation. Nevertheless, this type of ornament is an architectural and decorative element whose origins are unclear. Viewed as a section of a vault that is used in combination with other identical or related elements, it creates a three-dimensional ornamental effect, which can be scaled to any need from a vast niche or entrance to the smallest construction or decorative detail (Grabar and Hill, 1964).

Burckhardt (1976) suggests that the muqarnas or stalactites have both a static and rhythmical character, as is brought out most clearly by transposing the relationship of dome to base, or sphere to cube, back to its cosmic model, which is none other than that of heaven to earth, when heaven is characterised by its indefinite circular movement and earth by its polarisation into such four-sided contrasts as hot and cold, humid and dry. The honeycomb of muqarnas linking the cupola to its quadrangular base is therefore an echo of the motion of heaven in the terrestrial order. The immobility of the cube element may equally have the sense of completion or the fixed and timeless state of the world, befitting to the architecture of a sanctuary.

In Tabbaa's (1985) view, the muqarnas dome appears to be an architectural expression of Islamic thought. The muqarnas dome originally appears in Baghdad in the early eleventh century. According to al-Qadir (cited in Tabbaa, 1985), the usual smooth dome resting on squinches could no longer express the new Muslim view of the cosmos. It was too solid and continuous, its particles were imperceptibly small; and it was clearly supported by squinches. The dome would have to be divided into small but distinct units arranged in a complex manner (like the universe), supported and kept whole by the will of God. This view echoes that of Al-Baqillani (1013) who adopted atomistic theory, known as the theory of atoms and accidents:

> *" the world . . . is composed of atoms and accidents; accidents [cannot] endure within matter (jawhar) for longer than an instant, but are continuously being changed by God. It follows then that the attributes of matter (colour, luminosity, shape, etc.) are transitory accidents which change according to the will of God and that even the preservation of matter - the collocation of its atoms – requires the continuous interference of God"* (Tabbaa, 1985, p. 69).

Hillenbrand (1994) points out that what is particularly interesting about the *muqarnas* dome is that the Muslim rejection of human and animal motifs due to their association with idolatrous acts, encouraged a strong focus on abstract

ornament. Islamic artists repeated individual units on columns, arcades, and the cells of a honeycomb vault (*muqarnas)* and applied various forms of adornment such as the floral, geometric, and epigraphic. The craftsmen who produced this type of ornament experienced a sensuous pleasure in the mixing of colours, materials, textures and design motifs.

Tabbaa (1985) suggests that Muslim philosophers and theologians dedicated significant consideration and attention to three important points: the nature of the material, the cosmos, and the relationship between these two to God. The Aristotelian theory of an eternal cosmos was discarded by most Muslim theologians from the early periods, because it contradicted the Islamic perception or understanding of God as the absolute and eternal. Muslim theologians, from very early and with hardly a single exception, accepted the atomic view of matter, space and time, and built upon it a theological edifice over which God presided as absolute sovereign.

In Islamic architecture, the *muqarnas* was the preferred ornamentation for decorating internal large niches, such as monumental gates. It is probably the only ornamental form to take full advantage of the spatial relations within and around a niche, whereas other pattern types remain mostly two-dimensional. Even when interpreted in relief on a curved surface, the several small niches comprising the *muqarnas* are basically three-dimensional. They do not simply beautify the concave shell, but transform it into something far more intricate, for example, the projecting boundaries and receding curves of the *muqarnas* catch the light in ways that vary with the time of day and the location of the viewer (Trilling, 2001) (Figure 2.67).

Some examples of the historical development of the *muqarnas* will be referred to briefly. A good example is the *Muqarnas* dome over the tomb of Abd al-Samad at Natanz, which dates from about the thirteenth century. The tomb is a square room with a shallow recess in each of its walls covered with a spectacular muqarnas vault in which twelve tiers of plaster like elements appear to be superposed under a pyramidal roof (Hattstein and Delius, 2000).

Another example is the mosque of Bibi Khanum in Samarqand (1398). The large dome over the prayer hall is beautifully ornamented. Its smooth turquoise cap is faced with embossed tiles, bands of various types of ornaments, and inscriptions in cursive script (Stierlin, 2002) (Figure 2.68).

One outstanding example of the *muqarnas* is the hall of the Two Sisters in the Alhambra Palace. The architecture and ornamentation of this hall is striking. It supports a superb *muqarnas* dome that rises over the entire central part of the room. It is made of plaster and is based on a central star motif, developed by overlaying individual, multicoloured prisms at different levels. Also, in the Alhambra palace, the ceiling of the hall of the Abencerrajes, with a wonderful dome rising above, is based on a central star motif that is made of *muqarnas* prisms (Bermudez, 2000) (see Figures 2.69 & 2.70).

A further example is the vault in Hasht Bihisht from the Safavid era in Isfahan around the sixteenth century. A splendid stucco *muqarnas* vault has been installed under the roof. The niches of the vault are decorated with ornamentation and painting (Blair and Bloom, 2000) (Figure 2.71).

In summary, the above discussion shows that geometric ornament is an important element in Islamic art. It can be found in a wide variety of media, including manuscripts, metals, ceramics, stucco, stone, wood and glass. Its patterns vary in their complexity and design, from simple shapes to very intricate stars and polygons. Repetition and coverage of the surfaces of art objects are the main features of geometric patterns in Islamic art and architecture. The Muslim artist used geometric ornamentation creatively, in ways that do not exist or appear in other civilisations.

HUMAN AND ANIMAL FIGURAL REPRESENTATION

Animals, imaginary creatures and birds may be regarded as one of the main features of Islamic ornamentation elements. Here, the Islamic attitude towards images has considerable significance. Islamic opposition to and condemnation of making images originated from the belief that God is the creator and He

alone is able to create living beings. Therefore, the role of the artist who fashions and depicts human and animal figures is debatable.

Islam's view of the representation of living beings has been debated and interpreted in various ways. Islam came to liberate humanity from idolatry and from worshipping statues made of stone. On the Arabian Peninsula, idols were placed in or around the sacred Ka'ba in Mecca, and the Prophet Muhammad destroyed them (Burckhardt, 1976).

Religiously, the issue of human and animal representation in Islamic art and opinions may be viewed as vitally important. In this section, this issue is discussed because of its importance and sensitivity, with respect to three aspects:

1. The first aspect: The verses of the Holy Qur'an as it is the first source of legislation for Muslims.

2. The second aspect: The Prophetic traditions (the sayings, actions, and approvals of the Prophet Muhammad, peace be upon him) as they are the second source of legislation.

3. The third aspect: The opinions of researchers on Islamic art, and especially Western researchers, who, in most cases, perceive this issue in a way that differs from the truth.

The First Aspect: The Holy Qur'an

The Arab tribes before Islam used to practise different forms of religion, including paganism. They had a strong belief in the power of idols and their worship of them was deeply rooted in their customs and traditions. Some of these idols had the features of living beings, especially human beings, even though they were made of stone and lacked the ability to see, hear, talk, etc. This was the general situation of Arabs and their worship of idols before Islam. After Islam appeared, many verses in the Qur'an pointed to the irrationality of idol worship. The idols in the Ka'aba were destroyed by the Messenger. He ordered his companions to destroy them wherever they found

them and sent them out of Mekka to destroy idols in different places (Hussain, 1996b). The Holy Qur'an refers to idols and acts of worship in several places. Stories about idols are accompanied with dire warnings, and it is stressed that worship of them belittles the clear call to worship Allah. The Qur'an also prohibits the making of idols and praying to them, as in Sura (chapter) Nuh (15-14) and Sura Al- Shu'ara (69-73) (Hussain, 1996b).

The Second Aspect: The Prophetic Traditions (*Hadith*)

The second source for legislation in Islam is the Prophetic Traditions (*Hadith*) which prohibit the making of images and pictures and promise those who make them the most severe punishment (Hussain, 1996b). These include the *Hadith* related by the Prophet that Allah said: "And who is in wrongdoing than the one who goes making creatures like my creation, let them create a seed or an atom [if they can!]."

In another Hadith, the Messenger said: "Angels will not enter a house in which there is a picture or a dog." Further, in another Hadith, Aishah (the Prophet's wife and the mother of believers) said: The Prophet returned from travel and I had put up a curtain that had pictures on it across a window; when the Prophet saw it, he pulled it down and said: "The most severe in punishment among people in the Day of Judgement are those who mimic the creation of Allah."

The Third Aspect: The Opinions of Western Researchers on Islamic Art

It should be noted that Western Islamic art researchers and historians differ in their explanation of the Islamic attitude towards painting or the representation of human and animal images. Their points of view and opinions often conflict. They can be divided into different groups, each proclaiming a consideration against another group. Some argue that a statement clearly prohibiting the painting and representation of figural images is not to be found in the Qur'an, while others frequently repeat that the Qur'an is silent on this issue. A third group argues that Qur'anic verses prohibit the worshipping of idols but not the

depiction of figural images. Every group attempts to emphasise its claim by supporting their argument with evidence or verses from the Qur'an.

Generally, in discussion of Islamic and ornamentation, the question that seems to cause most difficulty is related to the lawfulness of the representation of images of human beings or other figural images (Brend, 1991). Brend states that it is not precisely the case, as is sometimes stated, that the Qur'an forbids representation. She refers to a key passage in *surah* [5: 90]: 'O ye who believe, wine and games of chance and idols and divining arrows are an abomination of Satan's handiwork; so avoid it.' On the other hand, the traditions reporting the words and actions of the Prophet and collected after his death tend to show him as disapproving of images. The doctrine eventually evolved that the painter or sculptor is guilty of trying to usurp the creative activity of God.

Ettinghausen and Grabar (1987) claim that on the aesthetic of art works, such as painting, sculpture, and other arts, the Qur'an appears to be silent. However, it does include a number of statements and attitudes whose effects on later Islamic art was considerable. Some Qur'anic passages and statements are clear with respect to idolatry: they condemn it. As Islam developed, compared to earlier centuries, figures had attained a meaning far beyond their significance as artworks. They had come to be imbued with mystical, theological, political, royal, and intellectual significance and resonance. This explains the hostility to idols, and an essential precept of Islam, its rejection of magically endowed figures, ultimately led to a resistance to the representation of all living beings.

Clevenot and Degeorge (2000) indicate that throughout Islamic history, jurists have often expressed their thoughts and opinions on the representation of human and animal images on Muslim art objects and architecture, basing them on an explanation of different Qur'anic passages and attributing them to certain *hadiths* (sayings or acts of the prophet). Some argue that the representation of human and animal figures is contrary to the will of God and therefore deserves condemnation. They also contend that reproducing human and animal images can be likened to endowing them with the breath of life and

therefore similar to the act of creation of God. Further, the *hadith* state: "Angels will not enter into a house where there is a dog nor into one where there is an image" (p.125). Thus, as a result of this, Muslim artists likely rejected the depiction of human and animal images in their art. Nevertheless, this rejection does not appear to have been followed in every part or at every period of Islamic history.

With regard to interdictions concerning the figural depiction of animated beings in the Qur'an and *hadiths*, Papadopoulo (1979) states that it comes as a surprise to find there exists not a single interdiction against images, paintings, or statues of living beings. The only reference of any kind solely concerns the idols worshipped by pagans, and these constitute no more than three passages, which refer to other prohibitions as well. Ettinghausen (1976b) agrees with Papadopoulo that there are no specific verses that prohibit the figural arts. However, a common attitude towards statues can be discerned from a few passages in the Qur'an and *hadiths* where it is obvious that the Prophet Muhammad correlates statues with pagan idols, and refers to Allah as the true 'fashioner', and the only one able to apply the breath of life to his creation. In the *hadiths*, it is stated: "on the Day of Judgment the human artist, who, in his hubris, has dared to make images, will be called upon to instil life into them; naturally he will be found wanting and be condemned".

Other researchers on Islamic art, such as Leaman (2004), deny that Islamic law or the Qur'an specifically repudiate the representation of human and animal figures. However, there are *hadiths* that are critical of images and the practice of idolatry. The notion of praying to images appears to be totally prohibited. This is seemingly the reason for the lack of images in divine buildings such as mosques and places of worship.

While discussing the representation of figural images in Islamic art and architecture, it is necessary to refer to the debates within Islam which arise as a result of different attitudes to images and art according to Sunni and Sufi traditions, particularly how these perspectives have influenced Islamic art and ornamentation. According to Sunni tradition, the representation of any living

being is frowned on out of respect for the divine essence contained within every creature. If the prohibition against the depiction of images appears not to be observed with equal rigour in all ethnic groups, it is strictly upheld within the liturgical framework of Islam. Anticonism became by some means an inseparable concomitant of the sacred; it is yet one of the basics, if not the most important foundation, of the sacred art of Islam (Burckhardt, 1976).

Sufi traditions, on the other hand, consider the different forms of ornamentation, such as calligraphy, vegetal and geometric patterns, as forms of expression composed of continuous movement that begin with the ultimate creative act of God and are one of the most important ways of providing evidence of His existence. Also, the constant wavering and curling lines that appear initially derived from the complex patterns, possibly refer to ideas of eternal movement and variety of shapes, both of which can serve as a notion of the eternal God (Leaman, 2004).

An important point that should be stressed here is that, in spite of the Qur'an's and *hadiths'* rejection of the representation of living beings, animal and human forms did appear in Islamic architecture, due to a number of possible factors. These include external cultural influences or the influence of local traditions, which may account for the human and animal images in the illustrations of Islamic manuscripts. Moreover, the use of human and animal forms in ornamentation that can be observed in the designs of frescos, sculptures, mosaics, and ceramics in Muslim architecture throughout the Islamic world seems to merit special consideration due to its plastic qualities and the social, political, magical or sacred meanings it expresses (Clevenot and Degeorge, 2000).

In Islamic art, the designs of human and animal figures in ornamentation are varied. Artists modified and designed human and animal figures, using an enormous range of figural designs. In Islamic architecture, figural forms are found on the surface adornment, as part of the applied patterns of textiles, and, sometimes, in sculptural shapes. Also, ornamental images are closely linked to the narrative painting tradition, where text illustrations present sources for

decorative subjects and designs. What is particularly interesting about figural images is the utilisation of legendary creatures in Islamic art and architecture. Some mythical motifs, such as harpies (female-headed birds) and griffins (winged felines), may be drawn from pre-Islamic mythological sources, while others were formed through the visual manipulation of figural shapes by artists (MMO, 2004).

In the context of discussing figural representation as an ornamental element in Islamic art and architecture, many questions may arise with reference to the issue of human and animal figures that need answers. However, the problem is that, due to few available materials and lack of studies that discuss the development of human and animal figures, whether from the aesthetic perspective, the spectator's reaction to them, or artists' attitudes towards the utilisation of human and animal figures in art, the researcher will raise only the following questions. Artistically, did the artist who was attracted to or fascinated by human and animal images, due to his boredom with Arabic calligraphy, geometric and vegetal styles and forms therefore desire change? Did artists create images of human beings or animals out of a desire to imitate other civilisations' arts? Did the Muslim artist experience the joy of creativity and perfection when he sculpted, drew, and designed images of human and animal forms, or was he merely copying nature, the human, animal, and vegetal, that God as Creator had created? Did the artist, particularly in creating human living figures, view himself as a servant of the Islamic religion and his community, so that he used his skills and imagination to express wonder and admiration of the powerful One God? Did he ignore the dictates of the Islamic religion and its principles? To answer these questions, the issue of figural images will be discussed in chapter four: the aesthetic values of Islamic ornamentation and chapter six: the artist and the spectator.

The Development of Human and Animal Figural Representation

With regard to the development of human and animal images, earliest Islamic coinage had figurative ornamentation similar to that on earlier Byzantine and Sasanian coins. But after the currency reform of the Umayyad caliph Abd al-Malik in the 690s, coins were decorated with inscriptions in Arabic (Irwin, 1997) (Figure 2.72).

A characteristic feature of early Islamic ornamentation, particularly in the Umayyad period, is that human and animal figures in stone and stucco existed in secular buildings (Ettinghausen, 1976b). A possible explanation for human representation in the Umayyad period may be Umayyad princes' desire to be recognised as powerful human rulers. An example that illustrates the power of the Arab princes is the human representation found in the Khirbat al-Mafjar palace. The striking six heads in a flower on a dome supported by four winged horses and a procession of birds probably conveyed some kind of cosmic symbolism (Ettinghausen *et al.*, 2001) (Figure 2.73).

Also, during the early period of Islam, mural paintings and figurative images in architecture were part of secular life. The palace of Khirbat al-Mafjar, which dates from the eighth century, reveals a wealth of carved and moulded stucco adornment, sculptured stone reliefs, and figural fresco paintings (Hattstein and Delius, 2000). Another example of living being representation from the Umayyad palaces is the pavement fresco in the palace of Qasr al-Hair al-Gharbi, Syria, which depicts a horseman hunting with a bow and arrow, perhaps indicating the influence of Sasanian art on Umayyad art and architecture (Clevenot and Degeorge, 2000) (Figure 2.74).

Importantly, human and animal depiction mostly appeared in princely residences and not in mosques or sacred buildings, places assigned for worship. Animal figures, such as gazelles, antelopes and bears eating fruit or playing a stringed instrument, birds, and human figures are painted in a diaper technique on one of the vaults of Qasr Amra in Jordan. Lions, griffins and

other real and imaginary animal motifs appear on the caliph's residences and baths which are decorated with many animal images (Baer, 1998). A good example that illustrates the early decoration of Islamic palaces is the throne room of the ceremonial hall of the bathhouse in Khirbat al-Mafjar palace. It contains a mosaic floor with figural depictions. It shows a tree with luxuriant foliage, bearing fruits among its branches. The design of the tree, with different colours used in its leaves, trunk, and branches is evocative of the trees in the mosaic of the Great Mosque of Damascus. There are groups of animals to right and left of it. On the left side, a pair of gazelles are plucking leaves from the branches, whereas on the right side, a gazelle is seen falling to the ground as a lion pounces on it. However, it is believed that the depiction of the gazelle is romantically correlated with a love story in the caliph's life. It is suggested that he fell in love with a girl as graceful as a gazelle named Salma. However, the caliph's happiness with his beloved wife did not last long as she died after only a few months of a very happy marriage. It is suggested that the images of the gazelles under the fruit tree reflect this unhappy incident in his life (Enderlein, 2000) (Figure 2.75).

Figural representations as ornamentation also appear on other princes' palaces, such as the portal façade of the Mshatta palace in Jordan. They are given prominence on polygonal towers, and appear in lavishly worked relief ornamentation extending to the next towers on both sides. A zigzag band over the surface of the facade separates it into triangles consisting of large rosettes. The remaining background of the wall is covered with delicate reliefs. It is decorated with a range of animals and fabulous beings placed among twining vine tendrils. On the right side of the façade, the adornment is restricted to vine tendrils and does not illustrate living creatures. However, on the left side of the façade, animal creatures appear to be frequently depicted (Enderlein, 2000) (Figure 2.76). Importantly, the change in ornamentation of the Mshatta's palace's façade has been interpreted in different ways. One possible explanation is that the artists employed on the relief of the façade may have converted to Islam during their work and, therefore, no images of living beings

appeared in their later work. Another suggestion is that perhaps the site of a former mosque lies behind the façade (Enderlein, 2000).

A remarkable alteration in the depiction of human and animal figures appears in the Bevelled style in Egypt. At the end of the ninth century, the Samarra third style culminates in the wood carvings in Tulunid Egypt, where most of the motifs are identical with those of the Iraqi style (Ettinghausen and Grabar, 1987) (Figure 2.77), for example, a flat carved wooden panel ornamented with a bird form (Grabar, 1992). According to Trilling (2001), an Islamic woodcarving of the late ninth century seems at first glance to depict a bird, but the more closely it is studied, the more the freeform character of the motif asserts itself, while the image seems to melt away.

The development of ornamental figural representation is characterised by almost a different style. Animal ornamental forms contain a range of hunting species, including birds of prey and wonderful grotesque creatures. Whether arranged separately, heraldically paired, or associated in narrow bands, they decorated Persian twelfth to thirteenth century brass vessels and ceramics. Also, they appear engraved on eleventh to twelfth century Egyptian, Spanish and Sicilian ivories, on painted Sicilian ivory caskets, and appear to be woven into Persian and Anatolian silks (Baer, 1998). A good example that illustrates the most familiar themes in the ornamental arts of the later Fatimid period, is an ivory with a hunter and harvester dating from about the twelfth century in Sicily. A labourer carries a pannier full of grapes on his back, above him a hunter spears a lion. The bodies are delicately rounded, and there appears to be a subtle interplay among the two levels of relief (Ettinghausen and Grabar, 1987) (Figure 2.78).

Between the twelfth and fourteenth centuries, the most important feature of the development of figural ornament is the appearance of imaginary animals or human headed creatures, for instance, sphinxes and harpies, which appeared on ceramics and textiles produced in Egypt in the eleventh and twelfth centuries. By the middle of the twelfth century, they had been adopted with other fabulous beings, such as winged lions, by potters, metalworkers and

weavers in Iran. Among the various compositions, perhaps the most common are the heraldic creatures. Represented in pairs, they either face each other or flank a plant device. They look or turn backwards, and may be physically linked or share a body member. In winged lions, sphinxes or griffins, the tails and wings serve as a junction. Hares are joined by their long ears, and harpies or loins have a common head (Baer, 1998). There is a ceramic bowl from Egypt dating from about the eleventh century. The ornamentation of this bowl illustrates two harpies with intertwining wings and a stylised tree among them. The background is ornamented with small spiral adornments (Mazot, 2000) (Figure 2.79).

What seems to be astonishing about the development of animal forms is that the animal shapes and designs change. Another type of ornament that appeared on metal objects and ceramics was popular between the twelfth and fourteenth centuries. The animals tend to rotate around a central axis. The animal designs occur in three varied forms. In the first type, the animals are located centrifugally, with their wings, ears or necks meeting or intersecting in the centre. In the second type, the centrifugal artwork is retained, but the animals are not connected. In the third type, the design consists of birds that fly around a central device (Baer, 1998). A good example of an animal wheel which appears in metalwork in the second half of the twelfth century, is a metal tray in which four rabbits walk in a circle around a central point (Ettinghausen, 1976a) (Figure 2.80).

Another familiar animal design appears in friezes, where quadrupeds or animals of the hunt either chase each other or are associated in a decorative style. During the early centuries of the Islamic period, these friezes were generally composed of animals of the same species, whereas from about the twelfth century friezes of different species become dominant. The animals are designed in narrow bands, which either adorn the edge of an object or have a structural role in the composition of the whole ornamentation (Baer, 1998) (Figure 2.81).

In the course of the fourteenth century, the artistic character of figural ornamentation changed because of two reasons. First, the emphasis of the ornamentation moved towards epigraphy and away from figurative designs, for example, in Spain, North Africa, and in Mamluk, Syria, and Egypt. Second, new ornamental designs of birds and types of magnificent creatures appeared from East Asia as a result of the Mongol invasion, such as the Chinese phoenix, dragon, and qilin. Naturalistically drawn flying cranes or geese taken from Far Eastern art form friezes. Parakeets, swans, and swimming ducks are seen between the foliage of a background design, and phoenixes in full flight with windswept tail feathers become an important theme on tiles and other media (Baer, 1998). According to Trilling (2001), the Mongol conquests of the thirteenth century brought China and the Islamic Middle East together under a single power with a keen interest in cultural hybridisation. It represents an advanced stage in the complex process by which the Muslim world absorbed themes and conventions from Chinese art. The sensitive use of shading, the shape of the flames which outline the composition and certain animal types, notably the dragon, are Chinese.

Finally, in the sixteenth century, qilins, dragons, phoenixes and Far Eastern birds constantly inspire not only Persian, but also Turkish and Moghul art. Produced and designed in a range of forms, they may be found in book illuminations and depicted in the margins of paintings and on art objects, for instance, ceramics, metalwork, carpets and rugs (Baer, 1998). An example that illustrates the influence of Far Eastern ornamentation on Turkish art is a drawing from about the fifteenth century, which is connected with the *saz* style. Two monsters, particularly a hostile dragon, are designed in ardent confrontation. They appear to be surrounded by *saz* plants. The undulating body and clawed feet of the monster to the right, monster heads, yawning mouths, and the vigorous calligraphic lines are reminiscent of fifteenth century Persian and Central Asian dragon monsters (Baer, 1998; Trilling, 2001) (Figure 2.82). Another example of Far Eastern ornamentation is found in the Topkapi Palace in Istanbul, in two underglazed-painted tile panels from the Circumcision Room, which are probably from the fifteenth century. The

design illustrates birds and Chinese deer that appear entangled in a scroll of feathery leaves and fantastic complex flowers. These creatures walk one behind the other and bite into the leaves. The upper corners of the tiles have been ornamented with white chinoiserie clouds on a dark blue background (Bloom and Blair, 1997) (Figure 2.83).

In summary, it may be concluded that in principle the Qur'an and *hadiths* forbid the creation of images or sculptured representations of living beings. Despite the religious interdiction against the depiction of living forms, figurative representations emerged in Islamic art, possibly due to the Islamic world's exposure to cultures that already had a tradition of depicting living being images in their art and which consequently influenced Islamic art. Most Islamic figurative art exists in secular palaces and not in sacred or religious buildings. Western researchers agree that there are no verses in the Qur'an that specifically prohibit the depiction of human figural images. Also, they allege that the Qur'an, which is the main source of Islamic law, does not criticise the representation of human and animal figures, but unequivocally forbids them being worshipped. The final point is that contact with non-Islamic cultures would seem to be an important factor influencing Islamic ornamentation elements since Far East animal motifs are commonly employed in most Islamic art objects. Nevertheless, interest in this type of ornamentation appears to later decline.

CHAPTER THREE

ISLAMIC ORNAMENTAL METHODS

AND

THE MEANING OF ISLAMIC ORNAMENT

INTRODUCTION

An understanding of the various artistic methods and techniques which Islamic artists used to create wonderful complicated ornamentation, whether in Islamic art or architecture, is important. In order to complete the picture of Islamic ornamentation, this chapter will illustrate the methods that were utilised in forming Islamic ornamentation and then will focus on the meaning of Islamic ornament.

ISLAMIC ORNAMENTAL METHODS

The scope and nature of the different motivations and various ornamental methods that Islamic artists might have had available to them for creating ornaments and abstractions is a significant matter worthy of discussion. Al-Faruqi and Al-Faruqi (1986) point out that much has been written about the abstract nature of Islamic art, and thus about its rejection of figural images as significant material for its creative expressions, however, little attention has been paid to the methods Muslim artists employed to create abstract forms and transfigure nature in their arts.

According to Judy (1996), Islamic abstract ornamentation seems to have a profound meaning as it is filled with a productive artistic spirituality in terms of symbolism, abstraction, and its geometric surface. In this ornamentation, some of the elements appear to be supporting others, and expand in different directions in a swift motion that realises a symmetrical rhythmic motion. It is suggested that the hand, which created these ornamentations, was skilful, and was able to set the different positions of the abstract forms in rapid motion.

In selecting the continuous repetition method, Atwan (1996) suggests that the ornamental units are continuously repeated without following a specific structural order. Wisdom and skill are joined, as well as time and place, light and darkness, and the mental with the physical, through an abstract language based on ideological, philosophical and aesthetical perspectives, which are deeply seated in the eternal Islamic structure. Therefore, in order to understand

Islamic creative identity, its peculiarity and purity of origin have to be understood from these three perspectives.

Overall, the methods that Muslim artists used to create Islamic ornamentation in Islamic art and architecture are characterised by complex and varied methods, which reflect the highly creative skills of the Muslim artist, and his great expertise and talent in producing very different arts. Islamic ornamental methods are discussed in turn below:

Overlay method

One technique common to the different Islamic arts is to overlay the essential materials of any object or building with an ornamental covering of infinite patterning. The overlay method is regarded as one of the most significant and prevalent devices for transfiguration of materials in the Islamic arts. It conforms to the pervasive cultural demand for abstraction from and denaturalisation of the created world (Al-Faruqi and Al-Faruqi, 1986).

As regards Islamic architecture, monuments can be revealing about the overlay technique. Almost every important monument or simple structure includes evidence of such transfiguration. The actual construction materials for a building, for instance, a mosque or tomb, are never emphasised. This would be excessively distracting to the aim of Islamic art, that of reminding the viewer of a divine realm that is totally other than nature. A building might be made of brick or rough stones but no Muslim architect worthy of his profession would draw the attention of the beholder to the base materials with which he works. Instead, he may emphasise the transfiguring patterns with which they are overlaid (Al-Faruqi and Al-Faruqi, 1986).

Covering the inherent qualities of the materials

The other technique appears to be the transfiguration of materials through Islamic ornamentation in order to enhance denaturalisation. This involves the treatment of materials in ways that reject any highlighting of their naturalistic qualities, thereby making them more abstract or stylised. For example,

ceramics for both small objects and architectural ornamentation can be treated by glazing that gives the finished lusterware product a metallic sheen and appearance (Al-Faruqi and Al-Faruqi, 1986).

Multi-unit structure technique

The multi-unit structure technique, or the infinite pattern, is composed of distinct parts or modules combined in an additive and repetitive form. Each unit maintains an emphatically separate identity, though it may be joined with other units to create a larger combination. This structure is widely used in Islamic art. It is found on the decorations of ceramic or metal vessels, on weapons, on the ornamental passages or illuminations of a Qur'an or other book, on carpets, fabrics, and on the ornamental overlays of architectural monuments (Al-Faruqi and Al-Faruqi, 1986).

The modules of a multi-unit infinite pattern are often organised in some form of second level combination. This may entail a symmetrical arrangement of units to right or left or up and down from a central point, or it may take the shape of a combination of modules into a ring structure (Al-Faruqi and Al-Faruqi, 1986) (Figure 3.1).

Meander structure

The meander arabesque is a technique for conjoining complicated structures in which a never-ending succession of calligraphy, leaves, flowers, tendrils and abstract forms follow each other but are not readily divisible into the separate or distinct modules of the multi-unit arabesque. The motifs might be mounted on a trailing vine or perhaps they provide the track for a continuing evolution. They defy any assignment of beginning or middle, or of climax to the pattern. This continuous structure of motifs can be found in the arabesque panels for small objects as well as in panels or borders for architectural design units (Al-Faruqi and Al-Faruqi, 1986).

Movement of the ornamental unit

A characteristic of other ornamental methods appears to be the movement of the ornamental unit. It is strictly the illusion of movement in which the eye is encouraged to follow a line or series of patterns. The Islamic artist may design beautiful abstract ornamental units and motifs using different methods, such as repetition and symmetry. According to Atwan (1996), Islamic ornamentation gains "ornamental unity" by an infinitely strong movement, and the ornamental unity utilises:

Monotonous repetition: the same unit is repeated to convey sensational movement that harmonises with human sense or feelings.

Alternate repetition: between movement and silence, between stabilisation and agitation, which, in turn, suggests a human experience that is alive, controversial, dynamic, and not stable.

Integrative repetition: where two or more conditions are repeated in one or more ornamental units. This adds to the sensational movement, architectural harmony, and equilibrium between motion and silence.

Total symmetry: this is realised through continuous sensational movement of the units and signifies the value of the fight of good against evil.

Baer (1998) mentioned three standard techniques that Islamic artists used to produce ornamental forms and patterns in Islamic art: framing and linking, change and counterchange, and geometric interlocking.

Framing and linking

This method produces an overall pattern that draws together the main motifs and arranges them into medallion forms, panels and cartouches, thereby correlating them and giving the pattern an internal structure. The organisation of these frames and the consequential shape of panels or medallions seem to be closely associated. The correlated enclosures, for instance, appear to be a simple rope of two or three warped strands or guilloche bands, that when

loosened produce medallions that may possibly be filled with other ornamentations. These distinctive Islamic arrangements or round enclosures not only share a general outline and are correlated with smaller loops, but are also warped into the upper and lower boundaries of the ornament style (Baer, 1998).

Change and counterchange

Another technique employed in Islamic ornament to achieve continuity in ornament tends to be the reciprocal repetition of basic designs, which produces coherent patterns that can be applied to larger surfaces as well as to closed panels and frames. This technique was used extensively in the third style of wall decoration used at Samarra in the ninth century. This type of ornament prevailed until the fourteenth century and may be considered one of the earliest expressions of an Islamic aim to fill all available space. In frames or borders created by this technique, the positive and negative forms often tend to be differentiated by colour, be it in the shape of dark and light stone, glazed tile or other material (Baer, 1998).

Geometric interlocking

Another characteristic appears to be the geometric interlocking technique. In this method, a number of patterns are repeated to give the impression of infinity (Al-Faruqi and Al-Faruqi, 1986).

Three types of methods are linked to the geometric interlocking technique:

The tile method

The tile revetment method was adopted by artists for filling empty spaces and producing a general interlinked design. This method involves identical or different geometric shapes with straight linear outlines, which tend to be closely arranged next to each other so that there seem hardly any spaces left. An example is a huge lustre painted jar from Kashan in Iran, from the second

half of the thirteenth century, where the body is totally covered with dovetailed geometric forms such as hexagons (Baer, 1998) (Figure 3.2).

The strap method

This method produces geometric patterns similar to those produced by the tile method. In the strap style, constantly crossing and overlapping bands determine the composition of the pattern. The size of the interspaces varies, depending on the density of the network. More intricate strap methods create a greater variety of geometric enclosures. Further, in more complex patterns, the interspaces seem to be smaller than in the tile style, and the visual effect differs since the tiling draws further attention to the panels, while the strap method draws attention to the lines that create the panels. These patterns are widely used in different techniques and media, for example, carved wood, stucco, brick and stone, painted paper and clay (Baer, 1998).

One example which illustrates the strap style is the cenotaph of the mausoleum of the Imam al-Shafi'i in Egypt (Figure 3.3). Another example is from the Mamluk period. A bronze plated door at the entrance to the mausoleum of Sultan Qala'un is ornamented with geometric strap work, which produces an overall star pattern with radiating hexagons. A further example is the arrangement of intricate bands on the bronze-plated door of the Khanqah and Mausoleum of Baybars al-Gashankir in Cairo, which is based on twelve and nine stars and features in its polygonal interspaces delicate arabesques and oval knobs, whereas the centre of the five main stars is accentuated by large round bosses (Baer, 1998).

The stratigraphic method (three-dimensional ornament)

Islamic artisans employed this technique, in which up to four ornamental systems and methods are arranged in many sets, one on top of the other and in staggered lines to produce an illusion of depth and plasticity. In some cases, the ornamental schemes are interlaced to such a degree that they seem to run over and under each other. Importantly, in this method the third-dimension appears to be enhanced, in the case of wood and ivory, by carving in relief at

various stages, while in painting or tile mosaic, allusion to a third-dimension seems to be brought about by colour, darker colours giving an illusion of extra depth (Baer, 1998). One of the best examples is the three-dimensional adornment on the dome of the Mausoleum Qayitbay in Cairo. It is composed of two separate styles that contrast both in movement and surface treatment. The first style is the arabesque ornament that appears to be set against a simple ground, the other style is a geometric strap work method that lies above the arabesque (Baer, 1998) (Figure 3.4).

THE MEANING OF ISLAMIC ORNAMENT

In discussing the various ornamental methods that Muslim artists utilised in Islamic art, an understanding of the meaning of Islamic ornament is also useful, for example, the link between the repeating pattern and the infinite, between mathematical order and divine order. Islamic ornament, whether vegetal, geometric or depicting human or animal figures, in either Islamic art or architecture, appears to have particular meanings or symbolises certain ideas or concepts, such as well-being or cosmic power. However, as Baer (1998) points out, it is difficult determine whether Islamic ornament communicated explicitly or implicitly. A good understanding of Islamic ornamental meaning can be obtained by detailed study not only of the official and technical features of ornamentations, but by considering the local, social and theological differences between the artists who produced and beheld them. Notably, Islamic ornaments may have been appreciated by some due to their being aesthetically attractive, or inviting contemplation, whereas others may have interpreted a similar style metaphorically or symbolically, and associated it with sacred, magical or other meanings.

In general, the diversity of adornment and colours may be regarded as one of the main factors that contributes to the beauty of Islamic ornamentation, whether employed in Islamic art or architecture. Stierlin (2002, p.268) comments: "luxuriant motifs make the mosque into an enchanted space, and more [like the] garden of Paradise. The leaves and flowers with which the building is decorated suggest the eternal spring of Eden. In the mosque, this

immortal, unchanging vegetation is a symbol of eternal life". Clevenot and Degeorge (2000, p.45), refer similarly to the "azure robing that transfigures the ordinary brick and the luxuriant plant motifs that offer an image of the heavenly gardens which have been promised to the devout Muslim".

In considering the symbolism of Islamic ornaments and their meanings, what about the utilisation of human and animal figures in Islamic architecture? Do they convey a particular meaning or carry particular messages? Mahdi (1983) indicates that if one examines the literature on Islamic philosophy in order to find an account of Islamic architectural symbols and their meanings, the search will reveal written sources that indicate that the over-arching concern of Islamic philosophy is to find out what is true always and everywhere, and to discover the principles that govern temporal and local variations and change insofar as these are rhythmic or cyclical or the products of the interaction of permanent factors. According to Brend (1991), on this matter, the important characteristic feature of Islamic art seems to be its particular treatment of symbolism, in other words, how the symbolic meanings of Islamic ornaments are conveyed and expressed. In the early centuries of Islam, particular symbolism was found in the decoration, for example, the repertoire of images expressive of the ruler's power. In the field of animal symbolism, creatures may be used to denote distinct qualities and attributes. The best example is the lion which, as in other cultures, is often used to represent royalty. However, we cannot be sure how a metaphor is intended, for example, whether a lion employed as the mouth of a fountain is meant as an imitation of classical models, or does it more probably mean that the water is fit for a king to use. The appearance of birds in art objects, may suggest luck, pleasure or may simply be ornamental elements.

Islamic ornament meanings have been categorised as invoking blessings possessing metaphoric qualities, and as emblematic. Each will be discussed in turn below.

1. Ornaments Invoke Blessings

Fruit and Vegetables

Ideas and themes of well-being whether in this world or the next, frequently appear to be connected with vegetal designs, such as blossoming or fruit-bearing trees irregularly flanked by imaginary or real animals and birds, palm trees, vases of flowers, blooming bushes. None of these designs is automatically invested with meaning, but under certain conditions these configurations retain or are recharged with connotations close to those connected with the Tree of Life in ancient civilisations (Baer, 1998) (Figure 3.5). According to Hillenbrand (1994), vegetal ornament, such as the arabesque pattern, is frequently interpreted in a symbolic religious sense to refer to Paradise and God.

Flowers

Other ornaments that convey well being in this world or the next seem to be flowers. It has been suggested that since flowers are considered an essential element in any garden, they appear as the most ordinary visual expressions not only of the earthly, but also of the celestial Garden of Paradise (Baer, 1998), (Figure 3.6).

Panels and Arches

Panels and arches comprise another set of ornamental motifs that possibly invoke blessings. Due to their formal similarity to the *mihrab*, arched panels are frequently charged with divine representation. This is the case with ornamental panels that carry one or more attributes marking them as a *mihrab* (prayer niche), an inscription such as the *shahada* (profession of faith) or the Light Verse, a hanging lamp, or a pair of candlesticks (Baer, 1998) (Figure 3.7).

2. Ornaments with Metaphoric Qualities

Whorls and Stars

A first category of metaphoric ornamentation tends to be the way in which some ornaments visually transform a part of a building or object and give it new expression, as in the ornament that transforms the internal space of a hemispheric dome into a celestial sphere. Domed ceilings have been imbued since Late Antiquity with cosmological attributes (Baer, 1998). Brend (1991) suggests that the dome placed over a cubic space may be an efficient means of roofing or perhaps a symbol of the heavens above the earth that is likely to carry the message of a powerful God. Further, it possibly symbolises the power of a ruler, whose power derives from God.

Another metaphoric design character appears to be the whirling rosette, which is set in the top of the dome and produces an illusion of movement in a circular orbit. For example, the dome over the hall of the Friday mosque in Kerman in Iran. Also, in some domical ornamentations, stellar configurations may possibly be linked with other adornments, which at the same time provide the illusion of a rotating firmament (Baer, 1998). A good example, which illustrates this pattern, is the dome of the Friday mosque of Yazd, in Iran decorated with tile mosaics. The prayer hall with radiating stars on a blue ground appears to be an allusion to the starry firmament and the almighty power of God (Hattstein and Delius, 2000) (see Chapter 2, Figure 2.59). A visual metaphor may also be brought about by the concentric zigzag lines that circumscribe the top of the dome or totally cover it (Baer, 1998). For example, at the entrance hall of the Humayun's tomb in Delhi, which was built around 1557, the dome is decorated with zigzag lines (Stierlin, 2002) (Figure 3.8).

Fish and Water Creatures

A second category of metaphoric ornamentation comprises designs in which fish and imaginary water creatures encircle a sun or solar symbol. These motifs are entirely used for the internal adornment of metal vessels, and less frequently, on pottery bowls and basins. From the late twelfth century

onwards, these fish whorl motifs are found in numerous versions. Fish may be arranged around a central device, with different sorts of aquatic creatures swimming in opposite directions, or may encircle a solar symbol. The observation of fish and water creatures may arouse the viewer's imagination and stimulate his mind to wander into another world (Baer, 1998). It has been argued that Muslim artists who decorated art objects with fish and bird motifs may not have been aware of their symbolic significance. Artists possibly considered these ornaments as traditional patterns suitable for certain functions (Ettinghausen, 1976a).

A good example that illustrates fish creatures, combined in radial or circular arrangements, is a bronze bowl from the fourteenth century (Ettinghausen, 1976a) (Figure 3.9).

Jewellery Imitation

A third kind of metaphoric ornament is the imitation of jewellery that gives a type of relatively cheap pottery vessel a valuable appearance and transfers it almost into a living being. Such transformation is attained by using precious metal methods like twisted wire and granulation and using base material, and other cheap pottery methods as substitutes for gold and silver (Baer, 1998) (Figure 3.10).

What appears to be an interesting manifestation of employment of this technique is the way the artist transforms jugs and other artefacts into "living beings" by applying jewelled ornaments to the shoulder, handle, or foot of these vessels as if they were parts of the human body (Baer, 1989). Early uses of this method appear in the mosaics of the Dome of the Rock, where the artists laid jewelled breastplates around the necks of the amphoras, or attached earrings with one to three suspended pearls to the S-shaped handles of the vases (Baer, 1989).

Another technique linked to jewellery imitation ornament is the transformation of ornamental motifs and methods from one medium to another, a well-known phenomenon in Islamic art. In the process, the artist

attempts to retain the character of the original material by utilising methods that will imitate them in base materials. One of the most remarkable examples of this kind of imitation is the translation of gold techniques into clay as in the central rosette on the 'pilgrim' bottle in Jerusalem (Baer, 1989).

3. Emblems Versus Ornaments

Combatant Animals

A third type of ornament has meaning as an emblem. Combatant animals, be they imaginary or real creatures, or figures depicting animals in fight, are considered to be elements of the Islamic decorative repertoire. They appeared frequently on medieval Islamic ceramics and metal work, for their ornamental qualities made them appropriate as essential ornamentation on dishes or bowls. An eagle striking a duck, or a lion savaging a bull were preferred images on Egyptian, Syrian and Persian pottery and other art objects. Combatant animals were also symbols whose meaning changed over the centuries. The utilisation of emblems was primarily seen in tenth and eleventh century Spanish stone carvings, and on ivories and embroidered textiles (Baer, 1998) (Figure 3.11).

Generally, in Islamic architecture, human and animal figures may be used to symbolise power, and may also evoke astrological symbolism or have magical connotations. They include the representation of angels and animals, such as eagles, lions, snakes, dragons, zodiacal figures, or the appearance of fabulous animals, such as griffins, sphinxes and sirens on certain secular and military buildings, bridges or ramparts, for example, in Diyarbakr and Konya in Anatolia, but also on the facades of different religious buildings (Clevenot and Degeorge, 2000).

Animal figures may have several meanings. Some have acquired a heraldic function, such as the image of the moon in feminine form which, because of its astronomical symbolism, became the emblem of the Atabeg of Mosul, Badr al-Din Lu'lu', since Badr al-Din Lu' lu' means 'the full moon of religion'. This is probably the function of the two-headed eagles sculpted on the façade

of the Great Mosque of Divrighi in Anatolia. In spite of the Islamic prohibition against the depiction of human and animals figures on divine buildings, they sometimes appear on the decoration of mosques, such as in Turkey during the Saljuq period. Other animal figures may have a magical protective function, such as on the citadel of Aleppo in Syria, dating from the thirteenth century. The arch of the first gate is decorated with an intertwined snake. The snake symbol may represent the power to heal, to repel the forces of evil, and to defeat the enemy. Animal figures may also have astrological symbolism, literary allusions, or mythical associations, such as the legendary figures of the harpy and the siren. Legendary figures may also include the Simurgh, a magnificent bird of Persian tradition that seems comparable to the phoenix (Clevenot and Degeorge, 2000) (See Figures 3.12 & 3.13). Allen (1993) thinks that, in the Islamic world, dragons symbolise eclipses in some instances, but may also be associated with snakes, imperial power and protection.

Animal Wheels

The ancient motifs of animal heads connected together in a swastika form appear to have been adopted in Islamic lands from the tenth century for the ornamentation of metal and ceramic wares. The development of animal wheels appears in metalwork in the second half of the twelfth century, for example, a metal tray in which four rabbits walk in a circle around a central point (Ettinghausen, 1976a), (See Chapter 2, Figure 2.80). What is particularly important about the appearance of animal wheels in art objects is, Baer (1998) argues, not that they are an isolated phenomenon, but are part of a decorative language that may have cosmic symbolism or indications. Whatever their particular meaning, animal whorls are beautiful adornments that spread from eastern Iran and gained particular popularity in the mid-twelfth and thirteenth centuries.

Interestingly, what could the four animals in solar form symbolise or indicate? Do they symbolise cosmic or other concepts? Ettinghausen (1976a) suggests that the appearance of four animals in a solar shape represents the cycle of the Four Seasons, the animals being joined, as together they form the year.

Representations of the seasons in a cosmic setting are, of course, very natural and occur, for example, in late classical Christian ceilings and mosaics.

An excellent example that illustrates animal wheels is a vessel that has in its centre a wheel motif consisting of a 6-armed swastika, the vertical bars of which are shaped like the heads and necks of birds (Ettinghausen, 1976a) (Figure 3.14). Another example is an animal wheel that contains four walking sphinxes whose wing tips interlock. It is ornamented with silver inlaid arabesques whose framing outlines and central dots in circular designs are inlaid with copper (Ettinghausen, 1976a) (Figure 3.15).

In summary, from what has been discussed in this chapter, the main aim of Islamic ornamental methods appears to be to cover all surface spaces, whether in art or architecture, by means of various complex techniques. What distinguishes Islamic art from other cultures' arts is the Islamic artists' use of numerous artistic methods characterised by repeating patterns in an infinite way, and interlaced ornamental patterns, symmetry and abstraction, which may be connected with a particular cultural and divine philosophy. The cosmos, Paradise, the Power of God are the main ideas associated with Islamic ornament, whether using elements such as geometric forms, vegetal patterns, such as the arabesque, animal images, Arabic calligraphy and others, and applying them on walls or art objects to symbolise a notion of the divine. In other words, ornamental themes and figures in Islamic art and architecture have implications and explanations connected with a philosophy of the divine.

CHAPTER FOUR
THE AESTHETIC VALUES OF ISLAMIC ORNAMENTATION

INTRODUCTION

The characteristic values of Islamic art are connected to significant matters relating to artistic philosophy and aesthetic. These values, which give Islamic art a distinctive quality among the other arts, are generated from its underlying philosophy. Abdul Lateif (1991) argues that the philosophy of Islamic art basically originated from the essence of the Islamic faith, which requires the Muslim artist to contemplate whatever his vision falls on around him. This contemplation, or meditation, is considered by the Muslim artist to bring him near and closer to God, and to strengthen his belief in and awareness of God's great creative powers. As the Muslim artist directs his contemplation towards God's creations, he finds the source of his art which, in its aspects and essence, is connected to the Islamic faith. This faith has always been the source of the inspiration of the Muslim artist, who employs his art to further devotion to God, using the many different art forms available to him, especially architecture.

As regards the aesthetic character of Islamic art, Al-Lowate (1994) suggests that it does not have a definite content, idea or meaning, rather, it appears to be a state, taste, and bright spiritual experience that the artist draws on to express glorification of God and remembrance of Him. Generally, the aesthetic in Islamic art is not the harmony of the form itself, but the use of the form to reflect God's light and His immense creative ability. Since God is the light of the heavens and the earth, and the aesthetic conveys the dynamic energy of God's creative power, the aesthetic can be said to be God Himself.

The idea that the 'aesthetic is God' is a bold and important idea, worthy of discussion. Aesthetically, artistic creations may be viewed as expressions of divine creativity, meditation upon which may draw the viewer to active contemplation of God. It has been suggested that the infinite patterns and arabesques in Islamic artwork symbolise the infinity and transcendence of God. Any delineation of God's features will appear to be anthropomorphic and thus is to be avoided. What is important to mention is that God's nature is beyond man's power to identify or represent; it is inexpressible. The Muslim

artist in utilising an infinite pattern and floral motifs is trying to emphasise the point that God's nature is indescribable. In other words, the nature of God is inexpressible and what the Muslim artist should do is worship Him rather than symbolise Him (Madden, 1975).

THE AESTHETIC VALUES OF ISLAMIC ORNAMENTATION

The importance of the aesthetic values of Islamic ornamentation and how it is to be treated as an aesthetical element is worthy of consideration. The aesthetic values provide the standards upon which Islamic art and ornamentation are based. Simply, these standards provide the framework for Islamic art and ornamentation. Very importantly, the aesthetic values of Islamic art have been influenced by the religion of Islam. The values of Islamic ornamentation are significant for the Islamic artist, they have to be understood at the beginning and only then can their characteristics be developed in accordance with Islamic prescription, so that the artist uses the available elements in accord with the prescriptions of the Islamic creed. Thus, we can understand the idea that 'the aesthetic is God'. Each aesthetic element of Islamic ornamentation is combined to produce a work of art that is worthy of the God it seeks to glorify.

Afifi (1997) referred to the basics of Islamic art as follows:

1 – Forbidding production of images of living beings

When the Islamic religion appeared, it made the production of images of living beings unlawful, because production of such images before Islam emerged was not just an art, such images were worshipped as idols, as gods, instead of the one God, Allah. Since Islam prohibits the worship of images, their production was also prohibited.

2 – Inconsistency with nature

Islamic art, fundamentally, is not concerned with offering a realistic depiction of nature, but its essential character is to abstract live scenes from nature until they are left only as geometric lines. The Muslim artist reacts to nature to reduce its components to primary elements and then to reshape them in innovative ways. The Muslim artist does not seek to imitate nature in detail, as this is not his concern.

3 - Creating and shaping the impossible

Lack of concern with imitating nature in detail leads the Muslim artist to create new shapes that have no equivalent in nature. The artist, using his creative imagination, produces forms that have never previously been seen. For example, one who investigates the stories of folk imagination finds many patterns or forms that can only exist in the realm of the human imagination, for example, birds with human faces, winged horses, and animals that can talk. The stories in which these forms appear are attempts to express, dissatisfaction with external appearances, the false adornment of life, the wonders of creation, and changing circumstances. There are many examples in Islamic plastic art of birds and animals constructed from legendary forms that have no equivalent in nature, for example, griffins, sphinxes, and sirens. The Muslim artist through his imagination creates new forms that revive pleasure and stimulate the imagination further (Figure 4.1).

In Western art, similar extraordinary artistic figures or forms shaped in fantastical ways may be utilised as substitutes for human figural images. Trilling (2001) argues that such fantastical images may become so firmly entrenched that they lose their novelty, hence inviting a whole new wave of fantasy and innovation. The winged boys, known as cupids, for instance, had such an established place in Graeco-Roman art that they became conventional in the colloquial and technical sense. The celebration of the impossible includes many naturalistic human figures transformed into plants from the waist down. Foliated cupids have no purpose or meaning, except in ornament.

Kant makes a distinction in the *Critique of Aesthetic Judgement* (16&17) between 'pure beauty' and 'dependent beauty'. 'Pure beauty' refers to an experience of beauty that comes from the form of the beautiful object, regardless of any purpose that it might serve. 'Dependent beauty' entails that the experience of beauty is modified by our expectations about the purpose or form that the object should take. Thus, for example, Kant suggests that one might redesign a horse to become more purely beautiful by changing its colour or number of legs. However, because we know it is a horse, and expect a horse to look and function in a certain way, the beauty of the horse is restricted by these expectations. Kant views dependent beauty as more important than pure beauty (Kant, 1911). Islamic art, in contrast, tends to view pure beauty as more important and this is a significant difference between Western art, with its roots in imitation and Islamic art, which derives its inspiration from the religion of Islam.

4 -Transforming the cheap into something valuable

Renouncing excessiveness in the false adornments of life is one of the basic principles of the Islamic faith. Adornments are viewed as transitory; what is in the possession of Allah (God) is the best and that which lasts. This credal way aims at renouncing luxury in all its forms. It is well known that luxury is the lesion of civilisation since it leads man away from worship of God. Bearing in mind the principle to renounce excessiveness, the Muslim artist had to avoid the ostentatious display or lavish use of costly materials in ornamentation. Thus, pulpits might be made of wood, clay, or stucco, the cheapest materials. Further, although it was possible for the Muslim artist, especially in times when the Arabs enjoyed economic influence, to use gold and silver to decorate pulpits and inlay them with jewels, he tended to transform these cheap materials into the equivalent in beauty of the most expensive materials, through fine ornamentation and the combination of different materials, so as to attain the highest possible aesthetic value and beauty.

According to Erzen, one of the significant qualities of Islamic visual expression is the attempt to create a cryptic relationship between the real and

its appearance, its indication, its echo and illusion. Hence, one of the remarkable features of Islamic visual expression is the use of reflections, mirror images, or water screens that fragment what one is looking at, creating the sense that what one sees may be true or equally false. These effects are what distinguish Islamic arts (UNESCO, 2003).

Here, it is worth exploring the notion of 'falseness'. The distinction between superficial adornments and spirituality is important. Kant in the *Critique of Aesthetic Judgement* (3) distinguishes between the agreeable and the pleasurable. A sense of the agreeableness occurs when we have an interest in the existence of the object we appreciate. Thus, we find food agreeable, because it satisfies our bodily and sensual needs or desires. In contrast, we are not interested in the existence of a genuinely beautiful object. A painting of fruit may be beautiful, and we may get aesthetic pleasure from it, but because the fruit does not actually exist so it cannot satisfy our physical appetite. Aesthetic pleasure, thus, appeals to a higher, more spiritual or intellectual side of human nature (Kant, 1911).

Generally, in Western aesthetic theory, we can find a link to the notion of 'falseness', which is the idea of 'disinterestedness', an impersonal detachment feature of aesthetic meditation. It describes "the absence of the kind of interest that relates to one's own advantage or disadvantage; or it can describe an important and unbiased attitude in which one has no personal axe to grind in a matter. It requires us to consider something on its own merits and not in relation to what might accrue from it for ourselves; to be concerned with the object itself rather than with how it relates to oneself. Or it can refer to a concern solely with the look or appearance of something and an absence of any interest in the actual existence of what appears" (Hanfling, 1995, p.134).

5 - Leaving embodiment and relief

Islamic art is considered far from embodiment and relief in all aspects available to it. This might be due to the fact that it is not aiming to depict the third dimension, which is the representational depth of Western arts, but rather

is searching for another depth to make it special in comparison to all other arts, which is the spiritual depth, as observed in the ornamentation of doors and other types of ornamentation, such as stellar designs, which lead the spectator to other ornamentations inside them, and these, in turn, lead him to further ornamentations, which may inspire him to move from one thought level to another.

Researchers in Islamic art note that the Muslim artist covers all surfaces with ornamentations in awe of space (and dislike of empty spaces). The artist's motivation may be attributed to his desire to dissolve the material of the body by directing the gaze to the artisan ornamentation that covers it, and the desire to destroy its mass and solidarity in order to give it lightness. This is a way of achieving the religious vision that characterises the Muslim's arts. Some Western artists have tried to attain this spiritual style with their tools, using light and colour, especially the colour of gold. Using metallic lustre on pottery appears to dissolve the material of the container, since the gold lustre strongly attracts the attention of the viewer, and moreover, is a colour not seen at all in nature.

6 - Variety and unity

Dividing the surface into different geometric forms is one of the important features that characterise Islamic art. Inside these forms, the ornamental units are made up of floral elements, and geometric, animal, or lineal shapes. All such types of ornamentation may be found in one area. Further, there may be an unexpected transition from ornamentation elements that have a special nature to other elements, such as the transition from animal shapes to floral shapes or leaf patterns, and from circular geometric lines to straight lines. Thus, the Muslim artist in the details of his production shows continuous striving that denies satisfaction with the object's immediate appearance, such that he will perform a series of ornamental formations which he seeks to perfect and thereby directs the sight to the sum of all areas.

CHARACTERISTICS OF ISLAMIC ORNAMENTATION

Having discussed the aesthetic values of Islamic ornamentations, it is useful to distinguish between the aesthetic values and characteristics of Islamic ornamentation. The nature of these characteristics should be connected with the aesthetic values of Islamic ornamentation. Such characteristics are factors to be considered in the achievement of aesthetically satisfying compositions.

Three scholars in Islamic Art agree that the main characteristic of Islamic ornamentation is the dislike of empty space, which leads the Muslim artist to repeat, vary and alter the ornamental unit infinitely and to distance the elements from their natural shapes (Atwan, 1996; Muhammad, 1996; Afifi, 1997). Atwan (1996) refers to three other aesthetic characteristics of Islamic ornamentation and art: the lack of depiction of living beings in the earlier stages, the dislike of embodying and imitating creation, and abstraction. Muhammad (1996), on the other hand, suggests that an indication of movement, repetition, diversity, unity, abstraction, and symbolism are the most important aesthetic characteristics of Islamic ornamentation. Afifi (1997) also makes reference to three different characteristics of Islamic ornamentation: the equivalence between the shape and the background, the symbolism of the colour, and the surface textures.

What appears to be an important feature of the characteristics of Islamic ornamentation is their 'rhythm', which is seen from different perspectives. While Afifi emphasises a series of characteristics, one of which is rhythm, Muhammad makes rhythm central, thus stressing the dynamism of Islamic ornament. Therefore, the question arises: should we look at Islamic ornamentation as static patterns or as patterns and forms that create the illusion of movement and dynamism?

One of Islamic art and ornamentation's striking characteristics is that of abstraction which may be used to reflect a particular theological theme. It is suggested that the artist transmitted the divine message through abstract shapes. Madden (1975) points out that the way in which the Muslim artist

expresses the universal features of the God he worships is by creating abstract art. Abstract art is favoured in all Muslim societies and virtually universally preferred in traditional Sunni societies due to the belief that only by abstractions can one hope to symbolise the universal, transcendent, unity in multiplicity, and necessary Being. Or, in other words, it is viewed as impossible to draw attention away from the limited, the historical, and the parochial using pictorial icons or images. According to Dakhel (1993), abstraction in Islamic art appears to be quite different from abstraction in contemporary art. In Islamic art, abstraction is the expression of a deep philosophy which guides the human being to God, because the basis of this artistic work is the philosophy and feelings that are generated from a great faith in God, eternity, and in the moral aspect of the material. Further, faith in the eternity of God is reflected in Islamic ornamentation by the continuity of beautiful ornamental stripes when neither ends of a stripe can be distinguishable.

It is possible to make comparisons with some Western abstract artists, such as the Russian artist Kandinsky, who was the first Western abstract artist and who viewed his art as a spiritual activity. The origins of Kandinsky's painting are to be found in the religious art of Russia of the tenth to fourteenth centuries. In 1910, he painted his first work entirely detached from an object and wrote his first book, *Concerning the Spiritual in Art* (Kandinsky, 1947). In this, he stated: "The artist must have something to say, for his task is not the mastery of form, but the suitability of that form to its content... [the artist's] actions and thoughts and feelings, like those of every human being, constitute the spiritual atmosphere, in such a way that they purify or infect the spiritual air" (quoted from Cooper, 2003, p. 2).

The Unity of Islamic Ornamentation

Generally, one important quality that characterises Islamic art and ornament is the unity of the Islamic art features. One might therefore ask: do Islamic art and ornamentation vary from place to place and over time? Moreover, how has the artistic production of the Muslim artist, wherever he lives in any

Islamic land, been unified in style, form and ornamental design? Is the faith factor significant for this unity since the Muslim artist adheres to the religion of Islam? Further, are there different ways of expressing the same religious content? If so, Islamic ornament can be changed but will still be concerned with the same spiritual issues and the same theology. Muflih (2002) states that, according to some, the characteristics of Islamic art across different times and places are the same regarding the essence, in other words, the properties and artistic principles remain the same. However, this does not mean that Islamic art did not develop and grow during different periods. Rather, it means that the philosophical and aesthetic aspects of this art did not change since they were not linked to political and social developments. As for the additions to Islamic art over one period of time to another, and from one type to another, during some periods when the art flourished, techniques developed and new materials appeared, but without affecting the basic aesthetic philosophical stand.

The disappearance of the Muslim artist's identity contributes to Islamic art and ornamentation's unity. There is no signature or individual art style to identify him as the artist. He uses his art to express his devoutness as a Muslim. However, as Burckhardt (1987) notes, most art historians who are mainly interested in the artist's individuality are not interested in the divine truth that an art might seek to express or transmit. What they are more interested in is the psychological and emotional desires that have led to the artist's creative and imaginative artistic expressions. This individualism or psychologism may be absent from Islamic art, since it did not become a stage for expressing human experiences and problems. What is important to the Muslim artist is, that through his 'surrender' to Islam and the Divine Law, he constantly becomes "aware of the fact that it is not he who produces or invents beauty, but the work of art is beautiful to the degree that it obeys the cosmic order and therefore reflects universal beauty... This awareness, while excluding all prometheanism, by no means diminishes the joy of artistic creativity, as the works themselves testify. Rather, it confers on Islamic art a serene and somehow impersonal character. For the Muslim mind, art reminds man of God

when it is as impersonal as the laws that govern the movement of the heavenly spheres" (Burckhardt, 1987, p. 211).

Whilst recognising the unity of Islamic art and ornamentation, it is important to look at its development against local and historical influences. Habash (1987) states that the development of ornamental elements can be divided into four main stages. First, these elements were very greatly affected by the local arts. Nevertheless, in the second stage, Islamic art over time developed its own characteristics, although some local effects persisted. In the third stage, ornamental elements and styles spread over large distances due to migrations within the Islamic world. In the final stage, Islamic art continued to flourish but became less abstract as human and animal elements increased.

Al-Shami (1988) strongly argues that Islamic ornamentation's uniqueness can be attributed to its unity of style and purpose. The divine is considered a crucial factor in the unity of Islamic art. Al-Shami summarises three aspects that contributed to its unity as follows: first, the absence of variance. Islamic art was employed to beautify religious buildings, such as mosques, and was the predominant art style used to adorn public and private places. Second, the disappearance of the artist's identity as being a Muslim and an adherent to Islam constituted his identity. The Muslim artist established his identity in relation to the Islamic religion and Muslim community in which he lived and worked. Third, the exclusion of human figural images and the avoidance of imitating nature, the uses of geometric and vegetal ornaments and, finally, the avoidance of the sculpting of human and animal statues.

To sum up, from what has been discussed above, it appears that Islamic ornamentation is distinguished by a variety of characteristics, which contribute to shaping its aesthetic features. The Muslim artist created imaginative designs and styles, by which he moved away from imitating nature and substituted abstract designs in order to express his feelings through various artistic methods. According to Yusof (1995), ornamental designs in Islamic ornamentation appear to be characterised by observing the mass and space, the composition of the construction and its symmetry. This is illustrated by a

concern with the background as intense as the concern with the ornamentational elements themselves, to ensure the ornament integrates into the background space in a clearly defined, harmonious order. The ornamental design is therefore characterised by the rhythmicity of its shape and the harmony of its tones and parts. The ornamental distribution radiates from an original source of continuous lines and tangential curves. The artists also understood that in order to achieve beauty and harmony in the ornamental construction it was necessary to achieve a balance between straight lines, inclined lines, and curved lines.

THE INGREDIENTS OF ISLAMIC ORNAMENTATION

As mentioned earlier, the Muslim artist used the available ingredients of Islamic ornamentation that adhered to the aesthetic values and had been shaped by the characteristics of Islamic ornamentation. For example, calligraphy is of great importance since depictions of animals are not allowed, as also are geometric forms, such as the square, circle, and triangle, and the forms that emerge from them, especially the stellar saucers, and *Muqarnas,* as well as vegetal patterns, including flowers, palmettes, pine fruits, carnations and tulips, and arabesque ornamentation. Animal and human figural images are highly restricted and very rare. Muhammed (1996) points out that Islamic ornamentation, whether in architecture or in the other arts, depends on a number of components, one or more of which are used to add to the aesthetic quality. It is clear that the least widespread of the elements and the rarely used are human and animal images. The most important elements of Islamic ornamentation are geometric ornamentation, vegetal ornamentation, human and modified animal shapes, and Arabic writing.

Geometric Ornamentation

The primary element of Muslim ornamental art is geometric patterns. Circles, squares, triangles, and hexagonal forms are employed in decorating Islamic art and architecture. Geometric ornamentation has had a special and unique identity throughout Islamic art and civilisation. Baqir (1986) indicates that

Muslim artists invented many types and varieties of geometric shape to produce infinite-seeming ornamental units and forms that control the feelings and evoke pleasure and satisfaction.

In Islamic art, geometric ornamentation became the main element that covered large areas. The geometric line plays a role similar to that of the curved line in the arabesque, in the crossings of angles or combining geometric shapes to realise a firmer beauty, such as appears on antiques. The geometric shapes in Islamic art include holed and adjacent circles and entangled lines in addition to square, pentagonal and hexagonal shapes. Despite its apparent intricacy, Islamic geometric ornamentation depends on relatively simple fundamentals and principles that include dividing the circumference into equal parts and then connecting the points to obtain various geometric shapes (Al-Aloosi, 2003) (Figure 4.2).

According to Al-Basha (1975), the tendency of Islamic arts towards abstract ornamental impression derives from the influence of the Islamic faith. The artist sought to refrain from following the style of nature and imitating reality so as to avoid simulating God's creative act which produced both animals and plants. In Hussain's (1996b) view, in Islamic art the artist moves towards abstract ornamentation to express the beliefs and aspirations of the dominant religious ideology. Through his artwork, the Muslim artist is seeking to convey to the spectator a sense of the astonishing beauty and infinite variety of Almighty God's creations in the universe. Therefore, he used plant and geometric elements and abstracted their nature to express the feelings of awe and wonderment he felt when he contemplated the heavens above and the earth around him. Hence, the repeated ornamental elements, for example, geometric and floral forms reflect the glory of Allah and adorn those houses where His name is glorified and revered and His teachings meditated upon: "... in them is He glorified in the mornings and in the evenings, (again and again), By men whom neither traffic nor merchandise can divert from the Remembrance of Allah". *Qur'an [24/36-37]*

Vegetal Ornamentation

The second ornamental element developed by Muslim artists was the vegetal or floral pattern that consists of vegetal motifs, in which plant branches, leaves and flowers are linked and interlocked in beautiful forms.

One of the characteristics of vegetal ornament is the abstract arabesque pattern. According to Burckhardt (1987), ornamentation with abstract shapes developed in the art of Islam does not exist simply to fill the void, as some believe. Rather, by its continuous rhythm this ornamental form resembles an endless piece of weaving which, instead of ensnaring the mind and dragging it into some imaginary world, dissolves mental 'coagulations', just as when the mind contemplates a stream of water, a flame, or leaves trembling in the wind.

Burckhardt (1987) suggests that vegetal ornaments such as arabesque patterns, which contain floral motifs, are designed to the point of losing all resemblance to nature and obeying only the laws of rhythm. Thus, this pattern appears to be logical and rhythmical, both mathematical and melodious, and this is most significant since the spirit of Islam advocates equilibrium between emotional energy and intellectual sobriety (Figures 4.3 & 4.4).

Aesthetically, how abstract ornament, whether vegetal or geometric motifs, gives pleasure, Trilling (2001) suggests, is by transforming the inessential into a theatre displaying passion and beauty, creation and magnificence. The display can seem anything but passionate if we approach it unprepared. Unlike traditional painting and sculpture, whose subject matter provides the key to their emotional tone, ornament communicates primarily through form. Its emotional energies are implicit, masked by the discipline of pattern. The only way to appreciate ornament is by discerning its emotional charge, which is just what we have not been trained to do.

Human and Animal Figures

The third element of Islamic ornamental art is human and animal figures. Al-Janabi (1978) suggests that animal decorations involve the use of animal

drawings of various types and shapes as ornamental units and elements on antiques and buildings. These shapes may be engraved or painted or mixed with ornamental plant elements that are natural or abstract, especially on the backgrounds where they are engraved or painted.

One may ask whether some contrast can be drawn between Arabic art and Islamic art? Islamic art, especially with the prohibition against the depiction of images of living beings was originally a reaction to pre-Islamic Arabic art and the idolatry that was part of pre-Islamic Arabic culture. Al-Ansari (1984) in his article, *The effect of Arabic arts before Islam on Islamic art,* raised a significant question as to the reason for the concern of the Arabic artist with sculpture. In his opinion, the concern is related to a religious purpose, since we find in the heritage of the Arabic peninsula much evidence suggesting a use of sculpture in religious ceremonies, where statues as idols are worshipped as gods. Therefore, after the rise of Islam there tends to be no strong insistence on sculpture in art, because the old religious connotations did not match the new divine principles. Clearly, the Islamic religion's emphasis on the oneness of God rejected the worship of idols, so, the first action that Mecca's polytheists faced was the Prophet Muhammad's destruction of the idols around the Kabba as well as other idols in other cities and places in the region. Also, according to Al-Ansari, the Arabs before Islam were intimately connected to what they religiously sculpted. This may explain the lack of concern with sculptures of kings or princes in places connected with worship, such as temples and cemeteries. However, other elements connected with their form of worship remained, particularly squares and triangles imbricate, crescent circles, floral and vegetal ornaments, and these continued to develop and flourish in Islamic civilisation.

The extent to which pre-Islamic Arabic art influences are present in Islamic art, ornamentation and architecture is an important question. In Fansah's (2003) view, despite the concern of the artist with human subjects, confirmed by documents discovered in Syria dating back to the pre-Islam period, there is something new in the mosaics of the Umayyad, that is, their lack of animal figures, although the palaces of the Umayyad caliphs are full of human figures

and engravings. Hence, it would seem that the prohibition against human drawings was not observed in palaces that were made for comfort and amusement and beyond the censure of the rulers' subjects and believers. It is through them that the philosophies and principles of Arabic art, that had existed in Arab lands since ancient times and have continued until recent times, can be understood. Although artists were inclined towards abstraction and ornamentation, more than towards figurative painting, their art subjects were fixed according to the purposes of the buildings and their different functions.

Another influence appears in the Amra palace in Jordan. The walls are rich in coloured drawings that show hunting scenes and scenes of relaxation, sports activities, and wrestlers. A few paintings show women in different positions or in harmonious groups, other wall paintings are difficult to explain, but may be summarised as romantic scenes based on stories in Arabic poetry. Images of feminine beauty adorn the walls of the Qasr al-Hair al-Gharbi palace in Syria, which also portray ancient legendary scenes from the Greek arts (Fansah, 2003) (Figure 4.5).

To what extent does the Muslim artist in Islamic art and ornamentation succeed in imitating nature and expressing its aspects in his designs and drawings? In other words, in his endeavours to depict figural images in Islamic art, is the Muslim artist mimicking living beings and creatures or are they being modified? Fansah (2003) argues that artists stagnated because they became controlled by the styles they used to symbolise nature as they did not dare to imitate it in a true and living way for fear their artistic efforts might be viewed as imitating the power of The Creator. Therefore, the artist is not concerned with drawing body parts in a way that observes the science of anatomy and does not study the luminosity of light and the distribution of shadows, but instead uses a distribution of colours that gives the picture another life, a wonderful gloss, and ornamental impression, so that it appears as a treasury of colours without depth or graduation.

According to Afifi (1997), when the Muslim artist draws living beings, he does not mean to draw them for their own sake, but uses them as ornamental elements that he modifies to realise his aesthetic intentions. Muslim artists extensively used animal shapes in their ornamentation, for example, elements of living beings were used in the ornamentation of wood, stucco, copper, and pottery (Figure 4.6). Such ornamentation was put inside geometric shapes and areas and distributed on the facing. Generally, the scenes that often appear on Islamic antiques include bands of birds and four-footed animals. Two birds or animals may face each other with ornamentation between them symbolising the tree of eternity or the tree of life. One animal may be pursuing another animal. A bird of prey may be diving at an animal or another bird. Scenes of hunting include the hunters, animals and birds. Scenes of indoor parties may show dancing and other recreational activities.

Generally, with respect to the depiction of human and animal images in Islamic art, Dr. Faried Al-Shafi'ee, in the first volume of *Arabian Architecture in Islamic Egypt,* states:

> *"The most dangerous consequence of dislike of representation or depiction in Islam is that the majority of Muslim artists have left for other fields of art that have no restrictions and where they find the freedom to satisfy their artistic desires and show their skills and talents. All of this is manifested in the fields of various types of ornamentation. Muslim artists were intensively involved in the creation and development of ornamental subjects, groups, units, and elements in a way that gave Islamic art this ornamental impression that distinguished it from all arts"* (Baqir, 1986, p.113).

The question of the 'I' of the artist in Islamic art or the disappearance of the artist's personality, discussed earlier in this chapter in the section on the unity of Islamic ornamentation, requires further discussion. The idea of the artist subordinating his own personality and personal expression to the demands of his religion and community is something that has been lost from the Western

tradition, particularly since nineteenth century Romanticism. Fansah (2003) indicates that the Muslim artist did not distinguish himself in his production from his fellow artists in any historical period. Although some artists undoubtedly attained a high level of skill and proficiency in drawing and ornamentation, the main cause of the disappearance of the personality of the artist in Islamic art was dislike of the depiction of living beings. One of the results of this aversion is that Islamic art is identified and represented by ornamentation, calligraphy, architecture, and practical arts. This is a clear distinction and difference from all Western arts, and a practice that is nowadays being revived by many artists from the East and the West, both Arabs and others.

However, the strongest argument for the disappearance of the Muslim artist's personality is given by Hussain (1996b). He points out that those who have studied Islamic arts indicate that the Muslim artist lacked the right to fully express his 'I' because the 'I' of the art sponsor competed with his 'I'. The first 'I' was confronted with a stronger and more influential 'I', the dominant ideology of the society, to the extent that the artist was unable to produce according to the principle of art for art's sake or his personal conviction, but worked according to imposed principles. The artist in the Islamic era was not free to choose between acting according to the dominant principles and ideology and his own personal conviction, but had to express the dominant culture and ideology. In other words, he was not able to ignore/neglect the "religion" or Islamic faith.

Arabic Calligraphy

The fourth ornamental element developed by Muslim artists is the Arabic calligraphy pattern that consists of the use of artistic lettering, which may be combined with geometric or vegetal shapes. What should be noted in relation to Arabic calligraphy is that utilisation of its lettering in decorating Islamic art objects and architecture is considered to be an important and also complex issue. According to Al-Janabi (1978), decorative writing or the use of Arabic calligraphy as an ornamental element in decorating buildings and antiques, is

considered not simply one of the important characteristics of Islamic Arabic art, but rather one of its most characteristic inventions, in the sense that Arabic letters are natural tools for decorative work in all its aspects. They have great importance in defining the time of the antique or building, if this is not mentioned on the work, and it is also possible to relate the antiques, their forms and models to the country in which they were made. Calligraphic decoration may be mixed with plant and geometric decorations to greatly ornament them (Figure 4.7). Baqir (1986) points out that Muslim artists have made Arabic calligraphy with all its varieties like the Kufi, the naskhi and other calligraphic scripts, one of the main fields of decoration. They have produced out of letters and their ends many shapes and elements of decoration interlaced with words and phrases to produce collectively decorative subjects that have an artistic harmonic rhythm. On occasions they are emphasised by geometric and vegetal elements in the background to increase their beauty and decorative quality.

Erzen (2003) suggests that, with regard to the aesthetic beauty of Arabic calligraphy, the Muslim artist utilises it as an act of homage towards and admiration of the God whose creation of the many beautiful materials at his disposal arouses his awe and desire to create works of art worthy of a place in the buildings dedicated to this worship. Further the artist attempts to produce effects that will convey his piety and love of God and bring him and the spectator closer to the Creator. Therefore, the act of artistic creation is not accomplished through mental effort alone but engages the artist's feelings and emotions such that the artist becomes a medium through which the sacred and divine beauty may be clarified (UNESCO, 2003).

A key question that needs to be asked is to what extent Arabic calligraphy has influenced Islamic ornamentation? Have the decorative elements been affected by Arabic writing and its various forms? Al-Basha (1975) states that Arabic calligraphy is considered one of the three fundamental roots "of the Arab nation" together with the mosque and the Holy Qur'an and, at the same time, remains one of the important unifying factors across different times and countries.

He adds that the impact of Arabic calligraphy on Islamic ornamentation is very clear since the ornamental elements and units are affected by its shapes. Sometimes the letters of the calligraphy are mixed with geometric and plant ornamental units and elements to the extent that it is difficult to discriminate between them. Arabic calligraphy became one of the more important elements of ornamentation in the different products of Islamic art because of its distinctive ornamental features. This is confirmed by the observation that sometimes antiques include Arabic letters and words that have no meaning and the writing is sometimes unclear to the extent that it is impossible to read it or know its meaning. Hence, the role of writing in such cases is restricted to decoration only. Calligraphy in most cases represents several elements in the ornamentation of Islamic art and its products, while, in some cases, it represents the single ornamental element in such products (Al-Basha, 1975).

The idea that Arabic calligraphy expresses the spirituality of the Muslim nation and is the most essential element of Islamic art and ornamentation is very important, since it suggests that art expresses the spirit of a community. Al-Basha (1975) claims that if every society is distinguished by a particular art type, which expresses its true sprit, and identity, and inspires the spirit of creativity that is needed for its development, then Arabic calligraphy is indeed an art of pure origin that truly expresses the Islamic spirit of the Muslim nation, its ambitions, and hopes. Similarly, commenting on Western art, Collingwood (1958) describes the relationship between the artist and the community within which he exists, as the artist's "collaborative relations with an entire community; not an ideal community of all human beings as such, but the actual community of fellow artists from whom he borrows, executants whom he employs, and audience to whom he speaks. By recognising these relations and counting upon them in his work, he strengthens and enriches that work itself; by denying them he impoverishes it" (Collingwood, 1958, p. 324).

UNDERSTANDING ISLAMIC ART AND ORNAMENTATION

The way in which Islamic art and ornament can be understood as an expression of the Islamic worldview, for example, on the relationship between the ephemeral and the eternal, the finite and the infinite, the struggle between good and evil, nature and the cosmos, human nature, ethical values and the community, is worthy of discussion.

Notably, the nature of knowledge and the relationship between art and knowledge is conceptually interesting. One might ask: is art a way of knowing the world or does it express what we already know? It can be said that there seem to be several forms of knowledge. Firstly, knowledge may simply be the knowledge that is expressed in natural science, and thus refers to a world of facts. Secondly, knowledge may be a spiritual or gnostic vision of the world. Thirdly, there is the knowledge of law. Nasr (1987) indicates that knowledge appears to be the foundation of Islamic art that is itself of a divine character. Traditional masters of Islamic art referred to knowledge as wisdom. In the Islamic tradition "with its gnostic mode of spirituality, intellectuality and spirituality are inseparable, being facets of the same reality. The *hikmah* upon which Islamic art is based is none other than the sapiential aspect of Islamic spirituality itself" (Nasr, 1987, p.9). He adds that Islamic art is based upon knowledge of an internal nature that is concerned with the internal truth of forms and not the external character of things. So, Islamic art manifests "with the aid of this science and by virtue of the Muhammadan *barakah*, the *haqa'iq* of things which reside in the 'Treasury of the Invincible' upon the outward plane of corporeal existence" (p. 8).

Therefore, it appears from Nasr's argument that Islamic art is not concerned with the first form of knowledge, perhaps because that would be linked to imitation but with the second form of knowledge, particularly the spiritual or gnostic vision. Martin Heidegger argues that art is concerned with something like a spiritual 'unconcealing' of the truth as opposed to knowledge in the sense of truth-as-correspondence (Cooper, 2003). German philosophers, such

as Schelling, Schopenhauer and Nietzsche, argue that through art "man might best hope to articulate and express the realm of the ultimate reality which, since Kant, was held to be closed to conceptual understanding and rational discourse" (Cooper, 2003, p. vii).

Moreover, when discussing the relationship between art and knowledge, an important question may be posed: how can we distinguish between true and false knowledge? In other words, is there the possibility of ornament being a true or false expression of our knowledge of the spiritual? According to Ettinghausen (1974), the highest stage in meditating on art is the metaphysical approach since it helps the individual attain greater insight by shifting attention from the exterior appearance of the object. In this regard, Al-Ghazali states: "the beauty of the outer form which is seen with the bodily eye can be experienced even by children and animals ...while the beauty of the inner form can only be perceived by the eye of the "heart" and the light of the inner vision of man alone'. Further, in the metaphysical approach, the art object becomes a clue to greater diversities: 'The one [may see] in the mind only figured clay; while the other [sees] clay replete with knowledge and works" (Ettinghausen, 1974, p. 287). The distinction between true and false knowledge can be linked to the discussion on 'false ornamentation' presented at the beginning of this chapter.

The relationship between knowledge and expression, the way in which Islamic art expresses and is shaped by religious belief, cosmologies, and ethics is also important. Nasr (1987) believes that Islam consists of a Divine Law, a spiritual path and the Truth that is the basis of both the Law and the Way. Further, it possesses many forms of science of a juridicial, theological, philosophical and esoteric nature connected with this essential Law. Importantly, the Divine Law seems significant in forming the character and background of Islamic art, and in setting definite restrictions or boundaries upon a number of arts, while at the same time, encouraging others. However, the Divine Law effectively includes orders for Muslims on "how to act", not "how to make things". Besides providing a common social background, the Divine Law's role appears to be

to shape the artist's soul by filling it with positive manners, thoughts, feelings and qualities derived from the Qur'an and the *Hadith* and *Sunnah*.

If the knowledge in Islamic art is spiritual or gnostic then it can be argued that what this art is doing is enabling the artist to articulate what he knows through expressing his faith by means of it, in other words, Islamic art articulates and makes substantial his spiritual knowledge. According to the expression theory, "an artist is someone who gives articulate expression to emotions or feelings in the various artistic media. He begins in an emotional state whose chaotic indeterminacy perturbs him, and leads him to search for a clearer conception of it; and his search ends when he has succeeded in giving concrete expression to that state in a work of art" (Cooper, 2003, p. 144).

It can be argued that a new faith needs a new art to express its spiritual knowledge. According to Hussain (1996b), spiral ornamentations are considered to be among the original Arabic inventions, and for the Muslim artist, they are subject to the influence of a new faith, which is the Islamic faith. This belief and the notions that arise from it influence the methodologies that gave the various countries opened up to Muslims a special artistic character, regardless of differences in language, and these artists became involved in creating new artistic shapes.

Understanding Islamic art and ornamentation in the context of Islamic theology and spirituality is interesting. Hussain (1996b) contends that the Islamic faith plays an important role in the artistic perspective, especially with regard to arabesque ornamentation. Creation in this faith is viewed as a power exclusively possessed by Allah, the Glorified, and is manifested in all events and natural phenomena created by Allah. These manifestations have a non-eternal character, so are temporary, and their fate is disappearance.

As regards the idea that Islamic art may have been shaped by broader cultural beliefs, Hussain (1996a) suggests that the arabesque reflects the viewpoint of Arabs who left the desert and subsequently gained a new perception of the world around them. When they were faced with a need to change the style of ornamentation in countries they gained, as the Islamic empire spread, they

interacted with it and presented it from their own perspective that conformed to their own sense of beauty and the dictates of faith. Hence, the Muslim artist carried the perspective of his own world inside him, and when he explored the natural world around him he started transforming all tangible things, whether an experience or existing phenomena in nature, into unrealistic shapes that did not exist in nature to conform to the Divine Law that guided his actions.

The relationship between the eternal and the ephemeral and the way in which Islamic ornament expresses the Islamic understanding of the eternal is worthy of further exploration. While Western painting is often viewed as creating the illusion of a third dimension on a two-dimensional plane of paper or canvas, Islamic art seems to express the extra dimensions of the spiritual and infinite in finite painting or ornament. Regarding this expression, Clevenot and Degeorge (2000, p. 191) state:

> *"The wall surfaces are fragmented into a multitude of panels which form autonomous units and display all kinds of materials, patterns, textures, densities and colours. One can see surfaces of zellij, scraped tiles, sculpted wood, pierced wood, dark and light zones, which are matt or shiny, coloured or plain. There are plant, geometric and calligraphic motifs.... At first the spectator's gaze is dazzled by such variety. Moving the eyes backwards and forwards creates an illusion in which each panel seems to detach itself from the wall and to float as if suspended in space. But longer observation reveals a progressively strengthening, rigorous order in this optical instability, which allows for multiple interpretations, with the eyes making their way across a pattern of horizontal and vertical axes"* (see Figure 4.8).

Grube (1967) claims that the infinite pattern that appears in a fully developed form is a major element of Islamic art in all periods. He comments:

> *"The infinite continuation of a given pattern, whether abstract, semi-abstract or even partly figurative, is on the one hand, the expression of a profound belief in the eternity of all true beings*

> *and, on the other, a disregard for temporary existence. In making visible only part of a pattern that exists in its complete form only in infinity, the Islamic artist relates the static, limited, seemingly definite object to infinity itself"* (Grube, 1967, p. 11).

Finally, the idea of atomism usefully contributes to an understanding of the philosophy of Islamic ornamentation. With respect to atomism, Grabar (1987) indicates that its central tenet appears to be that all things are made up of and "distinguished by various combinations of equal units. According to the faith of Islam, there is no compulsory, natural need that physical reality remains the same, and it is a divine miracle that the same compositions reappear. Since the artist must avoid imitating God or competing with Him, he becomes free to recompose the units of nature he knows in any way he sees fit, and the more arbitrary and absurd the better" (Grabar, 1987, p.192).

Referring to atomism in Islamic art, Papadopoulo (1979, p. 45) states:

> *"If there is a measure of atomism in Muslim art, it is not where it has been looked for. It expresses itself, rather, through an aspect of that aesthetic approach characterised by a "horror of the void". True, on the philosophical plane this would be an arrant contradiction since in Aristotelian theory nature abhors a vacuum, whereas the atomist conception is predicted on the existence of a void between atoms. But our context is not that of pure philosophy but that of the intuitive correspondence between the mental set of the Muslim intelligentsia and the autonomous universe of forms as revealed in actual works of art".*

Understanding Islamic Art and Ornamental Expressions and Symbols

How Muslim artists understand and practise the Islamic religion through their art and ornamentation is another important issue. Islam as a faith or creed inevitably influences designs and forms for the reason that Muslims love God and worship Him and also love His Prophet Muhammad. They adhere to

Islamic religious principles in their everyday life, in their daily prayers, and in their daily glorification of God and expression of gratitude to Him. These feelings influence their manners and personalities, develop their appreciation of the beauty in the world around them, evidence of God's perfect handiwork, and stir them to reflect it in their art, and its forms and motifs.

One may then ask: is art in Islam to be understood as merely beautiful forms and designs, which are perfectly achieved, or does it suggest a deeper truth, point to a higher reality, that this cosmos is manifest evidence of the Divine Being's power and creative energy? Hasan (1990) argues that art in Islam appears to be a beautiful expression of the conception of this cosmos from the Islamic perspective. This conception opens minds to the Creator of the cosmos, stirs consciences with high ideals, and gives people meaning in their lives. Therefore, Islamic art does not simply express Islam's realities, creed, characters and incidents, but deals with these from the cosmic perspective, and what is happening in the cosmos from the Islamic point of view.

In light of the above, what do Islamic art and its magnificent ornamentations, motifs, forms, designs and expressions signify? Also, how can both Muslims and non-Muslims understand this art? Brend (1991) suggests that Islamic art may signify different things to different people. For a Muslim it can be considered an expression of belief in the writing to be found across a page of the Holy Book or around the pillars of a mosque. Islamic art may invoke in a non-Muslim an appreciation of the rich and mysterious ornamentation that adorns objects that frequently have particular uses. To a tourist, Islamic art might display itself in the shape of unique forms, such as the high splendid dome hovering above a city horizon or the shape and shadow of a minaret against a sunset. Islamic art is many things to different people. It presents an attractive world to those collectors, professionals and students who are interested in it, and struggle to obtain a better understanding of the beautiful art objects and of the people who created them.

In summary, from what has been discussed above, it is clear that there are a number of issues associated with understanding Islamic art and its artistic

expression. There seem to be three different approaches to interpreting Islamic art. The first appears to be the need to understand the kind of knowledge or vision of the world it seeks to express. The second appears to be a (Kantian) appreciation of form and the pleasure that its beauty gives. The third approach suggests that understanding is possibly achieved by relating art objects to their cultural, religious, and historical contexts.

A further question that needs to be asked is: what do Islamic art and the beautiful ornamentation that adorns art objects and architecture express? Do they simply evoke beauty or also convey theological ideas? Papadopoulo (1979) believes that Islamic art is an expression of the whole of the Muslim civilisation, of which it is a part, and also conveys in its aesthetic the very essence of the Islamic attitude towards artistic creation. Concerning the development of that aesthetic, he states:

> *"there were almost two main phases. In the first, the works responded only negatively to the ban on the depiction of living beings, obeying it to the letter without having as yet found a way of getting around the restriction. In the second, an aesthetic revolution took place and brought about the extraordinary explosion of a genuinely Muslim art, one that was Muslim not only in that it avoided depicting living creatures or made use of subjects related to the new religion, but also in its very warp and woof, in its autonomous essence. In its conception of forms and their interrelationships, in the overall composition of its works, in the conventions that its paintings used to indicate space and time and living beings and reality in general, this authentically Muslim art entered into clearly defined and stable relations with the prescriptions of theology, with philosophy as a whole, and with the Muslim view of the world. Then the aesthetic would be tinged differently only by national or regional traits or perhaps by the mark of some original talent, but always and in whatever medium it expressed a unique conception of Beauty"* (Papadopoulo, 1979, p. 28).

Linking the concept of expression in Islamic art and ornamentation with Collingwood's Western theory of artistic expression, it appears that the artist will present a clear expression of sensations or feelings in a variety of artistic media. "He begins in an emotional state whose chaotic indeterminacy perturbs him, and leads him to search for a clearer conception of it; and his search ends when he has succeeded in giving concrete expression to that state in a work of art" (Cooper, 2003, p. 144). T. S. Eliot's view on the artist's need to find an 'objective correlative' through which to express his emotions is also relevant:

> *"The only way of expressing emotions in the form of art is by finding an 'objective correlative'; in other words, a set of objects, a situation, a chain of events which shall be the formula of that particular emotion; such that when the external facts, which must terminate in sensory experience, are given, the emotion is immediately evoked"* (Sheppard, 1987, p.19).

Collingwood states, with reference to what viewers' understanding of the artwork may involve, that " if we understand the emotion expressed in a given artwork, then we will have that emotion in our minds, and so will in some sense experience emotions of our own in terms furnished by the artist. This blurring of the distinction between apprehending an emotion and experiencing ... implies that the physical work of art is a species of transmission mechanism, a means of conveying to the minds of others the clarified expression of feeling that the artist has achieved in his own mind" (Cooper, 2003, p. 145).

In discussing the matter of understanding expression in the context of Islamic art and ornamentation, one can ask how might Muslims understand this expression? Is it important as an expression of the life of Islamic communities? Is it an expression of the community rather than of the individual? Also, how might Muslim artists apply the message of the Qur'an and the teachings and instructions of the Prophet Muhammad to enhance the understanding, production and evolution of Islamic art and ornamentation? It is possible to say that the significance of Islam as a religion is to be viewed in

terms of its importance in a Muslim's life. People or groups in Islamic communities may express the important issues that concern them in the form of art and ornamentation, which may reflect the values that are associated with Islam and guided by the Holy Qur'an and the teachings of the Prophet Muhammad. When applied to art or ornamentation, these values contribute to a perfection in artistic themes and styles, as a result of Muslim artists' desire to create Islamic art and ornamentations pleasing to God. According to Ettinghausen (1976b), Islam affects art by creating a way of life and manners that later became universally accepted. Hence, there developed a strong sense of belonging to the Muslim community, strengthened by participation in customary rituals and a shared set of beliefs. These included sincere belief in the revealed message of Islam's holy book, the Qur'an, acceptance of a Muslim's necessary duties, and a general reflection on the whole cosmos. This, in turn, influenced Islamic sacred architecture, utilisation of the Arabic language and script, the medium of the religious revelation; the range and nature of iconography; and the treatment of adornment.

In Islamic art, did Muslim artists understand ornament as a purely symbolic pattern, or did its figural representations and the elements and organisation of artistic designs express deeper meanings? In Al-Faruqi's (2001) view, the elements of design and structure, rather than the portrayal and depiction of characters, elegantly express meanings. Viewers may regard the important qualities of Islamic art as residing in the stylistic and formal features, rather than in the explicit or factual figurative content. A great range of ornamentation and topics have been used by Muslim artists over the centuries and the organisation of these ornamentations has been distinctive and consistent. Whether calligraphy, geometric designs, vegetal forms and human and animal figures are utilised, the outcome is clearly Islamic.

A key question which should be addressed in discussing the matter of understanding the expressive qualities of Islamic art is: how does expression work in Islamic art? Particularly, how can abstract art have substantial meaning or expressive power? For example, how can vegetal or geometric patterns express a theological belief or self-understanding of a community?

According to Al-Lowate (1994), the vegetal ornaments seem to support the Muslim's attitude that life in this world is transient, the sensible world is transient and should not be contemplated in itself, but be viewed as a manifestation of different aspects of God's capability and signs from Him. Observing the vegetal ornament in art, the vision or gaze of the observer darts here and there, marvelling at the abundance of forms, and then turns to contemplation of God's power, glory, ability, and the perfection of His creation. God says in His Holy Book: "He Who created The seven heavens One above another: No want of proportion Wilt thou see In the Creation Of (God) Most Gracious. So turn thy vision again: Seest thou any flaw?" "Again turn thy vision A second time: (thy) vision Will come back to thee Dull and discomfited, in a state worn out". *Qur'an* [67/ 3-4]

Human artistic creative ability can nowhere match the perfect creations of God Himself. The repetition of ornaments made by human hands creates a kind of visual saturation, so that it becomes difficult to continue reading the forms and to remain focused on the elements. Instead, the vision begins to stray in the interlacement and rotation of ornamentations in all directions (Al-Lowate, 1994).

As regards any literal figurative symbolism, and whether these ornaments transmit factual messages or not, Al-Faruqi (2001) asserts that we should not view the ornamentation of Islamic arts as conveying any sort of factual representative meanings, although ornaments from other art traditions may do so. Islamic arts lack this sort of symbolic expression and it is similarly absent in other areas of Islamic culture. What is important to mention is that there are no sacraments to present sacred representation and there is no priesthood to play a representative role. For example, ablution, prayer postures, sacred rituals, fasting and pilgrimage are functional and not symbolic in their origin and meanings. They are described as orders of God rather than carriers of mysterious meaning.

Finally, on the issue of whether beautification is used to convey theological ideas and themes, it appears that Islamic art aims to create an understanding of

theological ideas and themes through the beautiful structure of words and forms. According to Al-Faruqi (2001), the Muslim artist is never concerned with a representation of God, whether stylised or abstracted, for this is condemned by Islam and its culture. Thus, when artists represent living forms from nature they are not attempting to symbolise God. Further, it is not through symbolic statements of the realities of nature, as naturalistic theorists suggest, but actually through the beautiful designs and their formations, that the spectator is drawn towards contemplation of the nature of God and of man's relationship to Him.

CHAPTER FIVE

THE RESEARCH QUESTIONS

INTRODUCTION

This chapter will answer the research questions of this study, presenting them in five parts based on their order in chapter one.

THE HISTORICAL BACKGROUND OF ISLAMIC ORNAMENT

The First Research Question Is: What is the historical background of Islamic ornament?

To fully understand the significance of Islamic ornamentation, an introduction to Islam as a faith and way of life is important, as this will highlight the values and expressions found in Islamic art and ornamentation. Since this study deals with a specific cultural context, background information about Islamic culture will be provided. The historical development of Islamic ornamentation elements has been presented in chapter two in great detail, therefore, this chapter will start by describing the historical background of the Islamic religion and the origin of Islamic art and ornamentation within this context.

Before detailing the historical background of Islamic ornament, a brief comment on what we mean by historical background in the context of understanding the philosophy of Islamic art is necessary. A very important methodological question relating to the historical background, as Leaman (2004) points out, is: how important is the history of art for art? Is it possible to understand art without understanding its history, its context? Moreover, in order to understand the philosophy of art, how important is it that people understand the history which surrounds the theory? Leaman argues that history provides important background details that help to explain what the subject or context of the art is all about. Notwithstanding, a further question may be raised: does the history give us more information that deepens our understanding of the subject matter or does it, in fact, make it more intricate? The history, by adding more facts or background details, can produce a new perspective on the topic. However, a work of art can be striking, even if we do

not understand everything, or in fact, anything, about its context. Indeed, we frequently admire works about which we know nothing with respect to their origins. This is even true of a natural object. We may come across a stone that has a beautiful form and colour, or a sunset that strikes us with amazement, yet we may understand nothing about these phenomena from a scientific point of view. They are just there, as far we are concerned, and we are involved with them aesthetically (Leaman, 2004).

The following section will outline the circumstances in which the Islamic civilisation started. In the seventh century, God sent the Prophet Muhammad to inform people about the religion of Islam. He was the last and greatest Prophet. The Islamic religion originated in the Arabian Peninsula, where prior to the arrival of the Prophet Mohammad, people had worshipped a range of gods, represented by idols and other sacred objects. The Prophet Muhammad's message emphasised there is only one God and He is not to be represented by any image. The Prophet Muhammad's teachings stressed the divine order and unity of God, and the duty of all believers to worship God. Muslims believe that the Qur'an is the message of God as revealed to Muslims through the Prophet Muhammad in the Arabic language. According to Bloom and Blair (1997), Islam, derived from an Arabic word meaning 'submission' [to God], is the last of the great world religions to emerge. The Prophet Muhammad began to receive his revelations from the angel Gabriel about the one God, and began to preach to his fellows that those who accepted his teachings and became 'Muslims', that is, agreed to submit themselves to God, would prosper; all those who turned away in contempt would face fearful retribution in this world and the next. These revelations are known as the Qur'an from the Arabic word meaning recitation.

The Social and Political Environment at Islam's Inception

The Islamic religion of the great Islamic civilisation managed from the first, every feature of its empire. In addition to his role as a Prophet, Muhammad was also a leader, judge, and legislator. These roles were inherited by the caliphs or 'successors' who came after him. Also, he established the basis of

the Islamic civilisation, not only by sacred conversion, but also by power, political or military force, and administrative capacity (Grube, 1967).

Grube comments as follows:

> *"First a caravan leader, then a Meccan tradesman, his ambition became to restore the religion of Abraham and the belief in the one God ... He first gathered around him a small group of followers at Mecca. As his influence increased, rulers of the Meccan community began to fear his autocracy and resent his denial of their gods and goddesses. Dissension was followed by force and the Muslims were besieged and persecuted. Finally Muhammad accepted the invitation of Yathrib, thereafter known as Medina (the city of the Prophet), to take his refuge there .... He invaded and took control of Mecca, thenceforth the religious centre of Islam. He had all pagan idols destroyed and sent missives to all known sovereigns and rulers promising them safety only if they were converted to Islam"* (Grube, 1967, p.8).

With reference to the nature of the Islamic state, Islam was observed as a new beginning, the basis of a new religion as well as a new empire and civilisation. Lewis (1976) points out that Islam was concerned from its early periods with political power. The Muslim community of Medina was not merely a community, but a state as well, and successive events made it the basis of an empire. Under the security of the Islamic position and through the wealth of the Arabic language, a fundamental and unique culture developed, shaped by men and women of several races that bore the unique stamp of the Arab tradition and its various manners, and of Islamic values and principles.

Regarding the pre-Islamic religious beliefs and practices to which the Prophet was opposed, in pre-Islamic Arabia, particular gods were believed to govern the fate of individual tribes and regions and different realms of human life. It was thought that these deities could enter into material forms, such as stone and wood, and these materials were therefore fashioned into the images of the gods people believed inhabited them. These totems or idols were worshipped

in Mecca before it became the capital of Islam. The idols of different tribes were placed both around and within the Ka'ba. They became a significant aspect of the physical and spiritual world that surrounded the people of Mecca. The campaign against the idolatry of Mecca, led by Muhammad, the Prophet and messenger of Allah, the one and only God, became the foundation of Islam (Piotrovsky and Rogers, 2004).

When the Prophet had conquered Mecca, he went first to the sacred enclosure and performed a circumambulation of the Ka'ba on camelback. The pagan Arabs had surrounded this area with a girdle of 360 idols, one for each day of the lunar year. Touching these idols with his riding stick, the Prophet overturned them one after another, while reciting the verse from the Qur'an, 'Truth has come; vanity has vanished; in truth vanity is evanescent' (XVII, 33). He was then handed the key of the Ka'ba and went in. The inner walls were ornamented with paintings executed by a Byzantine artist on the orders of the Ka'ba's pagan masters; they portrayed scenes from the life of Abraham and certain idolatrous customs. He destroyed all the idols. If the Ka'ba is viewed as the heart of a man, the idols, which inhabited it, represented the passions which invade the heart and impede the remembrance of God. Hence, the destruction of the idols is the clearest possible parable for Islam of the 'one thing necessary', which is the purification of the heart for the sake of *tawhid,* the bearing of witness or the awareness that 'there is no divinity save the God' (Burckhardt, 1976).

Politically, under Muhammad's successors, known as caliphs, Islam spread with incredible rapidity, as brilliant military campaigns succeeded against weakened opponents. Within a decade, Muslim armies dominated all of Arabia. Palestine and Syria were taken from the Byzantine Empire, which had ruled the area from its capital at Constantinople since the fourth century. Iraq and Iran were taken from the Persian Sassanian Empire. Egypt, another Byzantine region, fell to Muslim-led armies in 646. The Muslim armies moved rapidly across North Africa to the Atlantic, and crossed the Straits of Gibraltar in 711 to take the Iberian Peninsula from the Visigoths, and

proceeded into France until they were finally stopped by Charles Martel, King of the Franks, at the Battle of Poitiers in 732 (Bloom and Blair, 1997).

Regarding the ideas and artistic practices prevailing in society before the emergence of Islam in the Arabian Peninsula, it appears they were connected with idolatrous and pagan practices. As to the role of pre-Islamic Arabian cultures and civilisations of the Arabs before the Islamic era, Ettinghausen *et al.* (2001) suggest that the myths and poems of the Yemeni, Lakmid and Ghassanid civilisations recited at campfires or in frequent meetings in rich oases, nourished the minds and imaginations of early Muslims. These sources comprised elements of a marvellous secular art created many centuries earlier by Arabs at the two edges of the dry desert. Together with the essentials of the symbolic shapes found in their sacred life, and some awareness of the more expensive methods of architectural decoration and of the arts of objects, this vision, based on monuments which were, by then, little known, afterwards provided the most important element in the creation of an Islamic art.

Ancient Civilisations Before Islam

Two ancient civilisations dominated the pre-Islamic world, the Byzantine Empire surrounding the Mediterranean, and the Persian empire, which extended to Central Asia. The Byzantine civilisation, inheritor to the Graeco-Roman Empire, was Christian, while the Persian civilisation under the Sassnian empire, was Zoroastrian by religion (Brend, 1991). According to Rice (1975), the Byzantine and old Sassanian empires left a great cultural and artistic heritage, which possibly influenced the Islamic world. Its significance was equalled at first by the impact of Semitic ideas and afterwards by the role played by the non-figural or Islamic abstract style. These different trends, incorporated within the universal adoption of various forms of Arabic script, were contributory factors that made the art of the Islamic world into a unique style. What were their key influential elements and how did they impact on Islamic art, ornamentation and architecture? According to Grabar (1976), in the period which preceded the Muslim conquest, those monuments that were definitely Ghassanid or Lakhmid were few and do not seem to have developed

an original style, methods and functions. Nor were the artistic contacts that the Arabs of Arabia had with Byzantium through trade and Christian churches more than second-hand. For the greater part, they were brief impressions of mediocre objects. Occasional texts refer to a more profound effect of Christian art, but their usefulness for archaeological purposes is frequently questioned. In general, relations between Arabs and Byzantium until the formation of the Muslim Empire were not relations of cultural equality. After the seventh century, the two empires were to become powerful bastions of two independent cultures confronting each other.

Regarding the influences and stylistic or thematic changes that the ancient cultures had introduced and that Muslims may have borrowed when contact was established between them and the new Muslim Empire, Grabar (1976) suggests two significant matters need to be considered. Firstly, the transformation of a Byzantine-Christian material culture into an Islamic one and the effect of this transformation on art, and secondly, the iconography of power in early Islamic art. While the second concerns the deliberate formation of a set of visual symbols with specific meanings, the first derives from the automatic inheritance by Muslims of several regions of the Byzantine Empire. Equally, they possibly serve to answer fundamental questions posed by the unique historical circumstances in which Islamic art and cultures were born: What did the Muslim Arab world know and understand of Byzantine art? How did the Muslims utilise what they knew? And finally, what effect did their utilisation of it have on Islamic art?

The most outstanding and astonishing changes began to occur when the new rulers took over. Some thirty to forty Islamic castles and large private houses remain from this period, which were built on land, the hydraulic infrastructure of which was pre-Islamic. Some houses' structure and frequently the stones of palaces are also pre-Islamic, but the major buildings are new. Buildings such as Jabal Says and the two Qasr al-Hayr in Syria, Khirbat al-Mafjar and Khirbat al-Minyah in Palestine, and Mshatta in Jordan, include square, fort-like formations with strongly emphasised gateways, small mosques, luxurious baths, and an astonishing array of mosaics, paintings, stuccoes, stone

sculpture, and other images of life. Overall, the region possessed an aristocratic residential character developed by and for the important princes of the dynasty (Grabar, 1976). A discussion of the influences of Byzantine and Sassanian civilisations on Islamic art, ornamentation and architecture will be presented in detail at the end of this section.

The Origin of Islamic Art

To identify Islamic art's origin, it is important to examine, first, how Muslims view Islamic art. What are the underlying aims that Muslim artists hope to achieve from this art? It has been argued that the most important aspect of Islamic art is its divine character and its connection with Islamic spirituality. Islamic art may be regarded as an approach to understanding God's messages brought to people by the Prophet Muhammad through the Holy Qur'an. These messages set the principles, and, hence, guide people on how to conduct their lives. Further, Islamic art may be viewed as a way of understanding God's creation, such as cosmic, human, animal and plant worlds. Moreover, the different fields of art and architecture enable Muslims to express their appreciation of creation and its perfection.

Nasr (1987) has suggested that the origin of Islamic art and the character of the values which brought this art into being should be linked to the world view of Islam, to the Islamic revelation that the divine art of Islam is one of its radiances. The fundamental connection between the Islamic revelation and Islamic art arises from the essential link between this art and Islamic worship, between meditation on God as mentioned in the Qur'an and the meditative character of this art. Remembrance of God is the ultimate aim of all Islamic worship, and Islamic art plays a plastic and sonoral role in the life of both individual Muslims and the community. This art cannot present a religious function and meaning if it is not linked in the most intimate way to the shape or character and content of the Islamic revelation.

A most important point that should be stressed here is that Islamic art in Islamic civilisation had its beginning in the mosque. The major contribution of early Islam was the development of a Muslim mosque. The early mosques

were simple constructions without any decoration. Hussain (1996b) states that the Islamic art and ornamentation which appeared in Arab lands, is an art that expresses a religious belief. At the beginning of Islam, Muslims were in need of a place to worship Allah. As prayer in Islam is allowed in all places, on condition that the place is clean and pure, there remained one condition for the Mosque building. Every Mosque should face the *Qiblah* (the direction of the *Holy Ka'abah* in *Mecca*) through the *Mihrab* (a niche) that should be used to indicate the direction of the prayer. In addition, the hot environment of Arab lands most of the year necessitated that the design of the mosque should include an open yard surrounded by four verandas so that the congregation might have light and air.

The earliest mosque built in Islam was that of the Prophet Muhammad's in Medina. The characteristic feature of this mosque was that it was a house that further served as a community centre and a prayer hall. The house was a simple structure built of bricks made of sun-dried mud around a central open courtyard. Along its north and south walls were porches made of palm tree trunks with thatched roofs made of palm fronds (Bloom and Blair, 1997).

Hasan (1990) also points out that historians describe the society or community, which appeared in the era of the Prophet Muhammad as one based on simplicity and spreading the message of Islam. In the course of widespread conquests of different countries, Muslims found widely differing artistic traditions, numerous buildings, skilful builders, and artistic designs and styles. In the beginning, the Muslim conquerors utilised the most skilful and proficient builders and craftsmen from among the people of the conquered countries since their main preoccupation was to spread the message of Islam through Islamic conquest. These builders moved from one place to another imprinting the Islamic mark, wherever they went, hence the internationality of Islam. The Muslim conquerors absorbed and digested existing cultures and then established new creations based on the principles of Islam and monotheism. Consequently, they were able to create and produce new artistic styles and motifs that respected those principles underlying and guiding the Islamic religion. Muslims were not so concerned with sculptural art and

embodied representation as with building and ornamentation to avoid the practice of idolatry in their places of worship. This was the fundamental factor spreading vegetal and geometric ornamentation.

Criticism of Purported Origins of Islamic Art

A significant and debatable matter that should be addressed in discussing the historical background of Islamic art and ornamentation, constantly mentioned in most Islamic art books and articles, is criticism of Western notions of the origin of Islamic art. The main argument is that Orientalists have misinterpreted the early stages of Islamic art and its relationship to pre-Islamic Arabic art. Some Western Orientalists and researchers who specialise in Islamic art studies contend that Muslim artists, from the early stages of Islamic art's development, imitated artistic styles, forms and techniques from cultures that preceded Islamic civilisation. One Western researcher who frequently alleges that Islamic art sources originated from Byzantine civilisation is Oleg Grabar. According to him, in the early period, particularly in Syria and Palestine "Byzantium played the part of one of the many parents who brought a new Islamic art to life" (Grabar, 1976, p.70). He further states "the role of Byzantine art is clear: it was one of the sources from which the new Muslim art chose elements which served to illustrate its own needs and practices" (Grabar, 1976, p.85). Burckhardt (1976) similarly indicates that historians suggest that Arab interlacement may have been derived from Roman pavement mosaics, which were still being used in the Syria of the Umayyad. Muslim artists adopted designs and motifs from ancient civilisations and adapted them with a sort of geometrical genius.

Ettinghausen *et al.* (2001) point out that all the lands taken over by the Muslims in the seventh century, which formed the core of the Islamic empire, had been affected by the classical art of Greece and Rome in its widest sense. The significance of this is twofold. On the one hand, Islamic art, like Islamic civilisation and Byzantine and Western Christian arts, inherited a great deal from the Graeco-Roman world. On the other hand, in varying degrees of intensity, from India to Spain, a remarkably rich vocabulary of formal

possibilities had developed more or less directly from the unity of the Hellenistic *Koine* and became available to the new culture.

Islamic art historian Hussain (1996b) strongly defends the originality of Islamic art, arguing that the phenomenon of adoption appears to be a universal phenomenon since there is no artist who has not adopted something from the legacy of previous arts. Moreover, the more the art adopts, the more the vitality and ability it has to grow and create. The adoption of previous styles/traditions by Muslim Arabs was not only copying, but also a thoughtful extraction. They distanced the elements of ornamentation from their origins and produced them in new styles and forms that made it difficult for the viewer to identify their origins, since these elements appear as if they have been created afresh.

There are many important questions which need to be asked, and which require reasonable answers. For example, what are the reasons for researchers, either Western or others, to speculate on the origins of Islamic art? Why do critics often appear excessively disparaging about Islamic art and ornamentation? Is it because Islamic art although beautiful and aesthetically pleasing, is too abstract, too vague? Why do they criticise the ways in which Islamic ornamentation elements interlace, combine or divide in units in one space of the art object or architecture? Further, why do Western researchers compare their art, artists, and modern artistic theories with the ancient art of Islamic civilisation, since Muslim artists and craftsmen did not study art academically but were greatly talented, highly skilful, and dependent on their own genius and imagination. Finally, why do Orientalists suggest Islamic art is inferior in its lack of invention and complexity when compared to Western art?

Western researchers often claim that early Islamic art had no distinctive themes or characteristics of its own. They argue that Islamic art adapted or extended the art of ancient civilisations. Undoubtedly, Islamic art in its early period was influenced by non-Islamic artistic themes and designs, clearly evidenced in secular palaces and art. We cannot establish the reasons and

motives for Islamic artists adopting elements of pre-Islamic figurative art or the cultural circumstances under which they did this in art and architecture. How the artistic designs and motifs of ancient civilisations were transformed into Islamic art and architecture is difficult to answer. Explanations require many research studies to reach reasonably unbiased truths and conclusions. One acceptable explanation is that Muslim artists and architects were in awe of the art of civilisations preceding Islam, and consequently copied their artistic themes, in the process developing them to a degree of elegance to indicate the power of the Islamic empire. Al-Yazji (1990), commenting on this matter, states that when the Arabs remained in the lands they had conquered, it was significant that they produced buildings to reflect the majesty of a growing Islamic country. To create public or religious buildings similar to the Prophet Muhammad's mosque in terms of its simplicity and low cost would be politically unacceptable, because the Byzantine empire at the time had considerable power in the northern Islamic lands.

The other criticism arises from the Orientalists' negative evaluation of Islamic art and its roots from the viewpoint of art and aesthetic values. Their criticism is based on the classification of Islamic art as a minor art or an ornamental art. In a recently published book, Baker (2004) points out that Western researchers in the early twentieth century argued that Islamic art is 'exclusively decorative', with 'an unfortunate lack of religious iconography' (Kuhnel, 1966) and that the painting of Islamic art seems 'without religious function' (Arnold, 1932). Leaman (2004, p.25), commenting on the argument that Islamic art is fundamentally minor, makes reference to Grube's statement in his book about Islamic art:

> *"The aesthetic aspects of Arab painting [involve] a strong sense of composition ... in which the various parts are grouped simply and often lack any specific framing device. The colours used are bold, though of a rather small range. The artists were not unaware of space ... human figures are rather shapeless, with their body structure hardly felt under the voluminous robes...".*

Leaman suggests Grube's comments are a negative indictment of the genre since he appears to imply that the variety of colours utilised is restricted, human images are formless, faces are stereotyped and lack individuality, and nature appears to be not realistically depicted. Such comments are frequently made to children just starting out to paint.

Sabini (1976) expresses a less biased view and contends that much Western criticism is influenced by current art movements. He points out that until the arrival of modern art, artistic values in the West leaned towards illusion, particularly the illusion of the three-dimensional, and the direct copying of nature, historical, mythical or religious anecdotes and the human form and face, were the subjects of the West's greatest works of art. What is important to mention is that Western scholars tend to view Islamic art as mere ornamentation and thus place it on the same level with what is considered to be the minor or "applied" arts of the West. In fact, this attitude betrays a fundamental misunderstanding of Islamic art, which has its own hierarchy of values. In this hierarchy, calligraphy comes first due to its holy association with the Word of God and the human form comes last because of religious strictures. Al-Basha (1975) states that it is regrettable that there is a tendency among those who study Islamic art to deny the influence of Islam and Arabism on the formation of both Islamic architecture and ornamentation. They appear to claim that Arabs have no artistic taste, practical skill, or proficiency of building styles that qualify them to truly participate in the rise and development of the arts of architecture and ornamentation in Islam. Hence, they attribute the rise of Islamic arts and architecture to the influence of those non-Arab people who embraced Islam as well as from other contemporary and ancient civilisations. Moreover, because they assume that the luxury, beauty, and ornamentation achieved by Islamic arts contradict the doctrine of Islam that calls for the renouncement of worldly things, asceticism, and distancing from adornment, they conclude that the Islamic arts must have been inspired by other principles that were not Islamic. Generally, these allegations result from ignorance about the situation of Arabs before Islam as well as a

superficial perception of the teachings of Islam and the reality or nature of Islamic art itself.

The argument, however, does not stop here. The matter of Western researchers and Orientalists, being inevitably biased by the influences and prejudices of their own civilisation in assessing Islamic art is an important issue. It raises significant questions about the aesthetic values of Islamic art and ornamentation in contrast to those of Western art. Western Orientalists and researchers often contend that the Arabs are a group of people who lack artistic talent and their creative abilities in art are limited. This criticism appears to be directed to disparage this group's artistic skills and intelligence. According to Baker (2004), some critics believe that non-Western 'traditional' cultures do not have art in the Western sense. Further, some Western critics, in the second half of the nineteenth century, would not have accorded the non-European artist the status of artist because he was not European by birth, in spite of the fact that international museums might be seeking to obtain magnificent art objects signed by the artist. Leaman (2004) indicates that the point frequently made about Islamic art is that it is of cultural rather than aesthetic interest. Many commentators on Islamic art are disparaging about the aesthetic qualifications of their topic, pointing to limitations in the creativity of the artist and the lack of sophistication in the style. Al-Hakeem (1984) suggests that it is not strange that Western Orientalists fall into this mistake, but what is strange is the fact that most Arab researchers participate in this mistake when they circulate this idea without presenting arguments against it. What should be pointed out is that the European nations did not know art until Arab teachers imparted their knowledge and skills to them. This is the truth, which most Western researchers admit.

The fact that Islamic artists developed an art form that was unique to their civilisation and in conformity with their religion's dictates has been misunderstood by many Western researchers who fail to appreciate that the essence of Islamic art and ornamentation is its conformity with Islam's prohibition against the use of human and animal images in art. As a consequence, because artists in Islam were discouraged from creating figural

forms, this led to the development of other ornamental motifs, for example, calligraphy and the arabesque. Al-Habib (1984, p. 73) states that most Western Orientalists and some Arab researchers concur on the Islamic prohibition issue after studying it intensively, coming to the following conclusion: "The prohibition by Islam against embodiment and resemblance representation has led to Arabic Islamic Art experiencing a state of repression that has led to its immaturity." This conclusion appears to be the result of the belief that plastic art, as people in the West know it, is the legitimate art form and the natural development of it, therefore, based on this assumption, all other arts are to be evaluated. Al-Habib (1984) declares that this a clear racial ideology since it holds to the view that there is no art except Western art, and art should have no other conception than the Western one.

Burckhardt (1987) indicates that European researchers claim that Islamic art has steadily atrophied due to its lack of imagination or fancy. However, this art has always remained true to its inner essence and, if at present, the arts of Islam appear to have declined, this is because their basic and traditional crafts have been damaged. Burckhardt also points out that Islamic art has remained until now a singularly neglected field as far as study in depth of its internal implications is concerned. Since the taste of Western art has been moulded by several centuries of humanistic art from the Renaissance on, and even before that by a sacred art based mainly on the image, and secondarily on sculpture, Western scholars have naturally found the great schools of Indian and Far Eastern art of more interest than Islamic art when they have turned their attention beyond the confines of Western civilisation. Despite certain works of inspiration which appear here or there, Islamic art has continued to be a closed book as far as its symbolic meaning is concerned. Its major art forms like calligraphy are considered 'decoration' or 'minor arts' and people look in vain in this tradition for art forms that are central elsewhere. Further, those who have become interested in Islamic art for its so-called 'abstract' nature have frequently done so for the wrong reasons. They think Islamic art is abstract in the same sense as modern Western art, whereas the two stand at opposite poles. The result of the one form of abstraction is the glass skyscrapers which

scar most modern cities, and the fruit of the other is the Shah Mosque and the Taj Mahal (Burckhardt, 1976).

After discussing and investigating Western researchers' and Orientalists' criticisms of Islamic art and ornamentation, which they argue originated from the arts of non-Islamic civilisations, we will turn to the cogent argument that Islamic art originated from the religion of Islam itself. Doctor Al-Basha contends that architecture and arts in Islamic civilisation are closely connected with the Islamic faith. The first origin of Islamic building was the Prophet's mosque. Is it logical that the mosque of the Prophet Muhammad would be influenced by non-Islamic sources, when this mosque is the origin of Islamic architecture? Doctor Al-Basha points out that the mosque is oriented towards the Ka'ba in Mecca (the direction to which Muslims turn in prayer) and this is the Islamic aim. When designing a mosque, the wall of the *qiblah* must be oriented towards the Kaaba. Moreover, the *Mihrab* (the prayer niche) and minaret of a mosque originate only from the Islamic creed, and therefore, Islamic art is based on three principles, the mosque, the Qur'an or the Muslim's Holy Book, and Arabic calligraphy. Thus, the interest in building mosques led to the appearance of various architectural decorations. Also, an interest in the mosque's furniture, such as carpets, incense burners, light lamps, led to the flourishing of different arts. In addition, the Qur'an also led Muslims to care about calligraphy, bookbinding and gilding. Arabic calligraphy played such an important role in Islamic art and architecture that we rarely find artistic masterpieces without Arabic calligraphic ornamentation. Surely, therefore, the Muslim's art and architecture is an expression of Islamic belief and guided by its principles (IW, 2005).

In summary, from what has been discussed above, it appears that Islamic art frequently faces serious and harsh criticisms from Western scholars. The important question that needs to be asked is: what are Arabic and Muslim researchers' points of views with reference to Western criticism on Islamic art? What is their role in confronting Western researchers' criticism and hostile ideas when critiquing, commenting and investigating Islamic civilisation's arts and culture? It seems that their role is absent compared with

Western scholars' role and their great interest in Islamic art, expressed through the media or publishing articles and books. Therefore, Muslim scholars should become more active, they should strongly defend their great Islamic civilisation's art, architecture and ornamentation, its roots and aesthetical values rather than remain silent in the face of Western critics and their false facts. Al-Aloosi (2003) indicates that European researchers intensively studied Islamic art, especially at the beginning of the twentieth century. These studies started to decline and a similar decline was witnessed among Arab researchers. The field was then wide open to Western research centres and individuals, who had a hostile view of Islamic Arabic civilisation and heritage, to express their biased, prejudiced views, which reached a peak in the middle of the last century.

The Cultural Background of Early Islamic Art and Ornamentation

It is clear that the factors influencing Islamic art and ornamentation are numerous and complex, therefore, it is important to discuss Islamic culture and traditions found to be linked to Islamic art and ornament. It is believed that Islamic art and ornamentation can be regarded as an expression of Muslims' culture and reflects their environmental background. Islam as a religion influences all aspects of believers' culture, in which art, ornamentation and architecture can be considered to be significant elements. The Islamic religion teaches Muslims the fundamental values and guides them on how to shape a path for their lives. So, the question that might be asked is: how does Islamic art and ornamentation reflect the culture from which it emerges? As Islamic art, ornamentation and architecture are elements of Islamic culture, they express Islamic principles and philosophy, through a variety of shapes, ornaments and styles. Thus, Muslims may offer their own art, ornament and architecture whenever they live in any land in this world. They may express in their art, ornamentation and architecture, their understanding of Islam, their love of God and his prophet Muhammad. To more clearly understand the cultural background of early Islamic art and ornamentation, it is necessary to expand upon some matters relating to the

historical development of Islamic ornamentation elements that have been previously touched on in Chapter two.

The Role of the Qur'an

It is suggested that Islamic art's unique identity among the arts of other civilisations can be attributed to Islam's Holy Book, the Qur'an. It has been strongly argued that Islamic culture appears to be a 'Qur'anic culture', since the meanings, formations, aims and techniques for the execution of its targets are all derived from the sequence of revelations from God to the Prophet Muhammad in the seventh century (Al-Faruqi and Al-Faruqi, 1986). These authors further state, "It is not only the knowledge of Ultimate Reality that the Muslim derives from the Holy Book of Islam. Equally compelling and determining are its ideas on the world of nature, on man and all other living creatures, on knowledge, on the social, political, and economic institutions necessary for the healthy running of society – in short, on every branch of learning and activity known .... without that revelation, the culture could not have been generated; without that revelation, there could have been neither an Islamic religion, an Islamic state, an Islamic philosophy, an Islamic law, an Islamic society, nor an Islamic political or economic organisation" (p.162).

In the field of art, the Holy Qur'an presents a ready and logical source of inspiration for aesthetic creation. The Qur'an has been influential on the arts as it has been on other features of Islamic culture. The Qur'an has provided the message to be articulated aesthetically and the way of expressing it as evidenced in the characteristics of its shape and content. It has supplied its own expressions and passages as most significant subject matter for the iconography of the arts. Thus, Islamic arts can fairly be designated "Qur'anic arts" (Al-Faruqi and Al-Faruqi, 1986).

The Role of Writing

The role of writing has been already discussed in Chapter two in the section on the historical development of Arabic calligraphy. In Islamic culture, Islamic art has a considerable role through the sacred position given to the art

of calligraphy over other arts. Papadopoulo (1979) suggests that the success of Arabic calligraphy appears to be based on its privileged religious role together with the rejection of figurative art. Grabar (1992) indicates two cultural aspects of the early Islamic centuries are particularly important. The first cultural aspect is the rejection of imitating living beings in official or formal documentation or objects. The result of this was the rise of writing as an important means of expression for signs of faith, power and any one of the roles for which figures were utilised somewhere else. Two good examples that illustrate the early period are the coins or the "images of the word", as they are known, of late seventh century caliphs with their ideologically laden declaration about Islamic belief, and the importance of the Dome of the Rock mosque in Jerusalem. The long inscription reiterates Islam's dogmas with a declaration of the new belief's ultimate victory. Notably, the main reason for the visual symbolic method of expression on coins was to identify the Islamic world, for example, to symbolise the power, and stress the existence, the greatness, and individuality of the new world (Grabar, 1976).

The other cultural aspect of the early Islamic period is the development of writing. Allah sent His message through writing, therefore, as a skill it should be deeply respected as a vehicle of communication. Moreover, because no other writing can express the plenitude of the sacred message, an individual's attempt to write merely emphasises his inadequacies compared to the supreme beauty and majesty of God's message through a sacred piece of writing (Grabar, 1992).

The Prohibition against Figural Images

Painting and sculpture have constantly been the highest forms of Western art, while the ornamental arts enjoy a privileged place in Islamic culture because images of living creatures are prohibited. Importantly, the absence of images in Islam has a positive role. According to Burckhardt (1987), Islamic art aims to create an environment that helps the individual to realise his primordial dignity; it therefore avoids anything that can be considered an idol, even in a relative and provisional manner. Nothing must stand between the person and

the invisible presence of God. Thus, Islamic art creates a void. It eliminates all the turmoil and passionate suggestions of the world, and instead creates an order that expresses equilibrium, serenity, and peace.

In short, the avoidance of figural representations in early Islamic art, as Grabar (1987) mentioned, was systematic and deliberate where religious buildings were concerned, and led to modifications in the expressions of imagery borrowed and utilised by Muslim artists. However, this avoidance did not mean an avoidance of symbolic meaning attached to those forms that were used. Rather, symbolic importance was given to new forms or the adoption of forms in older artistic languages for which a symbolism had not been known.

The Physical Environment

The importance of the geographic or environmental factor in the production of Muslim art and architecture should not be overlooked. Brend (1991) points out that Muslim lands are watered by great rivers, such as the Nile in Egypt, which have supported very old civilisations whose formation and designs have contributed to the Islamic world. The form and style of Islamic gardens and garden courts is maintained by a square network of water channels that fulfil the practical requirements of irrigation. Further, the image or idea of Paradise that Islam presents to Muslims is that of a garden with running waters, and each garden in the Islamic world is viewed as a symbol of Paradise. In Islamic ornament, the abundance of vegetal scrolls and love of ornamental motifs of great intricacy may be attributed to notions of Paradise.

Many Islamic monuments depict the theme of the garden. The question thus arises: what roles have actual gardens played in Islamic art and ornaments? How have Islamic metaphors of the garden as paradise impacted on actual gardens and garden imagery in manuscript paintings and ceramics?

Barrucand (2000) points that the Qur'an gives detailed descriptions of the eternal garden, which is "as large as heaven and earth". In it stand "thornless trees that spread their shade" with "fruits hanging low in clusters", and it is where the "Blessed, richly clothed, lie on couches lined with thick brocade".

However, the Qur'an gives no particular guidelines for the creation of a garden. All that can be deduced from the sacred text is the significance of shady trees, flowing water, a protective outer wall, and the scattered, luxuriously decorated buildings, which embellish the landscape. The Barada mosaic in the Great Mosque in Damascus comes close to this picture. Regarding the depiction of gardens of Paradise in the decorative arts, in the Qur'an's images of these cool gardens there seems a poignant sense of the joy that a Muslim would feel in finding himself in the shade after spending many lengthy hours in the intense heat of the desert. The gardens contain magic springs and streams flowing under trees. The streams are not only cool but also good to drink. They run with waters that do not spoil, with milk 'the taste of which does not change', with wine, which is a pleasure to the drinker, and with 'purified' honey. These images are used to imply a deeper religious meaning. The pleasures of Paradise have a distinctive character, conveyed by the use of earthly words and images to describe a physical beauty that reflects heavenly bliss (Piotrovsky and Rogers, 2004).

The environmental element has had a clear effect on Islamic art and ornamentation. According to Abdul Lateif (1991), aspects of the agricultural and pastoral society have contributed to the unity of artistic creations. The artist derives inspiration for his designs from the divisions of agricultural land, observing geometric designs, parallel lines, extended spaces, width and depth within it. Vegetal forms, their variations and branched extensions are circular, interlaced and twisted, derived from accurate observation of nature and reflecting delicate sensitivity towards vegetation and its growth. Moreover, in the desert, the human being is engaged in strict observation of his surrounding environment in the search for water, grass and pasture. He closely observes alterations in the sky, namely, the changing shape of clouds, the colour of the sunrise, and the direction of storms and winds, all of which may be preceded or followed by a calmness and quietness that is a characteristic feature of the desert. Further, in the desert, when the artist looks up at the sky, he observes the stars and planets and seeks to establish a connection between them and himself in his efforts to understand the mysteries of the universe. His

observations of the heavens were probably the first steps he took on his voyage of discovery to unlock the secrets of the cosmos and led to the development of mathematics, geometric and scientific theories, and astronomy. What is more, human observation of the stars with the eyes is not enough to understand the character or form of stars and realise their details, since the impression of a star may simply be as a bright spot observed in the sky. Thus, humans began to attribute various symbolic shapes to the stars, which afterwards took on a unique stamp or character known through numerous fields of Islamic art. What the Muslim artist derived from different stellar forms, as a result of his permanent search and continual contemplations of the cosmic creations surrounding him, motivated him to depict the different stellar forms both aesthetically and artistically that greatly contributed to the enrichment of artistic values and the artistic masterpieces that Muslim artists have achieved throughout the centuries (Abdul Lateif, 1991).

Another environmental aspect influencing Islamic art is the fact that the majority of Islamic countries are located in hot, dry areas and one of the main problems, therefore, associated with maintaining the garden has been irrigation. Both the western and eastern parts of the Islamic world had inherited the *qanawat* system, underground canals which carried water from raised headwaters over large distances, making use of gentle gradients. Distribution systems in the case of both the *qanawat* and canals were cleverly controlled. In the royal gardens, the water flowed through channels decorated with tiles right into the rooms of the palace. It welled from marble basins, poured over staircase waterfalls and terraced areas, and ran over colourfully tiled walls. Lions were a popular motif on fountains not only in the Alhambra (Barrucand, 2000).

The final environmental element which has affected Islamic art is light. Its nature appears not to be altered by its refraction into colours nor diminished by its gradation from clarity into darkness. Nothingness does not itself exist except by its illusory opposition to Being, therefore, darkness is visible only by contrast with light, to the extent that light makes shadows appear. There is no more perfect symbol of the Divine Unity than light. For this reason, the

Muslim artist seeks to transform the very stuff he is fashioning into a vibration of light. It is to this end that he covers the interior surfaces of a mosque or palace with mosaics in ceramic tiles. This lining seems frequently confined to the lower part of the walls, as if to dispel their heaviness. It is for the same purpose that the artist transforms other surfaces into perforated reliefs to filter the light (Burckhardt, 1976).

The Characteristic Features of Early Islamic Art, Ornament, and Architecture

Four general characteristic features of early Islamic art, ornament, and architecture are worth exploring in more detail to illustrate the possible influences of ancient civilisations on the development of early Islamic ornamentation, discussed earlier in this chapter.

The first feature is the monument, which has no importance beyond itself, since the significance of the form is provided through some other means. Importantly, the differences in purpose and utilisation were not established by the monuments but by the activities taking place in them. From the mosque to stucco or to ornament, almost all groups of Islamic monuments were flexible, adaptable to a multiplicity of purposes, and this characteristic remained for centuries. For instance, the magnificent facades that came to adorn many Muslim buildings from the twelfth century onwards never indicated whether the building was a mosque or a caravanserai. Along with ambiguity and flexibility, early Islamic art appears to be characterised by deliberate avoidance of symbols. The most significant reason for this aspect was the new culture's rejection of practices of the tradition it replaced, particularly Mediterranean Christianity. It is not that the Muslim world rejected its artistic forms, rather that it refused to use them in the same technical mode, since the type of official and moral coherence that Islam created could not take over an older or contemporary artistic vocabulary without accepting the intricacy of its meanings and thereby losing something of its own individuality or uniqueness (Grabar, 1987).

The second feature is the accumulation and novel distribution of forms from all over the conquered world, as a conscious sorting out of the meanings connected with the forms and as a creation of a limited number of new, characteristic shapes. Within this process, significant features can be identified, which convey a sense of the development of early Islamic art and some of the effects it sought to create. The first tends to be the gradual effect of Muslim devoutness. Particular features of the architectural development of the mosque can be attributed to growing ritualisation and a growing sense of the mosque's holiness, although it is unclear whether Muslim devoutness can in fact explain the complexities of Islamic ornament. The second feature is the double patronage of early Islamic art. Princely patronage predominated, but even if the various preserved monuments sponsored by it exhibit unique formal combinations and express original functions, they appear to be less Islamic than a Near Eastern-centred version of a princely art with universal values. Next to princely patronage there grew an urban one, particularly original in both the methods it developed and the themes it utilised. This patronage, greatly influenced by the Islamic faith, does not display the lively wealth of princely art. Its shapes appear to be more clearly localised than those of courtly art (Grabar, 1987).

A third feature of early Islamic art is the diversity of phenomena such as the break-up of arches in Cordoba, the creation of the *muqarnas* in north-eastern Iran, the utilisation of both expensive and cheap items to copy and transmit almost all shapes, the ubiquity of stucco covering, and the features of ornament. A separation appears to occur between the material medium of a monument and the forms given to it. Formal units were meant to give the illusion of something different from what they were, and technical virtuosity became valued at the expense of other creative merits. Nevertheless, this development also offered early Islamic art an extraordinary liberty to adapt itself to local patrons and local requirements, inasmuch as it was not fettered by any consensus of taste or patronage (Grabar, 1987).

Overall, what unifies these monuments are not individual shapes and their arrangements, nor even a body of functions, but a series of attitudes towards

the extraordinary process of artistic creation. These attitudes appear to be contradictory, for at times they deny the validity of visual symbols and major permanent monuments, while at other times they demand a great virtuosity in beautifying an imperial palace or a prosaic ceramic plate. But the greatest achievement of these centuries was the successful creation of a monumental setting for the new culture, that is, a consistent body of shapes different from other contemporary ones, while using in large part the same elements. The attitudes and the setting were conscious efforts at self-definition, at formulating the use of the vocabulary of older cultures, a language of visual shapes that would serve the needs of the new culture and maintain its separate unique character. In view of the fact that they are most easily defined through attitudes than through shapes, it is appropriate to utilise the term "Islamic" for the monuments that extend over several centuries from the Atlantic to the steppes of Central Asia (Grabar, 1987).

Early Islamic Ornaments and Designs

From the early periods of Islamic civilisation, starting from the Dome of the Rock mosque in Jerusalem and ending with the Mshatta secular palace, a style of ornament can eventually be defined. A ninth century style can also be identified in Iraq, both in architectural ornament and in ceramics, largely through the Samarra finds. This pattern was probably derivative, since one of its most original components, the bevelled style, appears from Morocco to Central Asia. Egypt has preserved a major series of woodcarvings, which reflect local tradition as well. Further, a third early Islamic group of styles comes from Spain, which appeared in buildings such as the mosque of Cordoba and Madinah al-Zahra (Grabar, 1987).

Another remarkable characteristic relates to the various materials utilised in art objects or architectural decoration, for example, stucco, stone, mosaic, ceramics, wood, ivory, and metal, particularly bronze, and glass. Two aspects justify a consideration of ornament as ornament regardless of technique. One is the demonstrably numerous attempts by early Islamic artists to transfer effects from one technique to another. Some of these attempts are self-

conscious, as in mosaics from Khirbat Minyah and Khirbat al-Mafjar where rugs are indicated by remaining tassels and, in one instance, by the apparent indication of a weaving technique (Grabar, 1987).

Another aspect of early Islamic art, which justifies the study of ornament regardless of method, is the astonishing significance of stucco. It is suggested that its uses as a method of architectural adornment was not new. From the Parthian era onwards it was one of the most important distinctive methods of Iranian art, as it was utilised to cover up the modest rubble masonry of Iran and Central Asia. Occasionally, it was painted but most frequently it was carved or moulded into a range of styles. One of the major consequences of the new balance between regions established by Islam was the unexpected and rapid spread of stucco from Iran and Iraq all over the Islamic world. What is more, the main significance of stucco lay in some of its properties. The cheapness of stucco made it a method available for all, and it presents an interesting resemblance to ceramics. It can be used for sculpture and it can be coloured. Stucco was also regarded as the most dependable method of architectural embellishment for many reasons. It can be used for decorative purposes or art works; it can be free of architecture and used to cover a whole building (Grabar, 1987). What seems astonishing about the motifs used in early Islamic ornament is the variety of new designs and decorative styles that appeared in the architecture of Iran. Ornaments' themes depend on a number of variables, some of which are independent motifs, which introduce a new taste or a new idea. Social, psychological, ethnic, religious, economic functions are all involved in the explanation of a given ornamental design (Grabar, 1987).

Differences between Sacred and Secular Ornamentation, Decoration and Architecture

A broader question concerns the relationship of the sacred to the secular in Islamic culture. Can the two be clearly distinguished? Does the prohibition against representation extend to all aspects of ornamentation and design? Baker (2004) indicates that some commentators, such as (Nasr in Ardalan *et*

al., 1973; Burckhadt, 1976; Critchlow, 1976) contend that in the world of Islam there is no difference between the sacred and the profane. All art owes its inspiration, its conception, and its aesthetic achievement to the faith of Islam. Leaman (2004) also points out that some have argued that there can be no secular art for Muslims because everything for Muslims is holy. Piotrovsky and Vrieze (1999) suggest that "An essential difference between Islam and Christianity is that the former does not divide life into the temporal and the spiritual" (p. 26). Al-Lowate (1994) similarly states that in the Muslim's life, there is no distinction between divine and secular art. The different aspects of Islamic art are integrated and appear in divine buildings, the art of books and artistic productions where Islamic art's essential themes emerge in a unified pattern. The Islamic mentality achieves creative conceptions in the architectural field such as mosques and the aesthetical field as well.

Al- Faruqi (1977) strongly argues that for the Muslim there is no secular art as opposed to religious art, no secular politics differing in jurisdiction or goal from religious politics, no secular actions, which contrast or are in opposition to religious duties. The Muslim considers his life to be a unity, his religion to be as much concerned with the way he manages his business affairs, participates in political affairs, or even greets his neighbour as with his ritual obligations or his upholding of the five pillars of belief, prayers, care of the needy, fasting, and pilgrimage. Similarly, his sacred ideology is a political, an economic, a social and an aesthetic ideology. Therefore, the person influenced by Islamic culture need not receive formal training or read books on aesthetics to understand Islamic artistic creations.

Secular art or the art of palaces entirely differs from sacred art or the art of mosques. The mosque is embellished with abstract motifs of amazing sophistication, involving the utilisation of Arabic calligraphy and vegetal designs. On the other hand, secular art is composed of an extensive variety of figural images and sculptures. Noticeably, despite the prohibition against the representation of images, Muslim rulers allowed themselves freedom in the decoration of their palaces. Ettinghausen (1974) states that while religious art was limited equally in its shapes and functions, secular art, and particularly

the art of the palace, was not. The secular themes of early Islamic architecture seem to predominate and offer a much greater sphere for improvement than sacred architecture. What is more, the infinite range of ideas produced by the new Islamic civilisation based on the past of conquered lands, is formed into something particularly Islamic.

Overall, the distinctive feature of secular art is that it can be just as limited as religious art, for a palace is reserved for a prince and only the rich can afford certain objects. The epistemological difference between the two is that there is much more common ground between the functions and inspirations of secular art from different cultures than between those of religious arts, since the former's forms and functions can be viewed as the expression of an aristocratic social level continuing older ways. Therefore, the modifications made to earlier shapes by the new culture were essential for generating the subsequent cultural and aesthetic changes that produced the unique features of Islamic art. It is also possible that the changes are accidentally preserved in Islamic culture, having disappeared in Byzantium and in the West. Thus, the value of the secular arts of Islam extends far beyond the Muslim world (Grabar, 1987). Grabar (1976) suggests that what emerged from the palaces to have a permanent effect on Islamic art was not Byzantine art but a number of techniques and a large number of designs. Importantly, Umayyad art was not an area of Byzantine art, but an identifiable art sponsored by the Muslim Arabs a few decades after their emergence from Arabia. Without denying the significant decorative values developed by Muslim artists as early as for the mosaics of the Dome of the Rock, it remains true that these artists and their patrons on many occasions utilised works of art to express certain ideas.

The other remarkable feature of secular art relates to the art and themes of early Islamic palaces. Ettinghausen (1974) points out that the defining features of early Islamic palaces' art can be classified into three main categories. The first feature appears to be the clear-cut separation of the princely establishment from the surrounding world, a separation that possibly had its origins in the *villa urbana* of ancient Rome. The identifying character of the palace on the outer surface is that its walls are decorated with towers and

usually a striking gateway, whereas the inside of the palace tends to become a myth. Inaccessible to most and transmuting itself frequently into a vast walled city within the city, the palace becomes the source of stories, adventures and all kinds of mysterious events in which fact and imagination are hard to separate. The second feature is that early Islamic palaces were not greatly organised and formally designed compositions. They comprised a series of self-sufficient units that could be adapted, enlarged, destroyed, or changed, as requirements or tastes altered. Among these units are found baths, audience-halls of a varying degree of formality, and courts with fountains, gardens and gates. Importantly, the palace seems not an aesthetically considered and structured entity, but a series of divided elements connected to each other by a small number of distinctive activities by which the life of the prince was identified. These included audiences, some of which were held in astonishing magnificence, as well as pleasures and pastimes, drinking, bathing and singing (Ettinghausen, 1974).

What is particularly important about secular buildings is that paintings, sculptures, and mosaics of early Muslim palaces primarily illustrate the life of the prince. There are official iconographic compositions, such as the monarch enthroned, or ones suggesting pleasure and luxury, such as hunting scenes or depictions of the prince surrounded by dancers, musicians, acrobats, and unclad women (Grabar, 1987). The Umayyad bath halls were decorated with mosaics, usually without any figurative elements. Mosaics found on the floors of the palaces range from the superb geometric designs of Mafjar and Minyah to the badly preserved and still unpublished ones at Qusayr Amrah. Rich stucco sculptures and mural paintings not only serve decorative purposes, but also depict various themes of royal pleasure and power (Grabar, 1976).

The third and final feature is that palaces were more richly decorated than mosques. Mosaics, paintings, stone or stucco sculptures were media utilised to produce an amazing range of ornamental or figurative ideas, which the discoveries of palaces such as Qusayr Amra, Mshatta, and Khirbat al-Mafjar have revealed, giving rise to doubts about their Islamic origins (Ettinghausen, 1974). At this point one might raise a question about the prohibition against

representations. Does it apply only to religious buildings and objects? Or does it apply equally to both sacred and secular artistic items and architecture? This matter has been discussed earlier in great detail in chapter two. From the early periods of Islamic civilisation, the Qur'an had forbidden the representation of living beings. A prohibition had been formally stated, and became a standard Islamic thought. The explanation for the prohibition is that any representation of a living being is an act of competition with God, for He alone can create something that is alive. Therefore, the Islamic attitude towards human and animal images has considerable significance. Fansah (2003) suggests that the dislike of painting in Islam goes back to the time of the Prophet. In essence, it is the striving to keep away from paganism and the worship of idols as well as an aversion to imitating the creation of Allah and the dislike of luxury at a time dominated by asceticism. However, history and reality both confirm that Muslims practised engraving and painting and did not totally abandon the painting of living beings. The history of Islamic arts shows the art of painting flourished in many regions that had an ancient artistic engraving and painting heritage, like Iran, and in those countries under the cultural control of Iran during that period of Islamic history, for example, Iraq, India and Turkey.

Finally, as regards sacred art, distinctively, representations of figural imagery are not found. There occurred a replacement of the depiction of representation with calligraphy, which became a major artistic pattern. The Islamic faith also had an important impact on the art of sculpture. This art did not enter the mosques, but was replaced by Arabic writing and the use of geometric ornamentation and modified plant elements. Afifi (1997) argues that ornamentation naturally occurred as a result of Muslims moving out from the peninsula desert to ancient countries and observing their beautifully formed luxurious buildings and splendid palaces, whose walls were adorned with images of gardens, flowers and birds. Muslims perceived a great difference between houses in the new environment and their mosques. As a consequence, Muslims began to ornament their mosques to show their high esteem for and appreciation of them so that they did not appear inferior when compared with the palaces and places of worship of non-Muslims. What is important to

mention is that the decorative methods used in early Islamic mosques are outstanding for their diversity. Mosaics occur in the Umayyad buildings of Syria and in Cordoba. Carved, painted woodwork and stucco columns are utilised to present emphasis to major architectural lines, as in the Aqsa mosque in Nayin in western Iran. Wood is utilised to decorate *mihrabs*, *minbars* as well as *maqsurahs*. Glass is utilised in windows that frequently have a stone or stucco grillwork of considerable complexity as in the Damascus and Cordoba mosques (Grabar, 1987).

THE INFLUENCES OF ISLAMIC RELIGION ON ISLAMIC ORNAMENTATION, ART AND ARCHITECTURE

The Second Research Question Is: Do Islamic ornament, art and architecture created by Islamic artists serve Islam as a religion?

This chapter will firstly offer a brief overview of the influence of the Islamic religion on the ornamentation, art and architecture of Muslims and then discuss the second research question.

The Islamic religion was an important factor in the creation of the great Islamic civilisation, in its distinctiveness from other civilisations. What made Islamic civilisation powerful and significantly varied appears to be the emergence and spread of Islam through the conquests of some lands in Asia, North Africa and Europe. Hence, its impact appears through different aspects of Islamic civilisation's culture, tradition, architecture and art. Ettinghausen *et al.* (2001) suggest that Islamic art did not develop slowly from the meeting of a new faith and state with whatever older traditions prevailed in the areas over which the state ruled. Rather, it came forth as suddenly as the faith and the state, for, whatever existing skills and local traditions may have been at work in the building and decoration of early Islamic monuments, their common characteristic is that they were built for Muslims, to serve purposes which did not exist in quite the same way before Islam. Therefore, one of the main remarkable features of Islamic art is the way in which a definite style, a whole

repertory of motifs, and a distinct architectural method became connected with a faith (Rice, 1975).

Generally, in discussing the impact of the Islamic religion on Islamic art, the significant point that needs to be emphasised is the centrality of the concept of God. How may the centrality of the concept of God assist understanding of Islamic art or an understanding of the Islamic religion in general? How can this idea be reflected in the spiritual world and in the Muslim's life? To what extent does the artist apply this divine philosophy in Islamic art and ornamentation? Does the artist arrange ornamental forms, whether vegetal or geometric motifs, in rotated designs around the centre in order to symbolise the movement and circulation of the earth around the sun or the movement of Muslims in Mecca when they move around the Ka'ba in a circular way? Al-Lowate (1994) states that the centrality of the concept of God in Islamic thought appears to be a power that possibly has no similar or identical concept in any other creed. It explains all spiritual, intellectual and physical aspects in Muslim civilisation. The relationship of God to the cosmos is simple and direct, as is the relationship between the creator and His creation. The main aim of man in life is to worship God. God said in the Holy Book: " I created the jinn and humankind only for worshipping Me" [51:56]. There is no complexity in the relationship between the Creator and creation or between God and man. The idea of Jesus as the ransom sacrifice or a mediator between God and man is not found in Islam. Islamic art can be used as a medium for the Muslim artist to continuously declare the unity of God. Thus, Islamic art should be viewed in terms of its divine role as bringing man towards a closer relationship with God and developing in him an intense appreciation of the marvels of the Creator's creation. Thus, the artistic creation of the Muslim artist can be viewed as an act of worship directed towards the Almighty God. Accordingly, the idea of centrality is not just one of the essential keys to understanding Islamic art, but is crucial for understanding the whole world of Islam, its spiritual and physical aspects.

The most important feature by which Islamic art, ornament and architecture is characterised is the reflection of figural representation, since it may lead to

idolatory, and the Muslim attitude towards the representation of human and animal figures is the point at issue. It is clear that this matter is the most debated in discussions of Islamic art. Piotrovsky and Rogers (2004) point out that idols and idolatry are repeatedly cursed in the Qur'an. Idols became the focus of bitter attack by Muhammad. He urged his countrymen to destroy them, explaining that idolatry was the great crime for which pagans burn in hell's fire. The Prophet Muhammad repudiated images on two grounds: as possible objects of worship and as expressions of impious lavishness.

Notably, one of the influential factors that positively contributed to the spread of Islamic ornamentation was the influence of this theological dictate, the prohibited depiction of human and animal forms. Contrary to what others suggest, that this factor influenced Islamic art and architecture negatively, as a result of it, Muslim artists began to create vegetal and geometric ornamental forms and designed them in abstract styles with complex and interlaced shapes that please the beholder and provoke amazement. Hattstein and Delius (2000) argue that the prohibition affected Islamic art in many ways. First, since belief could not be expressed through the representation of living beings, other approaches had to be found to visually display piety and holiness in Islamic art. One of these ways was the utilisation of the sacred art of Arabic calligraphy in a sacred art shape. Another factor that seems to have influenced Muslim art is the descriptions of heaven in the Qur'an with its gardens, fountains, and pavilions.

The Influence of Islamic Religion on Islamic Architecture

The influence of the Islamic religion on Islamic architecture is seen in Islamic sacred buildings, such as mosques, which are characterised by a particular structure and features that differ from those in churches and temples. These became requirements for all buildings utilised for communal prayer. According to Ettinghausen (1974), the one crucial element in the making of Islamic architecture is Islam. In its formative monuments, Islam neither required nor described an architectural identification. The Prophet's acceptance of the Ka'ba in Mecca as a holy sanctuary transformed into a

unique site, a symbolic centre, and a direction. Its uniqueness prevented the Meccan sanctuary from becoming a theoretically possible model for later Islamic architecture.

The influences of Islam on Islamic architecture, particularly mosques, extended to the fields of design, ornamentation, and embellishment (Al-Shami, 1988). The art of Islamic architecture was focused to a great degree on the building of mosques that shows brilliant variation and beautiful harmony. The simple design of the prophet's mosque remained a basic model for designing mosques throughout the centuries. The design of the mosque in Islam took into account the needs of worshippers and its function in promoting worship of God. According to Al-Basha (1975), in the field of architecture, Islamic buildings reached a high level of beauty and luxury regarding planning, styles of construction, and ornamentation. Many types of Islamic buildings, such as mosques, schools, castles, palaces, and other religious buildings, appeared. In terms of style, Islamic architecture is distinguished by architectural units and elements such as: minarets, domes, entrances, pillars, and muqarnas (honeycombs or stalactites).

Religious buildings, such as mosques, possessed a special structure and distinctive elements that had to meet the needs of Muslims. The *qibla* wall is oriented towards Mecca. The *mihrab,* which usually takes the form of a decorated niche, is to be found in the *qibla* wall of mosques, although this has no particular ritualistic importance other than to indicate the direction of prayer. Further, a minaret or tower is usually built at one or more corners of the mosque, from which the call to prayer is sounded, calling Muslims to prayer five times a day. Another element is the *minbar*, a pulpit reached via a stepped substructive in mosques, usually to the right of the *mihrab.* The *iwan* is a vaulted hall opening onto a courtyard (Hattstein and Delius, 2000). Another of the influences of Islam on architecture is that mosques may contain fountains for the necessary ablutions before prayer or separate areas for performing ritual ablution.

How Islamic architecture and its ornamentation serve Islam as a religion

The question of whether Islamic architecture and its ornamentation, as created by Muslim artists, serves Islam as a religion is important. One of the ways that it serves Islam as a religion is the fact that Islamic artists and architects intended and used their arts to spread Islam by decorating buildings with several beautiful forms of Arabic calligraphy, vegetal and geometric adornments, whose distinctive character immediately identifies them as Islamic. Islamic art may also play the role of a medium of entertainment, drawing the attention of people to the deep beauty of Islam that the eye cannot perceive directly. For example, the astonishing Muslim heritage in Spain, such as the Alhambra palace and the great Mosque of Cordoba, which Islamic architects created, serve the Islamic religion by arousing wonder and awe in the spectator through the aesthetical glamour of its ornamentation, the fascinating colours, and charming floral and geometric interlaced forms. People from all over the world may travel to see the famous heritage of the Muslim civilisation, just as tourists travel to Egypt to see the pyramids or whatever survives from the time of the Pharaohs. As a result of observing these architectural and artistic achievements, people may develop the desire to learn more about the Islamic faith and its aims. Moreover, Islamic art may inform people about the history behind this art. People may derive great pleasure from the astonishing architecture and admire its art and ornamentation, and wish to learn more about the power of Islamic history and culture.

According to Ettinghausen (1974), the legacy of Islamic architecture should be sought in terms of its achievement, and its structural or aesthetic characteristics which best express the vision of the Muslim world and identify those monuments that are acknowledged masterpieces of the culture. The legacy of an architecture appears to be the language of its constructional forms which most express the needs and dreams of the culture in which it exists, regardless of whether or not it has had a significant impact beyond itself. The reasons for the success of a definable Islamic architectural tradition are found in the necessity to make visible the physical reality of Islam by employing

patterns differing from those surrounding it and thus making it immediately recognisable as Islamic. The importance of this point is considerable when attempting to assess the legacy of Islamic architecture. For the historian of architecture, the formation of Islamic architecture may be used to illustrate a rarely observable phenomenon, namely how a culturally definable architecture creates itself, whereas to the historian of Islam it illustrates what the culture chose and what it rejected. In turn, this may suggest something of the image, which the culture sought to project. The very existence of an Islamic architecture raises more fascinating and essential questions than it answers (Ettinghausen, 1974).

The other way of serving Islam appears to be, mostly, to do with the obvious role that the artist and architect has within Islamic society. In Islamic architecture, the artist and architect's role in serving the Islamic faith appears to be in decorating religious buildings, such as mosque's, minarets, domes, entrances, pillars and prayer niches with several Qur'anic verses that depict the power of Allah and His Majesty, and also depict the splendour of paradise with its beautiful gardens and rivers that God promises to Muslims. Beautifying mosques with magnificent Arabic calligraphy and floral and geometric ornaments with charmingly coloured mosaics, which are combined with aesthetic sensitivity, may suggest several reflections. One is that this beauty may be a kind of worship of God and glorification of Him or it may possibly reflect the power of Muslims in the lands they conquered. It may also illustrate the spiritual and emotional aspects of the faith in a way that the letters and words cannot help. As Atar (1984) points out, Muslim architects have innovated in building divine mosques that reveal the missionary intentions and purposes that start from Mecca and the Prophet Muhammad mosque's in Medinah, and are such that every mosque reveals God's unity every day without interruption. According to Atar (1984), mosques with their high minarets may be regarded as one of the reasons for the spread of Islam. Muslim artists expressed their various arts either through sounds, beautiful melodies, drawing pictures, or compiling stories which attracted the attention

of their audiences so much that they began to take an active interest in the religion and often became converts.

The influence of Islamic religion on Islamic art

In Islam, art is considered a divine art since it can be used to express the divinity of God. Artistically, the Islamic religion did not order any particular artistic themes or subjects to be presented but forbade the depiction of human and animal images.

What is particularly important to consider regarding the influence of the Islamic religion on Islamic art and ornamentation is the degree to which Islamic artistic and ornamental elements, such as designs, forms, styles, and motifs, are used to express the beliefs and principles of the Islamic faith. Generally, under the impact of Islam, new methods and ways of artistic expression emerged, which were essential for generating from artistic objects an aesthetic contemplation in the spectator that would reinforce his Islamic faith and provide a constant reminder of its principles. It can be said that Islam set free the spiritual and intellectual abilities of the Muslim artist and enabled him to express the inexpressible aspects of this world as well as aspects of the hereafter. Al-Faruqi and Al-Faruqi (1986) indicate that Qur'anic visual motifs brought in their wake a wealth of correlative influences on Islamic culture and arts. These include the astonishingly rapid development of the Arabic script, the incredible proliferation of distinctive styles, and the widespread use of calligraphic materials in artistic works. Since every act and thought of the Muslim carries a religious connection or determination, the incorporation of the words of God in every possible decorative scheme, in every aural and visual experience, is a desired objective. Qur'anic passages have been used as decorative motifs not only on religiously significant items, but also on fabrics, garments, vessels and trays, boxes, walls and buildings in every century of Islamic history and in every corner of the Muslim world. With its inclusion of beautiful calligraphy reproducing passages from the Qur'an, Islamic art derives not only a discursive influence from the Qur'an, but also a Qur'anic aesthetic determination.

The influence of the Islamic religion on Islamic art is also apparent in the production of some types of Islamic pottery. Islam prohibited or disliked the use of vessels and dishes made of gold or silver. This prohibition or dislike induced the artist to invent a form of pottery with metallic lustre, which is made of mud (clay) and given the metallic lustre by metal oxides (Hussain, 1996b).

How Islamic art and ornamentation serve Islam as a religion

Important questions may be raised with regard to how Islamic art and ornamentation serve Islam as a religion. Were they created specifically to serve the Muslim faith? Or were the art and architecture produced in lands ruled by Muslims made simply for Muslim patrons? Does Islam as a religion serve Islamic art and ornamentation and contribute to their spread all over the world or does Islamic art serve the Islamic faith by helping to develop and spread awareness of its beliefs and principles globally? As to whether Islamic art and ornamentation serve Islam as a religion, Hussain (1996b) states that in spite of the strong relationship between art production and religious belief, Islamic art had no predictory or media role, in other words, the Muslim artist did not intend to provide any religious explanations through his artwork. Thus, it can be said that Islamic art in general was not a direct channel to serve the religion or advance it. The artist held/adopted the grand view of Islam towards existence and the unseen and used it to communicate to the spectator the profound truths underlying human existence. Therefore, many of the principles of Islamic thought can be found represented in Islamic artworks. Comparing the products of Islamic art with other arts, a noticeable difference may be found in that the prevailing religious ideology clearly exerted a major influence on all its aspects in the Islamic era.

Further, the interest that was expressed by Western Orientalists in Islamic civilisation as a result of studying its art may also be considered another way in which Islamic art served Islam as a religion. Two important matters need to be considered in discussing Western Orientalists and Islamic art. First, did the splendours of Islamic civilisation, such as luxurious palaces and mosques with

their beautiful ornamentation, attract Orientalists to Islamic art and ornamentation? Second, did Western Orientalists travel to Muslim countries and study Islamic art and ornamentation in order to understand the spiritual and intellectual life of Muslims. According to Vernoit (1997), the history of nineteenth century Islamic art remains a mostly unexplored subject, yet there are obvious reasons why such study is currently relevant. The political autonomy gained by Muslim states in the twentieth century has created a new sense of cultural identity and new viewpoints have emerged in the writing of history, free from the colonial perspectives of decline. Renewed interest in the nineteenth century history of the Muslim world deserves to be accompanied by a greater understanding of its art. Western collectors have been slow to appreciate this fact, but in recent years collectors from Muslim lands have brought new perspectives to the study of Islamic art in their choice of material, which is often more expansive than that current among their Western counterparts.

Also, displaying the treasures of Islamic civilisation, for example, the masterpieces of Islamic art in museums in Europe and America may serve Islam as a religion by communicating positive images of Islamic culture and Muslim artistic themes and language. Exhibiting the magnificent treasures of Islamic art ornamented with a variety of motifs provides people viewing them with historical and cultural perspectives of Islam as a religion. Further, it may correct false impressions and misunderstandings about Islamic art, particularly the prohibition against the depiction of human and animal figures, which is often criticised by Western people. Islam may thus be served by close observation of the beauty of Islamic art, the elegance of Arabic calligraphic styles, and the astonishing variety of abstract and geometric designs. Through this means, people may come to a better understanding of the Islamic religion and bridges may be built between Islamic culture and other cultures. Khoury (1989) believes that art remains one of the best methods by which we can show our participation on a cultural level, and by which we can reflect ourselves to the whole world. It is the best way of telling the world what we think of our past, and how we view ourselves now. Hence, we need to select,

and then revive those elements that are most descriptive of our humanity and intelligence. Our attempts at revival should not be through mimicking the glorious past, but through interpreting and defining it for others and ourselves. The context and significance of our art, once it becomes comprehensible to us, will become comprehensible to the rest of the world. Once it becomes universal in content and addresses itself to a wider humanity then we will become more able to share it with others.

Another way that art can serve Islam as a religion is possibly through contemporary art exhibitions. Nowadays, Arab and Muslim artists have a role in serving the Islamic religion through helping to correct cultural and religious misunderstandings. Artists speak expressively and meaningfully through their works and can utilise their art to convey the uniqueness of the Islamic religion and its principles, so assisting the removal of negative attitudes about Islam and fostering understanding of it. Khoury (1989) believes that Arabic artists' responsibility in the worldwide community lies in their ability to interpret their culture to the world. As painters, sculptors, and architects they can eloquently interpret their culture and give the world more than they borrow. They should thirst to discover, understand and promote what has been traditionally accepted as Arab art. However, without dissemination of the Islamic artistic heritage, Arab artists cannot share, exchange or teach their culture. The conscious efforts of Arab governments, institutions and groups to co-ordinate the study of Arab art in schools and university curricula, to promote international exchanges, to renew museum collections, to promote modern trends, and to encourage the spirit of creation need to be more widely exerted and encouraged and given greater value and significance. With such support, and with increased recognition of the importance of individual creativity, Arabic art will develop and flourish abroad.

Finally, at the present time, there are Western researchers showing an interest in Islamic art and ornamentation who objectively discuss the various aspects of Islamic civilisation in seminars and discussion groups, develop appreciation for the beauty of Islamic art products and the aesthetic of Islamic abstract designs and ornamentations. Their role should be to present and express the

spirit and value of Islamic art and civilisation, its history, development, and the elements of its creativity, and to clarify the impact of the Islamic religion on Islamic art and the influence of Islamic civilisation on other civilisations. They should also endeavour to achieve a better understanding of the features of the artistic creativity of Muslim artists by shedding light on the intellectual and spiritual facts related to the Islamic religion and studying the relationship between Islam and the innovations introduced by Muslim artists. Moreover, they should develop an understanding of the aesthetic and divine nature of Islamic art and present spiritual explanations of its ornamental forms, connecting them to the Islamic religion. By doing so, Western researchers will come to a better understanding of the Islamic religion. Their efforts may also be regarded as another way in which Islamic art can serve as a religion. According to Al-Aloosi (2003), the spread of exhibitions of the arts and antiquities and the exchange of views at international symposia and conferences dedicated to specific civilisations, as well as visits and meetings that elicit media interest, can contribute to forming a new positive perspective in the West towards Arabian culture. However, there is still a need for wider openness and a return to the basic values and principles of Islamic culture to derive inspiration and the drawing of more knowledge from its sources.

THE IMPACT OF ISLAMIC ORNAMENT ON OTHER CULTURES

The Third Research Question Is: To what extent has Islamic ornament influenced other non-Islamic cultures?

This research question will examine the impact of Islamic ornamentation on the arts and architecture of non-Islamic cultures. It focuses particularly on the influence of Islamic conquest and its great role in transmitting the artistic motifs and designs of Muslim artists to other cultures. Also, the role of trade along the Mediterranean coast in dispersing luxury items ornamented with magnificent Islamic ornaments will be the considered. The impact of Islamic art and ornaments on Western Orientalists' art will also be discussed. Briefly,

the tendency of this research question is to examine the extent to which Islamic art and ornamentations were accepted and admired by other non-Islamic cultures. Further, the great cultural exchange between Islamic culture and other non-Islamic cultures in the field of architecture, painting and the ornamental arts will be explored.

According to Zeyadh (1992), the growth of plastic arts in the Arabic world is a result of the impact of Europe. We find studies, research, and critiques concerned with the influence of Western art on Islamic art and others investigating the influence of Islam on Western art. The motives for these studies are varied, ranging from the objective to the ideological. Studies concerning the West's influence on Islamic art and the influence of Islam on Western art emerge from an attempt to identify similarities and differences between the two art styles in order to promote greater cultural understanding. The journey of investigation is also an attempt to discover the roots of the Muslims artist's heritage and to rebuild his artistic and cultural concepts. Such studies also endeavour to revive ignored or forgotten techniques. The aim is not only to relate modern plastic arts with older traditional arts but also to derive inspiration from tradition.

Reasons for the Occurrence of Islamic Ornamentation in Non-Islamic Cultures

Searching for explanations and reasons for the appearance of Islamic ornamentation, whether artistic designs, methods or styles, in non-Islamic culture, arts and architecture, is worthy of discussion. Generally, before discussing these reasons, it is important to provide a brief overview of how Islamic culture, art and ornamentation arrived in Europe, in particular, how Islamic ornamentation was transmitted and how it appeared in European arts, crafts and architecture. Due to the Islamic conquests, which lasted for almost eight hundred years, a sophisticated and lavish era of Islamic art emerged. Al-Aloosi (2003) suggests that the impact of Arabic culture on the arts of Europe started with the Islamic period of conquest, and that the state of Andalusia had an important role in transferring the Arab culture to Europe, since it was where

Arabs established firm cultural customs in architecture, the arts, calligraphy, ornamentation, and industry. The effect of these is still evident today. The Europeans incorporated in their arts, industries, and literature many of the Islamic cultural customs prevailing in Andalusia. The crusades also had an impact on transferring Arab culture to Europe and took back to Europe whatever they could of the wonders that Arabs had created in various arts. The settlement of Arabs in Sicily and in the Balkans also helped to spread Islamic arts across Europe. Arab and European explorers and merchants also had a further effect as they carried art products between countries, such as rare manuscripts and valuable art products.

Explanations for the presence and acceptance of Islamic ornamentation and art in non-Islamic cultures are varied. According to Ettinghausen *et al.* (2001), one of the most important reasons was the overwhelming secular character of Islamic art, which was not for the most part, socially or religiously restrictive. Another reason was the particularly high level of practical competence displayed by this art connected with the cultural status enjoyed by Islamic society. The third reason was, perhaps, that Islamic art consisted of objects which could be transmitted from one region to another and not to a single area. Finally, all members of the Islamic commonwealth employed artists who often belonged to different religious communities.

Another reason for the acceptance of Islamic objects may possibly be the fact that there are no Islamic figures, images or obvious religious symbolism. A range of birds, arabesques, and human images made the objects on which they were portrayed completely acceptable, even for the warping of a sacred relic or the carpeting of the altar steps. Other reasons for the acceptance of Islamic objects seem to be their obvious aesthetic quality in terms of their harmony and luxury, particularly in the early periods, as well as the high degree of practical skill evident in their execution, excelling anything possible in the West. Also, their striking attractiveness and their assumed association with the Holy Land and specific saintly figures (Ettinghausen, 1974).

Other reasons relate to the admiration of Europeans for Islamic artistic masterpieces, which clearly demonstrate Muslim artists' creative ability, imagination, and accuracy of workmanship. Such masterpieces include earthen, glass, wooden and metal artefacts which display a variety of forms, styles, and colours. Hagedorn (2000) strongly contends that the art of Islamic countries had the greatest and most enduring influence on the wider development of the Modern Movement in Europe. Yet, in spite of all the interest in, and attraction of, the foreign country, it was, in the end, experienced merely superficially, and it remained strange and charming above all, by reason of its entirely different nature. This sort of preoccupation with Islamic art simply occurred in a period when, in Europe, the content and form of its own art no longer came together in unity. This was due to the fact that the painting had forfeited to photography its illustrative, interpretative function. In architecture, pretentious quotations from times past, were freely utilised and separated from their original functions and then put together to form new compositions.

The Influences of Islamic Ornamentation on Non-Islamic Cultures' Art Objects

The influences of Islamic ornamentation on other cultures' art objects appear to be clear and are varied. The transmission of Islamic art and ornamentation to Europe and the world regions occurred in many ways. The following are some examples of the influences of Islamic ornamentation on the art objects of non-Islamic cultures.

Carpets

Carpets from Islamic lands were highly valued and admired for their aesthetic ornamental forms and magnificent colours. One unique type of Anatolian carpet, produced for export in the late fifteenth century, is known as the large pattern Holbein carpet. It contains several large octagons inscribed in square frames. The octagons are usually ornamented with strap work patterns and separated and enclosed by bands of smaller octagons. The carpet also contains a band of inscriptions in which the stems of the letters appear to be twisted

together (Bloom and Blair, 1997) (see Figure 5.1). Irwin (1997) pointed out that Oriental carpets became favoured props in European paintings from the Renaissance onwards. Venice seems to have played an important role in promoting the entry of Muslim luxury art productions into Europe. The richness of Venetian paintings in the fifteenth and sixteenth centuries, with their profusion of reds and golds, often show Turkish carpets, hanging from windows, covering tables, or strewn over marble floors. For example, the carpet in Hans Holbein's painting, *Ambassadors*, depicts two ambassadors standing in front of a table covered by a carpet designed with geometric patterns (see Figure 5.2).

In Sicily, a much greater transmission of Islamic motifs and techniques appeared on art objects, and ivory carvings were adopted. The tin-glaze technique became the basis for European majolica, and Spain came to produce a knotted carpet reflecting Islamic design (Brend, 1991).

Textiles

Another feature of Islamic influence on non-Islamic cultures appears in the design of textiles. Islamic textiles were favoured by European people due to their high quality, distinctive designs, and coloured schemes. Mack (2002) points out that ornamental patterns woven into, or embroidered onto, luxury fabrics were highly subject to fashion, due to the fact that the finest fabrics had universal prestige, and textile fashions were imitated along the routes of trade, conquest, and diplomacy. Europeans enthusiastically adapted the essential ornamental motifs in Asian and Islamic textiles. In the fourteenth century, textiles were the first Italian craft to bloom artistically and to compete internationally, and were inspired by luxury silks imported from Mongol Asia.

It is believed that Western craftsmen transformed some of the beautiful Islamic ornamental forms and used the same Muslim methods in the production of textiles. Bloom and Blair (1997) indicate that the beauty and value of fine silks, woven on drawlooms in eastern Islamic lands, were highly appreciated. In regions, such as Northern Europe, which had neither the raw materials, nor the drawloom technology, the finished fabrics had to be

imported from afar, but in Spain and Sicily, which were under Muslim domination, both the raw materials and technology were available and fine silks were produced there. These industries spawned silk weaving centres in Christian Spain and Italy, which eventually equalled and sometimes surpassed their predecessors.

What is worth noting is that European people found, in Islamic carpets, an aesthetic and creativity which they sought to obtain to decorate their palaces and churches. Many of the oldest Islamic textiles have survived due to the fact that they were preserved in Christian churches where they were used as hangings. Muslim textiles were treated as objects of prestige throughout Europe (Irwin, 1997) (see Figure 5.3).

Glass and Ceramic Wares

The influence of Islamic ornamentation on the arts of European glass and ceramic ware is also evident. In the field of glass production, Islamic glass luxury items were given pride of place, due to their charming colours and beautiful designs, and they became a significant source of inspiration for European artists. Vernoit (1997) points out that a trend developed in late nineteenth century Europe, for imitating Islamic enamelled glass and ceramic wares. This style was motivated by a desire to rediscover lost craft techniques, and was reinforced by the aesthetic taste for historicism. European craftsmen were stimulated by their encounter with Islamic gilded and enamelled glass vessels. Such items had been included in European collections since medieval times, acquired by crusaders, pilgrims and in other ways, but it was during the nineteenth century that many more pieces were discovered and studied. Thus, by the late nineteenth century, around 200 Islamic gilded and enamelled glass items were known to scholars, some of them passing rapidly from collection to collection.

Europeans valued and appreciated Islamic luxury glass because of its striking form and technical sophistication. The best examples illustrating European arts and crafts influenced by aspects of Islamic ornamentation are the works of the French glass artist, Phillipe Brocard. His works look back to Mamluk glass

objects for their inspiration, for example, the inscribed medallion is frequently featured. Nevertheless, he often replaces inscriptions with floral adornments or, for example, instead of the original writing, he produces a pseudo-Islamic flourish that, on closer examination, appears to show the Latin word *lux*. The approach really consisted of reviving, for Europe as well, the significance of written flourishes in Islamic art, though this flourish had to be replaced by European intellectual content because of a lack of knowledge (on the part of the artist, the viewer, or the purchaser) (Hagedorn, 2000) (Figure 5.4).

In the field of ceramic art, European artists tried out Islamic firing and glazing methods to create lustre and other artistic items. Mack (2002) suggests that improvements in Italian ceramics began around 1200, spurred on by Islamic methods, particularly lustre glazing. By the late fourteenth century, Italian ceramics began to compete with luxury pieces from Syria and Spain. They achieved international status, continuing to draw inspiration from Oriental sources, especially Chinese porcelain and the Ottoman ceramics of Iznik.

Metalwork

In the field of metalwork, Muslim artists produced several novelties in creating magnificent ornamental designs. New styles were created that pleased and refined the taste of Muslim culture. Wonderful Islamic metalwork items became popular in Europe and their designs were adopted as they were beautifully formed. Ettinghausen (1974) suggests that the influence of Islamic metalwork techniques became more pervasive towards the end of the fifteenth century when, at the very end of the period in which the inlay technique was used in the Near East, a large number of basins, bowls, platters, pitchers and candlesticks executed by this process, appeared in Venice and in other Italian towns.

The beautiful artistic designs, ornamentations, and styles of Islamic luxury metalwork masterpieces were imitated and widely admired, and may have influenced European artists. Irwin (1997) indicates that under market pressure from Europe, new styles of metalwork were created in the Middle East. In the fifteenth century, metalwork objects, ornamented with scrolls and arabesques,

were produced in Western Iran and then exported to Europe. Italian artists copied Iranian artists' work and adapted it when producing Western style vessels. In addition, Islamic metalwork in the form of weaponry, was prized in Western Europe, and in particular, Islamic ornamental elements, such as Islamic calligraphy, appeared in Western metalwork art objects.

The Influence of Islamic Ornamentation on the Architecture of Non-Islamic Cultures

In the field of architecture, the impact of Islamic ornamentation on the architecture of Europe is clearly apparent in European buildings, particularly in the decoration of some European churches and historical buildings. It is suggested that the use of Islamic ornament in the architecture of non-Islamic cultures demonstrates these cultures' acceptance of and admiration for Islamic adornments, possibly due to their beauty and magnificence. It is strongly argued that the influence of Islamic ornamentation on the architecture of Europe confirms the rich cultural legacy, which Muslims left to Europe. Muslim craftsmen developed several new styles and methods of ornamentation, as well as created many innovative architectural features such as arches, domes, and honeycombs. Their utilisation, as well as that of ornamental patterns and motifs, such as Arabic calligraphy, arabesque or floral motifs and geometric forms, is clearly to be seen in European architecture.

Spain

The best example, which illustrates the influence of Islamic ornamentation on Spanish architecture, is the Alhambra palace, which exhibits a mixture of wonderful architecture and designed gardens with many fountains and pools. The main architectural features, within the buildings, are ceramic mosaics, plasterwork and carved wooden ceilings all greatly ornamented. Clevenot and Degeorge (2000) claim that the ornamentation of the Alhambra palace has played a determining role in establishing its reputation, since it can be viewed as an actual or real encyclopaedia of Islamic ornament. One of the methods used is that of stucco. Stucco is a coating mixture of plaster and marble powder that can be carved while it is still drying. The patterns produced give

the surface of a wall a lace-like quality, usually mixing geometric and vegetal shapes (Figure 5.5). When used in the adornment of vaults, as in the Hall of the Abencerrajes and the Hall of the Two Sisters, the stucco produces honeycomb compositions, *muqarnas*, of never-ending intricacy. According to Madden (1975), the ornamentation of the Alhambra palace creates the illusion of a building "floating above the ground", while the architecture is as "insubstantial as a cloud", woven out of "vibrant rays of light", with an interior of "light gaiety".

The influence of Islamic ornamentation is apparent in the Almohad ornamental style which subsequently influenced the Spanish Mudejar style which can be identified in the previous synagogue in Toledo, which today is the Church of Santa Maria la Blanca. The simple architecture of this Church, with its wide horseshoe arches is enriched with some fine stucco ornamentation, which extends right up to the roof and clearly betrays its Islamic character (Kubisch, 2000) (see Figure 5.6).

France

Examples in France show Islamic ornamentation's influences on French architecture, particularly on some church facades, doors or arches. According to Irwin (1997), from the twelfth century, church facades became more ornate Romanesque buildings incorporating Islamic decorative elements, such as polylobed, pointed, horseshoe, and cusped arches. Another kind of Islamic ornamentation effect is seen in Central France, particularly, in the cathedral of Le Puy in the mountains of the Auvergne, the façade being ornamented with long pseudo-Arabic inscriptions (Ettinghausen *et al.*, 2001).

Italy

Islamic ornamentation creative methods and designs adopted from Islamic architecture appear in Italian architecture. Some historical buildings and churches were ornamented with floral and geometric motifs and other Islamic ornamentation designs. Mack (2002) indicates that within the Cathedral of San Miniato near Pisa, built at the end of the twelfth century, are to be found

Islamic earthenware bowls usually called *bacini.* Most of these *bacini* are painted with traditional Islamic ornamentation, such as animal, vegetal, and geometric forms and Arabic script designs in brown and blue over an opaque white tin glaze. Utilisation of the *bacini* shows that Italians appreciated their aesthetic qualities and employed them ornamentally, even in their most important religious buildings (see Figures 5.7 & 5.8). Also, in Venice, particularly in Saint Mark's, are recognisable Islamic shapes and adornments, which contribute meaning to structures. In the lunette above the Porta Sant' Alippio, at the left of the façade, are seen geometric marble tracery viewing windows. They are remarkably similar in shape and function to the window grilles of the Great Mosque in Damascus, of which several marble examples survive (Mack, 2002) (see Figures 5.9 and 2.54).

India

The influence of Islamic ornamentation is also apparent on Mughal architectural decoration. Architectural adornment is characterised by the utilisation of realistic floral ornamentation. Grube (1967) points out that the highest peak of Mughal architecture is reached in the Taj Mahal at Agra, built by Shah Jahan for his wife Mumtaz-i Mahal in 1629. The most extraordinary feature is its amazing ornamentation. The entire building is covered with white marble inlaid with coloured stones of all kinds in beautiful abstract designs and floral patterns, a technique further employed in the interior, particularly in the ornamentation of the tombs, the screens around them, and large parts of the wall surfaces. The floral designs that are sculpted in marble, or inlaid with semiprecious stones, create bright reflections. The floral ornamentation of the Taj Mahal monument, depicted with a stamp of realism, fascinates the viewer with its elegance and beautiful bright colours. The Taj Mahal's allusion to Paradise may be observed in the motif of flowers carved on the funerary chambers of the mausoleum and on the plinth of the interior *iwan* (IAAO) (see Figures 5.10 & 5.11).

The Role of Trade

The role of trade between Islamic cities or regions in Asia and other cities in Europe, such as cities in Italy, Spain and elsewhere, is an important point worthy of discussion. As a vital tool in transmitting Islamic ornamentation to other non-Islamic cultures, the trade role may be considered as a kind of influence. How are trade, manufacturing, and art linked? According to Insoll (1999), ideas, including artistic ideas or conventions, and scientific ideas and manufacturing techniques, are transmitted from one place to another often via trade. Conquest can and obviously did serve as an agent for the spread of Islam and Islamisation, but the peaceful movement of ideas, including religious ones, through trade, is often of even greater importance where the spectrum of Muslim history over the centuries is considered. Trade provides a convenient framework to transport a range of materials from the Islamic world to lands beyond its frontiers.

Overall, the Muslim luxury items trade had a large influence on Western artistic taste and growth, inspiring new developments and variations in the ornamental arts, for example in the fields of textiles, ceramics, glass and brass work. According to Brend (1991), in the early centuries, many transportable items, such as pieces of rock crystal, glass and silks, arrived by trade or were brought back by pilgrims. They were evidently valued and admired, since many of these items came to rest in cathedrals. Their appeal must often have been partly on account of their real or supposed associations with the Holy Land, but must also have depended upon their intrinsic beauty. The European donors would have been aware that these objects were often superior in technique to what was available locally; and, though they would not have expressed it consciously, they might have already experienced the attraction of the mixture of familiarity and strangeness arising from Islamic art's traditional and eastern heritages. These treasures were often adapted to new purposes by remounting or recutting. The extent of their influence on European art is not fully known.

Imported Islamic artistic luxury items were admired and influential in Europe, varying considerably in origin, type and style. The adornment, covering the surface of influential imports, was intended to please the senses and to enhance the object. During the ninth century, under the Abbasid caliphs in Baghdad, the Muslim elite had developed a rich urban culture that valued grace and pleasure in everyday life. Major developments in silk weaving, ceramics, metalwork, and woodcarving transformed common items of daily use into works of art. The colourful hangings, cushions, and rugs that traditionally furnished the tent of the nomad were now woven in fine designs utilising luxurious and sumptuous materials. Further, clothing became rich and elegant. Bowls, plates, jugs, and lamps were given visual and tangible qualities that added excitement to their use. Sophisticated burners and pierced containers were crafted to enhance the enjoyment of costly aromatics. Writing assumed forms and rhythms to delight the eyes, which could not read its meaning. These beautiful objects, for personal and domestic use, began to arrive in quantity to Europe during the Crusades (Mack, 2002).

Notably, the transmission of magnificent artistic masterpieces and luxury items astonishingly adorned with Islamic ornamentations from the East to European bazaars may possibly have attracted the interest of rich people in buying them. European artists may have been stimulated into imitating these masterpieces with their superb Islamic ornamentations. Ettinghausen *et al.* (2001) point out that Islamic art created an effect in areas beyond the direct frontiers of its domain, an influence resulting particularly from the transmission of wonderful Islamic masterpieces to other cultures and lands. Besides the significance of trade, people from far away regions travelled to and from Muslim lands and brought back souvenirs of their travels and described what they had observed, in this manner feeding an interest in an exotically different culture. Regardless of the exchange of gifts among Muslims and non-Muslims, whether kings or rich people, Gladib (2000) states that many medieval sources describe gifts exchanged between princes of the Islamic world and Europe at this time. Despite the constant tensions, relations with foreign states were promoted by the presentation of costly gifts, which

symbolised the giver's immeasurable riches and ensured a friendly welcome for emissaries. Also, the lavishly painted attractive ceramic jars containing perfumes and spices exported from Damascus, and found at Trapani and other locations in Sicily, were not seen as mere packaging at their destination, but were valued as works of art and cared for accordingly.

Orientalists' Paintings

The influence of Islamic ornamentation on non-Islamic cultures also extends to Western art itself. Western Orientalists utilised components of Islamic ornamentation in their art. An understanding of how the Middle East and Islam were perceived, understood and depicted is vitally important at this juncture in the study. A brief explanation of what is meant by Orientalism will therefore be provided. According to Hagedorn (2000) a preoccupation with the art of the Islamic world is a European phenomenon that has been observed in different forms, since the time of the Crusades. It is marked by contacts with the Islamic world that were often stimulating. However, in the nineteenth century, this phenomenon became more significant after the upheaval in intellectual life caused by the Enlightenment. It developed during the middle and second half of the nineteenth century, to reach a peak that was characterised more by the amount of discussion about the East, for example, the Islamic world, than by its depth. This phenomenon is known as "Orientalism".

According to Vernoit (1997), in Europe, a greater interest in Islamic art as a historical phenomenon, developed from 1880. This was reflected both in scholarship and in the growth of specialised exhibitions of Islamic art, where historical, rather than nineteenth century Islamic artefacts, were exhibited. There were several reasons for this. Scholars were increasingly attracted to the earlier centuries of Islamic history, in the belief that they could elucidate its formative principles. Further, both evolutionary theories and colonial policies had encouraged scholars to terminate their enquiries into Islamic art, in the seventeenth and eighteenth centuries, as if to mark a clear boundary between the 'decline' of Muslim civilisation and the rise of Europe.

So, from what has been described above, it appears that Orientalism is an interest in all things Eastern, including an effort to understand the Islamic faith, culture, and Muslim people. An important question that is raised here, is: To what extent did the eastern world, with its allure, attract Orientalist artists? Also, to what extent did the great desire to explore the mysteriousness and glamour of the Middle East influence the features of the Orientalist's art? Hagedorn (2000) states that during the nineteenth century much factual information and knowledge about the Islamic world started to reach Europe. Many painters and creative artists were able to gain an idea of Islamic art from the great European collections. It is characteristic of the division in ideologies, during this period, that a series of different theoretical approaches led to the study of Islamic art. They had an effect in the twentieth century, and in some areas had a marked influence on the development of new artistic movements in Europe. Hence, the admiration of foreign lands clearly distinguishes European contact with the Islamic East in the nineteenth century, from that in the previous periods. It is important to mention that European artists were culturally aware and able to travel and gain realistic practical knowledge of the Islamic world and its culture. A large number travelled in the East to make direct contact with a world previously unknown to them. Many educational visitors, scientists, and artists also travelled to the Eastern Mediterranean area to gain their own impressions of cultural sights.

Arguably, for European Orientalist artists, the Eastern world may have seemed a world of fantasy and imagination and they were therefore unlikely to depict the real and actual Arabic environment. To what extent, therefore, did the magnificent paintings of Western Orientalists truly reflect the reality of Arabic life, particularly in terms of landscape, male and female figures, the romantic style, and the white skin of females? Do they faithfully depict actual images in general and the figures of females in particular? Orientalist artists focused on details to reflect the splendour and magnificence of Islamic civilisation with its luxurious palaces and mosques, decorated with wonderful ornamentation and colours. In their paintings are clearly seen rich ornamentation on women's clothes, jewellery, walls, and other items.

According to Peltre (1998), Orientalist images reveal a perception of the Oriental world in which two contradictory approaches can be discerned. One seeks to make the East more accessible to the spectator by emphasising similarities between East and Western worlds, while the other emphasises the differences, exalting the odd and unusual, in an attempt to refresh an art that had developed staleness. Another significant point, in Mackenzie's (1995) view, is that Oriental painters were united thematically rather than stylistically. In no sense do they constitute a 'school'. Yet they require stylistic analysis as much as thematic, for many of the artist's drawing inspiration from the East were stimulated technically as well as visually. Moreover, the extraordinarily long life of Orientalism ensured that it passed through a variety of phases that can be demarcated by subject matter, style, ideology and national affiliation. Also, many of the artists had associations with other art forms and, in turn, they were influenced by the Eastern experience.

According to Mackenzie (1995), sometimes the artist's delirious responses to North Africa and the Middle East would be accepted as actual and real. W. J Muller, who described himself as half-Arab, revelled in the bazaars and street scenes of Cairo, which he viewed as pictures out of Rembrandt, Richard Dadd described the excitement of Middle Eastern scenes as being sufficient to turn the brain. Similarly, Dehodencq stated that Morocco drove him out of his senses. Gerome visited Egypt, waxing lyrically about all that he observed. European artists flocked to Northern Africa and the Middle East, as Europe seemed to present little more to explore, and these new areas were quite close together. They possessed an unusual and astonishing range of ancient cultures, the origins of numerous world religions, including their own, and dramatic topographical, architectural and cultural features. Some Orientalist artists set up studios in the East, in Cairo, for instance, and sold portraits, street scenes, and topographical studies often with monuments, as souvenirs to travellers. Others painted local royalty and dignitaries and sometimes sold the results to their sitters.

It is worth mentioning here, that two significant aspects of Middle Eastern life were always handled with real respect and admiration. The first was religion and the other was the concern for learning and education of the young. For many artists, visions of the Orient provided a direct route into the World of Bible, and scenes were repeatedly given biblical referents. Goodall claimed to see a Holy Family in every Arab village. Others had a genuine respect for Islam. Many artists were impressed by the way in which the Islamic religion penetrated every area of everyday life (Mackenzie, 1995). Formentine explained his refusal to treat certain subjects as an act of respect for another culture's values:

> *"To penetrate farther into Arab life than is permitted, seems to me, ill-considered curiosity. One must observe this people from the distance at which they choose to show themselves: the men close up, the women far off, the bedroom and the mosque, never. To render an apartment of women or paint Arab religious ceremonies is to my mind more serious than fraud; it is to commit, with regard to art, an error of point of view"* (Peltre, 1998, p. 144).

The great interest of Western Orientalist artists in Islamic art and ornamentation, and their adoption of vegetal and geometric ornaments and Arabic calligraphy in their paintings may be regarded as a sort of influence. Generally, examples from nineteenth century Western Orientalist paintings provide a striking and remarkable use of attractive ornamental features of Islamic art. Such paintings include those of Jean Leon Gerome. In his painting of men praying, Gerome shows, in an entirely European style, which has almost photographic feel in its realistic reproduction of detail, a group of people at prayer in a hall, which the knowledgeable observer would recognise as the Amr Mosque in Cairo. He also attempts to retain this realism in his portrayal of figures. While this definitely succeeds for the details of clothing and faces, in comparison, the overall realism of the picture is called into question. To the European observer, the picture of an exotically dressed barbaric fighter, which fascinated and shocked in equal measure, was painted

in an apparently realistic setting at a strange prayer ritual. This offered the opportunity not only for distance and identification, but also for the projection of the observer's own imagined desire and repressed feelings (Hagedorn, 2000) (see Figure 5.12).

Another example of the influence of Islamic ornamentation is the theoretical artistic analysis of two-dimensional ornamentation, which developed into abstract adornment, at the beginning of the twentieth century, strongly matched with the study of Islamic art. Moorish and Western Islamic art, with their abstract, complex geometric ornamentation and colour methods seem to have set the style. In 1921, Johannes Itten analysed the colour composition and formal construction of Islamic miniatures and, on this basis, developed new principles for classical themes in European painting. Artists at the beginning of the twentieth century were totally committed to modern painting, which turned, in the first decades of the century, towards Islamic art and its stylistic features. Painters such as Wassily Kandinsky, Robert Delaunay, and others, were no more preoccupied with the striking content of Islamic art than were their predecessors of the nineteenth century. However, they were very attracted by the two-dimensional effect of Islamic painting, particularly in the representation of figures, which corresponded to their own attempts to find a new kind of painting. From then on, the picture was, above all, a perceptibly two-dimensional object. In addition, the forms and colours of Islamic countries, their buildings, materials, and artistic objects, fascinated these artists. Works such as Matisse's and Kandinsky's North African paintings, cannot be explained, except by a preceding deep and strong examination of the principles of Islamic art. This can be established from the records kept in diaries and letters by these painters (Hagedorn, 2000).

According to Mackenzie (1995), artists such Kandinsky, Matisse and Klee, who were influenced by Eastern art, found abstract inspiration in the geometric complexity of Islamic art. Trilling (2001) strongly argues that in spite of the fact that Adolf Loos was the most influential figure in twentieth century ornament, he was not its greatest master. This title goes to Henri Matisse. The individual motifs in Matisse's cutouts are among the most

sharply defined in the history of ornament. The influence of Matisse on ornament, has been both immeasurably great and disappointingly small. Great, since we cannot imagine a world without him and small because his direct imitations have been few in number, and have enjoyed limited success. The extraordinary judgement and confidence that made Matisse's brand of abstraction possible made it, for practical purposes, unique.

With reference to Arabic calligraphy, it was highly considered in Europe among architecture, ornamentation and painting. European artists were fascinated with the noble character of Arabic calligraphy as well as its aesthetic features and the vagueness surrounding it, as a result of the inability of the many to understand it. For example, the artist Paul Klee used Arabic calligraphy in his paintings and this was considered an important development since it presented the aesthetic value of Arabic calligraphy to a Western audience who could stand in front of the Arabic inscriptions without understanding them yet still derive pleasure from observing them (Judy, 1996). In a beautiful Orientalist portrait such as Leroy's *Interior of a Mosque in Constantinople*, the wall is ornamented with Arabic calligraphy (Peltre, 1998).

Orientalist paintings often depict Islamic carpets, which are beautifully designed and wonderfully coloured. The popularity of Islamic carpets seems due to the harmony of their Islamic ornamentations, forms and designs, with their magnificent colours and high level of accuracy and innovation. Mackenzie (1995) suggests that when artists turned their attention from God to Mammon, from religion, learning and the desert to the market, they displayed their fascination with the pattern, colour and texture of the materials of Eastern crafts. Carpets are everywhere, reflecting a European fervent interest since the sixteenth century. These rectangles of striking patterns and delicate colours present a considerable artistic challenge. People bargain over them, admire them, mend them and sit upon them. Further, the appearance of tiles and wooden lattices, *mashrabiyyah*, in Western Orientalist paintings, are affectionately depicted. This is not only due to the fact that they represent technical problems of pattern, texture and light, but their representation of

architectural ornamentations that were being accepted and adopted in the West (Mackenzie, 1995) (Figure 5.13).

Finally, before leaving our discussion concerning the influences of Islamic ornamentation on Orientalist paintings, one significant point needs to be clarified. It is true that the impact of Islamic art and ornamentation on Western art is clear, particularly in the nineteenth century, but, if any spectator considers Orientalist paintings he will feel and realise that they are unrealistic and did not present the Islamic art and the Islamic civilisation identity particularly with regard to the portrayal of women. The way in which women are portrayed in some paintings indicates a European mindset, and an ignorance of Islamic values. Female nudity in Eugene Delacroix's *'The Death of Sardanapalus'* (1827), Ingres' *'Odalisque with Slave'* (1839), Vernet's *'Judah and Tamar'* (1840), Bazille's *'The Toilette'* (1869-70), and Lecomte Du Nouy's *'The White Slave'* (1888) do not faithfully represent Muslim or Arabic women characters who are known for their decency. It seems Orientalist artists used themes and ideas for their art works, which do not conform with Muslim standards at all. Arabic audiences do not accept portraits like these because they do not represent the actuality of Islamic culture and Muslims cannot contemplate God through them.

According to a specialist art historian, Linda Nochlin and her followers, oriental painting is suspect because its messages and uses mark it out as the product, reflector and tool of imperialism. Visions of the Orient were highly selective, creating oriental archetypes through which the 'Otherness' of eastern people could be readily identified. Tyranny, cruelty, laziness, lust, technical backwardness, languid fatalism and cultural decadence, generally, offered a justification for imperial rule and a programme for its reforming zeal. The ethnic diversity of oriental paintings conveys a set of racial concepts, particularly through the juxtaposition of black and lighter-skinned people, while the treatment of women is the clearest indicator of attitudes towards women in the nineteenth century. The 'licked finish' of the mid-century Realists is an illusory device presenting ideologically charged iconic images as an objective reality. The careful depiction of repaired tile work and the decay

and crude repair of buildings were used as indicators of a decadent civilisation (Mackenzie, 1995).

According to Leaman (2004), many of the artists carefully arranged to capture a particular look, even if it was not really present, and clothes are depicted in a way that bears little reference to the actual clothes worn at the time by ordinary people. Strangely, many of the women are depicted salaciously, wearing few clothes and displaying far more of their bodies than would normally be the case. We know that these paintings are far from accurate, from reading the accounts of the painters themselves, the difficulties they had acquiring models, and the ways in which they employed those models. Edward Said argues, with reference to the concept of Orientalism, that it appears to be a creation of the Western imagination, and reveals the uneven power relations that existed and still occur in the connection between the West and the Islamic world. The theory has been developed in what are called 'post-colonial' studies, which has expanded and made more sophisticated his central arguments to develop a complex theoretical methodology for analysing links between different cultures. One of the useful contributions of this theory is that it helps us understand what takes place when, for example, people from one culture paint or photograph those of other cultures. The stereotypes which, the former has of the latter, inform the eventual product. Since the Christian world was seen as 'normal', the Middle East had to be seen as the opposite, and so there was an interest in capturing exotic types and alien clothes in the subjects that were painted and photographed. Frequently, these objects were heavily eroticised, so that it is not unusual to have a picture in which there are women veiled and other women displaying their breasts. The picturesque nature of the subjects was frequently favoured, and the noble savage is a familiar type. The significance of colonialism and imperialism meant that the West observed itself as having a civilising mission and, accordingly, the more unlike 'us' the subject of the work, the better able it was to represent alterity, the Other, what is different from us. Not all the stereotypes are negative, although many are. Some are very positive, but it is frequently argued that they represent types who are so different from us, that they still serve as

images of the Other. Such images help us construct our self-image and so the noble savage establishes what might be regarded as norms of civilised life in industrial society compared with the simpler forms of life of tribal communities and those not yet part of the industrial nexus (Leaman, 2004).

THE IMPACT OF OTHER CULTURES ON ISLAMIC ORNAMENT

The Fourth Research Question Is: Are there other cultures which have influenced Islamic ornament? To what extent?

To answer this research question, the most important cultures influencing Islamic ornamentation and the extent of their influence will be investigated. Moreover, how Islamic ornamentation has been affected by the art and ornamentation of other cultures, particularly the ways in which the unique artistic approaches and distinctive styles of these cultures have affected Islamic ornamentation, through, for instance, their decorative styles, materials, designs and methods, will be explored.

Mainly, the influences of Safavid, Qajar, Mughal, Ottoman, and European cultures on Islamic ornamentation and art will be examined. Two important issues need to be considered in this context. The first is whether these cultures' particular philosophies contributed to the creation of the distinctive form and style of Islamic art and ornamentation? For example, in some cultures, Islamic art and ornamentation appear to be more realistic, while in other cultures, human and animal figures are entirely absent from it. The second significant issue is the important role patronage has played in the creation of Islamic art and ornamentation. In some cultures, such as the Safavid, Qajar, Mughal, and Ottoman cultures, various artistic patterns have been utilised and new ornamental motifs have been established or adopted in Islamic art and ornamentation. In these cultures, Islamic art has developed in different ways due to its exposure to their distinct attitudes or philosophies towards the use of images in the ornamental arts.

As previously mentioned in the first part of this chapter Islamic art in its early periods was affected by pre-Islamic cultures' art. The influence of Byzantine and Sassanian art on Islamic art and ornamentation, and secular palaces, was explored in great detail during discussion of the first research question.

The Influence of Safavid Culture

Islamic ornamentation and art was considerably affected by the Safavid culture in Iran 1501/1732. The figurative artistic traditions of conquered lands, as a result of Islam's spread to regions outside the Arabian Peninsula, greatly influenced the development of Islamic ornamentation. The utilisation of human and animal figural images in the Safavid era may be explained by the beliefs of rulers during this period in particular religious philosophies or divine rites which glorified the creation rather than the Creator. Islamic art and ornamentation undoubtedly flourished during the Safavid era and was affected by its culture, which contributed to the development of an amazing ornamentation of religious buildings' decorations. It also affected negatively, such as in the extensive utilisation of images and Chinese motifs in carpets, textiles, book illuminations, tiles in architectural decoration, and other artistic objects.

The most important feature of the Persian element in Islamic art appears to be that of a peculiarly lyrical poetical, metaphysical tendency which in the realm of emotional and religious experience leads to an extraordinary flowering of mysticism. The major schools of Muslim painting developed in Iran on the basis of Persian literature. Not only an entire iconography but also a particular imagery, abstract-poetical in its realisation, was created in Iran in the later part of the fourteenth and the fifteenth century that is without parallel in any other part of the Muslim world. The same attitude that creates in the field of painting an art form of the greatest beauty but of complete fantasy and unreality enters into architecture, creating forms of ornamentation that seem to negate the very nature of architecture and the basic principles of weight and stress, of relief and support, fusing all elements into a unity of fantastic unreality, a floating world of imagination (Grube, 1967).

In the field of architecture, the influence of Safavid culture on Islamic ornamentation appears in the extensive utilisation of magnificent brightly coloured mosaics for the decoration of external and internal building surfaces. Rice (1975) suggests that colour, delicacy and beauty are the hallmarks of Safavid architecture. Almost all buildings, whether religious or secular, seem to be rich and adorned, and the beautiful tile-work on the domes and entrance facades of mosques serves to reflect the spirit of lavishness that characterised the era. Further, under the Safavid era, vegetal ornament is clearly dominant. Large areas on the surface of major sacred buildings, particularly the outer surface of domes, are covered with painted glazed ceramics and decorated with intricate floral patterns. Grube (1967) points out that in the Masjid-i Shah in Iran, most internal surfaces appear to be covered with polychrome painted tiles that are usually square in form. Regardless of the pattern, all floral abstract ornamentations are of dazzling whites and yellows. The overall effect of the building appears as a floating world in which all material qualities have been eliminated. In addition, the ornamentation of Masjid-i Shaykh Lutfullah in Iran, inside the chamber is decorated with splendid coloured faiences, blue and yellow dominating, and the dome's external surface is decorated with an arabesque design (Figures 5.14 & 5.15).

What is important to mention here, regarding the influence of the Safavid era on Islamic ornamentation, is that new ornamental patterns and designs appear in different contexts. With regard to the art of book illustration produced under the royal patronage of the Safavid dynasty, one of the finest illustrations to survive is a copy of Nizami's *Khamsa* penned at Tabriz by the famous scribe Shah Mahmud of Nishapur. The volume is lavishly illuminated and illustrated with full-page pictures. The wide margins are enhanced with drawings, executed using gold and silver, depicting views of animals cavorting in windblown landscapes. One of the most outstanding images in this manuscript depicts the *Miraj*, the Prophet Muhammad's midnight journey to the seven heavens. The event, alluded to in the Qur'an, takes on a life of its own in the hands of mystics and poets who lovingly elaborate its details. The Prophet Muhammad, dressed in green and veiled in white, blazes in a huge flaming

halo against a starry blue sky, where curling white clouds obscure a haloed golden moon. Buraq, the human headed steed that bears him through the seven heavens to the Divine Presence, is led by the angel Gabriel, crowned with a smaller flaming halo. The Prophet is surrounded by angels bearing splendid golden vessels and a book, most probably the Qur'an (Bloom and Blair, 1997) (Figure 5.16).

In the field of textiles, the ornamentation of human and animal figures frequently appears. In the Safavid era, textiles were distinguished by numerous rich ornamentations enhanced with the adornment of flowers in addition to images that show scenes of princes hunting. Grube (1967) suggests that Safavid art excels in splendid and lavish forms of ornamentation as in its treatment of the knotted rug and in silk weaving. The great arabesque rugs are characterised by splendid intricate scroll patterns and strong but dark colours. The weavers borrowed motifs from manuscript illustrations, and the silks were covered with multiple images of hunting parties, of Layla's visit to Majnun in the wilderness surrounded by animals, or of Khusrau finding Shirin bathing in the pool (Brend, 1991).

Generally, new decorative styles flourished during the Safavid Empire. The most striking is the utilisation of ceramics. The Safavid royal palaces' walls are decorated with pictorial adornments in ceramics. Under the Safavid dynasty, the walls of the royal palaces in Isfahan and also of many houses are ornamented with painted tiles. Further, motifs depicting dreamy-looking youths with wine bottles and sophisticatedly clad women appear on plates, bowls, bottles, and wall tiles. Wall tiles are particularly suitable for the depiction of whole scenes in rich courtly settings, preferably amid a garden landscape (Niewohner, 2000) (Figure 5.17).

The Influence of Qajar Culture

Islamic art in the Qajar era appears to fall under European influences. One significant aspect of Qajar art, which European culture influenced, is the art themes. The figural tradition continued in book illustration, metalwork, and ceramics, while Europe appears to have offered further stimulation to Qajar

art, and Qajar artists adopted models from Western art, especially in oil painting. In addition, local cultural traditions and patron preferences, and possibly those of the artists, brought about further changes in Islamic art. These changes had a profound effect on it in general, and ornamentation in particular becomes quite distinct from the art of early Islamic periods. Bloom and Blair (1997) state that in Islamic lands, the ruling classes came to appreciate the exotic figures of Western art, possibly because they had little association with local traditions. The most remarkable new medium was oil painting on canvas. It had been introduced to Iran in the late seventeenth century, but under the Qajar dynasty (1779-1924), a distinctive style of painting developed in which Persian and European approaches or styles of representation were synthesised. The taste for pictorial art was broad in Qajar Iran, and there was a large market for warm and sentimental paintings on a smaller scale. Many such paintings of birds, flowers and people were done in enamel or under varnish on boxes, on mirrors, pen-cases and other small metal and wood objects.

As regards the Qajar rulers, they seem to have relied heavily on the visual arts to confirm their new position. Vernoit (1997) states that Fath 'Ali Shah realised that lavish patronage of the arts and architecture would reinforce his authority (see Figure 5.18). Hence, he employed royal portraiture to legitimise his rule, and his awareness of its value in the public domain appears to have predated that of the Ottoman sultans. His court painters were occupied with commissions for portraits of him, sometimes attended by his sons, or singing and dancing women, and of ancient rulers of Iran. The shah was further depicted at the hunt or in battle against the Russians or Ottomans. The portraits range from life-size oil paintings to miniatures in manuscripts and albums, painted lacquer and painted enamels. In the realm of architecture, Qajar palaces were decorated with large scale paintings and figurative tile work, reflecting the nature of court life, along with astounding mosaics of mirror-glass (Vernoit, 1997) (Figure 5.19).

The main effect of the Qajar dynasty on Islamic art and ornamentation appears to be the flowering of figurative painting, which developed a richness and

variety supreme in Islamic art; portraits of the Qajar royal court are rich and lavish. The ruler is often represented as richly dressed and wearing several necklaces and a jewelled crown. Also, women in portraits in Qajar art are beautifully depicted with rich jewellery and clothes. Bloom and Blair (1997) suggest that the Qajar monarch, Fath Ali Shah, appreciated the significance of art in the creation of a royal image or representation. He commissioned numerous canvases and murals to adorn the walls of the several palaces he erected throughout his realm, like the life-size portrait by the court artist Mihr Ali. The canvases are mainly full-length portraits of the shah in his favourite pose, showing off his luxuriant black beard and elaborate regalia, which form the foundation of the crown jewels of Iran (see Figure 5.20).

To add to the discussion of the influences of other cultures on Islamic ornamentation, it is important to note that a new artistic approach appears to have developed and flourished during the rule of the Qajars, that of lacquer and enamel painting. Lacquer painting seems closely linked to miniatures, since it utilises water based colours and is applied mainly to relatively small objects, for instance, pen boxes, book covers, mirror and spectacle cases, and other small items. On these items are displayed a great variety of forms and colours typical of Qajar painting, with flowers, such as roses and irises, foliage, and fruits used both as central and background motifs. The style of painting is distinguished by lively intricate shapes, bright colours, very detailed drawing and careful shading, which as a European element had become universal by the nineteenth century (Niewohner, 2000) (Figure 5.21). Regarding enamel painting, during the nineteenth century, the motifs used in enamel painting were increasingly influenced by European style and themes. European clothing appeared alongside Persian costumes, and landscapes closely imitated European versions, frequently at the expense of artistic composition (Niewohner, 2000) (Figure 5.22).

The Influence of the Mughal Culture

Islamic art and ornamentation created under the patronage of the Mughal dynasty seem to be among the most magnificent, elegantly developed, and

creative in Islamic civilisation. A range of different ornamentation designs, techniques and materials are utilised in monuments, manuscripts, and decorative arts. Artistic production under the Mughals is characterised by richness and diversity. Mughal rulers appear to be keen on gold and jewels, possibly as an expression of royalty. According to Trilling (2001), a number of Mughal rulers pursued a policy of syncretism, exposing the court, at least, to a wide range of cultural traditions and intentionally incorporating foreign themes into their art. In decoration, Mughal artists frequently handled an influx of new forms, reshaping them according to the unwritten rules of Islamic art's delicacy.

The primary influence of Mughal culture on Islamic ornamentation appears to be the utilisation of rich adornment. The main characteristic element of Indo-Islamic art, the general tendency towards rich ornamentation, both in architecture and in the ornamental arts, finds its counterpart, even in painting in the utilisation of strong ornamental colours, inherited from Hindu tradition, and the elaborate use of gold in later Mughal paintings (Grube, 1967).

In the field of painting, during the era of the Mughal dynasty, a unique Islamic style flourished at court, and its development depended on the patron. Grube (1967) contends that Mughal painting is one of the most successful applications of Islamic principles to an essentially non-Islamic tradition (see Figure 5.23). The evolution of a realism that goes so far as to involve portraiture appears to be distinctive, even within the great range of pictorial shapes in Islam. Further, a similar realism can be observed in the floral forms of the textile art of the Mughal period. Mughal silk and, particularly Mughal rugs, are characterised by very realistic pictorial ornamentation (Grube, 1967) (Figure 5.24).

In the field of Islamic architecture, the artist aims to maintain a variety of decorative styles and local ornamentation. Mughal artists introduced many new creative styles, which appear on the surfaces of decorative ornamentation. The artist created beautiful ornamental styles using materials such as marble, mirror mosaics, and others, in the decoration of architecture. According to

Bloom and Blair (1997), the Mughal taste for highly ornamented surfaces and the traditional method of stone ornamentation using a mosaic of different coloured marbles was replaced by inlay, in which a slab of marble was embedded with hard and rare stones, such as lapis, onyx, topaz, carnelian, agate, and jasper. The new technique allowed artists to create more intricate designs, and traditional geometric patterns and arabesques were juxtaposed to representational motifs showing wine cups, vases with flowers, cypress trees, and even people.

The Influence of the Ottoman Culture

The style of the Turks emerged as another great influence on Islamic ornamentation and art. In the Ottoman era, Islamic ornamentation was characterised by its naturalistic character and variation of colours. The dominance of vegetal ornamentation in this era may possibly be linked to the desire to avoid the depiction of human and animal figures in the decoration of religious buildings and most art objects or to accommodate the ruler's tastes. According to Vernoit (1997), in the major empires of the Muslim world, royal patronage set the standards of taste and created new styles. Under the Ottomans, royal patronage reproduced in an acute form the issues confronting the whole of courtly art in the nineteenth century, for instance, the desire to maintain traditional art shapes and the associated skills, while acknowledging a need to evolve new modes of expression appropriate for the modern world.

The Turkish element in Islamic art essentially consists of an indigenous concept of abstraction that the Turkish peoples of Central Asia applied to any culture and art form. They brought a significant tradition of both figurative and non-figurative design from eastern to western Asia, creating an unmistakably Turkish iconography. The importance of the Turkish element in Islamic culture may best be appreciated if one realises that the larger part of the Islamic world was ruled by Turkish peoples from the tenth to the nineteenth century. The art of the Islamic world owes a great deal to the rule of these Turkish dynasties, and the influence of Turkish thought, taste and tradition on the art of Islam in general cannot be overestimated (Grube, 1967).

Among the Ottoman arts, Arabic calligraphy was the most important. Under Ottoman patronage, wonderful and unique new ornate styles of Arabic calligraphy were adopted, occasionally constructed in such a way as to be representational, for instance, the animated Naskhi writing. Letters are presented in such a way that, in combination with other letters, they produce images of animals. Calligraphy frequently displays zoomorphic characteristics including the name of God (Leaman, 2004) (Figure 5.25).

In the field of pottery or ceramics, under the influence of the Ottoman Empire, magnificent floral ornamentations appear in the manufacture of ceramics, as well as a unique style of producing pottery, both in terms of its colours and forms. This style is characterised by coloured adornments and designs resembling Chinese ornamentations depicting plant motifs and clouds. The domination of tulips, carnations, lilies and clusters of grapes distinguish Ottoman art. Further, ornamental elements are marked by the added adornments of animal and bird figures in addition to floral and vegetal forms. Grube (1967) suggests that Ottoman art shows an entirely original style in every sphere: the new dome-chamber mosque in architecture, the new floral polychrome ornamentation in tile work and pottery, and the application of a new, and, in its results, highly successful standard of colour, composition, and iconography in painting. A major feature of Ottoman art appears to be the play on contrasts between tectonic qualities and the dissolution of materials, between realistic forms with closely rendered details and abstraction in colouristic effects or in the traditional infinite pattern and its richness of invention, brilliance techniques, and the beauty of designs.

It is important to mention that the influence of European culture and art on Ottoman culture subsequently had a great effect on Islamic art and ornamentation. A new attitude towards European culture began to be expressed visually in Istanbul, during the eighteenth century, as baroque and rococo elements were integrated in the adornment of mosques, mausolea, libraries, and public fountains. Also, a number of European painters were active in the Ottoman capital and portraits of the sultan were created in different manners. For example, in albums including a series of portraits of all

the Ottoman sultans, the figures are usually represented waist-length and enclosed by circular frames (Vernoit, 1997).

According to Bloom and Blair (1997), in the Ottoman Empire, oil painting tended to follow the models of European Orientalism. Many Turkish artists were sent to study oil painting in Paris where they worked under such renowned Orientalist painters as Gustave, Boulanger, and Jean-Leon Gerome. In Vernoit's (1997) view, the promotion of Western-style painting and sculpture in Turkey was particularly strengthened by the opening of the Academy of Fine Arts in Istanbul in 1883, under the direction of Osman Hamdi, who had previously trained as a painter in Paris. He introduced Western-style figurative compositions to Turkish art, adopting a detailed realistic style and employing photographs to ensure accuracy.

The Influence of Western Culture

A key question is: to what extent did Western art and culture influence Islamic ornamentation and contribute to the decline in its artistic creativity and aestheticism? Islamic art, in general, seems to have been affected by Western art and culture for many reasons. First, there is Muslim artists' lack of strict adherence to or following of the Islamic order or faith as presented in the Qur'an and the traditions of the Prophet Muhammad. Second, it seems Muslim artists were less concerned about Islamic ornamentation and more concerned about imitating Western art themes. In the process of discussing the influence of other cultures on Islamic art and ornamentation, it has been noted that with the expansion of the Islamic Empire, new ornamentation was introduced and produced as a result of contact with and exposure to other cultures to a greater or lesser extent. Particularly noticeable is the great effect of Western culture and art on Islamic art. The viewer may observe sculptures and artistic canvasses that depict human or animal figures so that they become common features. In the early periods of the emergence of Islamic art, the Islamic religion had a very profound effect on art and artists, so that figural images were, on the whole, rare. With the passage of time and the Islamic world's exposure to a succession of cultures, it appears Islamic ornamentations were

affected by other cultures, particularly in later centuries. Hence, there subsequently appears to be no abstract art which is solely concerned with leading the spectator to focus only on the Creator Himself, but an art that is concerned with imitating His creation and depicting its forms and images in the natural world.

Brend (1991) suggests that in the nineteenth and twentieth centuries, the traditional Islamic arts were profoundly affected by Western influence and the advance of industrialisation, and by political and economic changes. However, the techniques of production did not change. However, in the political and economic spheres, the direct link between princely patron and artist or craftsman largely disappeared. Princes and their equivalents were more inclined to exercise an interest in Islamic art through the collection and preservation of works of the past rather than through contemporary patronage. Without such support, artists could not maintain the high levels of skills required by the traditional media, and the lines of instruction that frequently ran in families tended to break.

Muslim artists became affected by Western culture and accepted its artistic concepts and theories that symbolised the modern period, although Western art concepts differed considerably from Islamic art and Muslim culture and traditions. Further, when Muslim artists imitated Western art they ignored the fact that Islamic art has art concepts that differ from those of other cultures. In addition, the concepts, philosophies, and principles on which the art is based differ from culture to culture and artist to artist. Therefore, the identity and character of the culture, artist, and art absorbing external cultural influences will change. Hagedorn (2000) points out that, in the nineteenth century, deep socio-political changes within the Islamic world led to a rupture with older artistic traditions in all spheres of art, due to the intensified contact of artists working in the East with the culture and art of Europe. As a consequence, there was both a greater openness of Islamic artists to European styles and also varied and distinctive new approaches to the analysis of their own traditions. European artists were working in many Islamic countries, and some became teachers, and subsequently transmitted European architectural theories at

universities and newly founded art schools. These teachers developed new approaches to the proportioning of buildings and the application of building decoration. Adoption of a European building style was viewed in many Islamic countries as an opportunity to progress in a more "modern" direction.

Vernoit (1997) also suggests that during the nineteenth century the Islamic world lost its independence, as the European imperial powers extended their economic and then their political control of the region. These changes were accompanied by the increased appearance of European or Europeanising features in some forms of Islamic art; and the hybrid 'Occidentalist' styles that resulted appear to be linked with the political prostration of the region. For most of the twentieth century such art was felt to be decadent, ill formed, and inauthentic. During the nineteenth century, the cultural and industrial transformation that had been gathering momentum in north-western Europe began to have far reaching effects throughout the world. Particularly, in architecture and the visual arts, European styles and motifs began to co-exist with indigenous features. In some cosmopolitan centres there was widespread urban redevelopment. New patterns of life were frequently accompanied by a more particular interest in the artistic forms practised in the West, whether in literature, art, or music. Further, underlying some of these artistic developments can be sensed the appearance in Muslim lands of new attitudes towards the role of art in the society and that of the individual. What is important to mention, however, is how strikingly little these Occidental features affected the basic forms of the artefacts produced by local artists and craftsmen, and even those created by European manufacturers for the Middle Eastern market. It is clear that the everyday life of the region kept to the established patterns; there was change, as there had been throughout the Islamic period, but there was no collapse (Vernoit, 1997).

As regards the different arts, they appear to have been affected in differing degrees. Some methods are no longer needed, while industrial processes can imitate other techniques but the latter cannot match the traditional quality of the former. Some arts in which traditional methods appear still to be utilised are currently supported to a significant extent by the tourist trade. The

adoption of printing as an ordinary method of book production naturally has had a deep effect on calligraphy and painting. Painting in traditional manuscript and album styles has almost ceased to exist, but has been invigorated to some extent for the tourist bazaar, its method or system from time to time reaching a refined rank, but the treatment of topics lacks conviction. Calligraphy has been affected in a different way from painting. This is the art least dependent upon patronage, since it can be executed with inexpensive materials, and due to its link with religion and the fact that it is frequently practised alone, it is possibly the most personal of the arts. Freed of the requirement to copy, the most innovative calligraphers have turned to the production of single pieces, which are at present frequently framed for display on walls (Brend, 1991).

Finally, in the nineteenth and early twentieth centuries, the traditional arts of architecture, the book, the loom, and the fire, in many parts of the Islamic world, fell to their lowest point. This was mainly due to the shift in economic and political power from Islamic lands to Western Europe. Since the sixteenth century, the dominating influence of Europe had disrupted traditional modes of production in the region and, by the nineteenth century, European manufactures, such as textiles and crockery, flooded Near Eastern and Indian markets and this began to spell the end of the traditional craft system, particularly in cities. While some European colonial patrons had little interest in indigenous arts, except to bring them home as souvenirs of their residence abroad, by the end of the nineteenth century, growing appreciation had led to the creation of some of the finest collections of Islamic art in Europe (Bloom and Blair, 1997). The two arts that remained most creative in the late twentieth century were architecture and calligraphy. Though these might be devoted to sacred purposes, as in the past, they are the arts most closely linked to the Muslim religion. The conclusion must therefore be that some parts of Islamic art have fallen away, leaving a Muslim core (Brend, 1991).

THE MOST IMPORTANT FACTORS THAT CONTRIBUTE TO THE BEAUTY OF ISLAMIC ORNAMENT

The Fifth Research Question Is: What are the most important factors that contribute to the beauty of Islamic ornament?

The aim of this research question is to identify significant factors that contribute to the aesthetic of Islamic adornment. In Islam, the idea of beauty appears to be tied to the practice of remembering and glorifying God. Therefore, the goal of divine Islamic art and ornamentation seems to be to convey the majesty of God by transforming objects, such as plates, bowls, tiles, and other items into objects of real beauty to reflect this quality. Hence, the question that needs to be asked is: what has contributed to the beauty of Islamic ornamentation, whether in Islamic art or architecture? Is it the religious factor which led to the dominance of the abstract style in Islamic art, or the variety of materials utilised, or the combination of artistic methods and techniques employed, or the beauty of the forms or colours?

To answer this question it is necessary to first consider what Western and Muslim philosophies have said about beauty.

Western and Muslim Philosophers' Conceptions of Beauty

One of the features that contributes to the wonder of Islamic ornamentation is that it not only appears pleasing to the eyes but also appeals to the intellect and arouses the emotions. The abstract style using a geometric system leads the gaze of the viewer on an infinite journey of movement through endlessly repeated ornamental units. It is suggested that the religious factor is the most important influence for the beauty of Islamic ornament and art. Due to Islam's prohibition against figural images, Islamic art avoids realistic representation of human and animal figures and its vegetal designs are extremely distant from their original models.

Burckhardt (1987) suggests that the essence of art is beauty, and beauty by its very nature is an outward as well as an inward reality. The Prophet said: 'God

is beautiful and He loves beauty'. Beauty is therefore an attribute of God, and this quality of His is reflected in whatever is beautiful on earth. Some scholars might perhaps argue that the beauty referred to in the *hadith* is that of a purely moral character, but there is no reason why we should limit the import of the *hadith* in this way, nor why the Divine Beauty should not shine forth at every level of existence. Divine Beauty is incomparably exalted above physical as well as moral beauty, but, at the same time, nothing beautiful can exist outside the dominion of the Divine.

In the Islamic world, concepts of beauty are embedded in metaphysical discussions. According to a number of famous Muslim metaphysicians, Divine Beauty (*jamal*) includes all the Divine Attributes expressing bounty and grace, while Divine Majesty (*jalal*) includes all the Divine Attributes expressing severity, which manifest the transcendent nature of God with regard to His creation. In other words, each Divine Quality contains all the others so that they all refer to the one Essence. Thus, beauty implies truth and truth implies beauty. There is no real beauty that does not have truth concealed in it and there is no real truth from which beauty does not originate. In this connection, it has been said: 'In Islam every art is a science and every science is an art'. These words refer directly to the geometric tradition in Islamic art, a knowledge that allows the artist to develop harmonious forms from fundamental geometric patterns. More accurately, art is a science because it opens up a way to meditative knowledge whose ultimate objective is awareness of the Divine Beauty. Science seems to be an art as it is oriented towards unity and therefore possesses a sense of harmony that cannot but lend it beauty (Burckhardt, 1987).

Importantly, how do Western philosophers define the concept of beauty? Are their expressions about beauty similar or completely different from Muslim philosophical expressions? Western philosophers, such as Kant, employ the term 'aesthetic judgement' in a broad sense that contains both what he calls "the judgement of the agreeable or the pleasant." By the judgement of taste, Kant means aesthetic judgement in the narrow sense, for example, in the statement: "This is beautiful" (Sheppard, 1987).

Defining beauty, David Hume, the Scottish philosopher, said: "beauty is no quality in things themselves; it exists merely in the mind which contemplates them; and each mind perceives a different beauty" (Cooper, 2003, p. 197).

Commenting on the concept of beauty, Burke stated: "beauty and sublimity would be *alternative* qualities to which an artist might aspire, and a good work of art might be sublime without being beautiful" (Hanfling, 1995, p. 54).

On the concept of beauty, Muslim philosophers' viewpoints differ. Some seem to connect beauty with the pleasure we get from it. Al-Ghazali, one of several influential thinkers in Islam, discussed beauty in his book *Alchemy of Happiness* as follows:

> *"Beauty is significant because it provides us with pleasure, and the essence of beauty is the recognition of perfection. Everything has its characteristic form of perfection, but the outer appearance is often a misleading guide to the perfection within, where it really lies. The eye can assess the outer, but it is left to the heart to get to the essence of the thing. The problem with appreciating paintings and beautiful objects is that it encourages us to concentrate on the outer, not the inner, and to regard the superficiality of the external world as representing how things really are"* (Leaman, 2004, p. 25).

Beauty is also viewed as being linked to the important principles of Islamic art, such as the general harmony, balance of parts, and perfection of the whole composition. According to Al-Ghazali:

> *"The beauty of a thing lies in the appearance of that perfection which is realisable and in accord with its nature. When all possible traits of perfection appear in an object, it presents the highest degree of beauty ..... beautiful writing combines everything that is characteristic of writing, such as harmony of letters, their correct relation to each other, right sequence, and beautiful arrangement"* (Ettinghausen, 1974, p. 284).

Another Muslim philosopher, Ibn Hazm, defines beauty as: "the brightness of the external members... it is also liveliness and nobility. Beauty is something that has in language no other name (than the one) that designates it, but is unanimously perceived by the souls... when they see it. It is like a fine linen covering the face, a glance that inclines hearts towards it, in such a way that opinions coincide in judging it beautiful. Although it does not possess fine qualities, everyone that sees it, admires it, considers it beautiful, and accepts it, even though contemplating its separate qualities afterwards, one finds nothing remarkable. It seems like something that lies within the soul of the contemplated object and is found by the soul of whoever contemplates it. This is the highest of the categories of beauty" (Gonzalez, 2001, p. 8).

Neoplatonist Islamic philosophers, such as Al-Farabi, Ibn Sina, and others, consider beauty in a very different way. In accordance with Neoplatonic thought, the value of the beautiful may simply be conceived in a spiritual light, more specifically, in the light of emanationist cosmology inspired by Greek and Graeco-Latin philosophy. The concept of beauty in this scheme is:

"apprehended in ideal and spiritual terms related to light and brightness as transcendental qualities. God being designated, for example, by the expression 'the power of light'. Therefore, logically, beauty thus determined generates an entire aesthetic of light that has in essence very little connection with the existential world owing to its divine source. This aesthetic is mainly conceptual, based on the double notion of light and splendour and may even be defined as a genuine aesthetics of the Divine" (Gonzalez, 2001, p. 12).

Factors Contributing Most to the Beauty of Islamic Ornament

Islamic Ornamentation Ideas or Themes

One of the most important factors contributing to the beauty of Islamic ornamentation appears to be the artist's outstanding ability to express his feelings and divine ideas in a wonderful artistic work. Muslim artists aimed to create new innovations and artistic designs in accord with the Islamic creed or order. Therefore, Muslim artists moved away from designing human and

animal forms and invented abstract styles. The Muslim artist's talent and genius revealed to him creative artistic ideas through which he could freely express his emotions and feelings. By employing an abstract style, the Muslim artist could modify vegetal and geometric forms, combine them with Arabic calligraphy, and arrange them in an infinite way. Hence, the Muslim artist, in expressing his feelings and religious themes, invented a new creative world in which simple vegetal and geometric forms are charmingly coloured and abstractly designed to reflect the intangible relationship between God and the artist, wherein the artist remembers God and glorifies Him, and attempts to please Him with the splendour of his artistic creations.

According to Al-Hakeem (1984), in the Muslim artist's search for new tools for artistic expression, he employed his artistic creativity and invented his own tools, which became part of his repertoire and granted him an element of independence and uniqueness, distinguishing his work from that of others. Moreover, even when drawing human or animal forms, the Muslim artist tended towards abstraction without considering the details, and this is what characterised his drawings. Both the abstraction and emotional depth are what European artists became keen to imitate in their artistic works. Islam influenced Islamic art in such a way that the Muslim artist turned away from representing human and animal forms and attained new convictions through the way of religion. He demonstrated his belief in it through his creative artistic ideas that conveyed his strong feelings and emotions towards it. The Muslim artist, through abstraction, also portrayed recognition of his inferior position in God's creation. God had created the skies and the land and the artist was nothing more than a very small part in it.

Islamic Ornamentation Forms

Another important factor contributing to the beauty of Islamic ornament is the ornament forms. Combined with other forms, such as circles and spirals or floral forms, richly varied ornamental forms or units connected with each other can be created in a beautiful way. Generally, in Islamic ornamentation and architecture, the variety of forms and the diversity of Islamic adornment

shapes in the different structures are such as to make it difficult to find equivalence between elements. According to Hussain (1996b), Islamic architecture is probably the strongest evidence of the ability of the Muslim artist to overwhelm viewers through his art. For example, the mosque, the first building to be designed and implemented by Muslim Arabs, shows how Islamic architecture was unique and unprecedented, contrary to the allegations of Orientalist historians of art and architecture. Muslim Arabs used simple styles, some of which were taken from their environment and others emerged due to religious factors. The hot Arabic climate required the architect to cover his building with a roof to shelter people from the heat of summer. The religious factor defined the direction of the *qibla* (direction towards Mecca) so that prayer is offered towards the right direction.

In Islamic art, the significant characteristic feature of forms appears to be the prevalence of divisions. The Islamic work of art has a disjunct organisation. It may not be viewed as a unit with a single or dominant focus. Instead, whether executed in wood or stone, in paint or stucco, in words, tones, or even in the three-dimensional plans of buildings and complexes, the Islamic aesthetic captivates the mind with a series of units or modules. These interior units may be identically repeated to make up the whole composition, or they may reappear in varied forms. In both cases, the interior divisions of the work are essential to the sense of continuing and never ending patterns (Al-Faruqi, 2001).

What creates the beauty of Islamic ornamentation forms seems to be the aesthetic of ambiguity, which may be considered another important factor contributing to the beauty of Islamic ornamentation. The aesthetic of ornamental styles, which are interlaced in infinite-seeming ways as well as the abstract shapes of Islamic adornments, suggest vagueness. Papadopoulo (1979) contends that the pleasure derived from such ambiguity becomes proportionately more exquisite and intense with the increase in distance between the represented world and the autonomous world of forms and colours. By rendering the representational content as credible as possible, while at the same time vitalising the compositional structure of forms and

colours with the richest and most variegated internal relationships, and with the whole solidly structured by a mathematical curve, the distance between appearance and true significance can be pushed to the maximum, ambivalence can be exacerbated, and the pleasures of ambiguity become more ineffably exquisite and secret.

As regards the aesthetic context, what makes the form concept important appears to be its ability to convey an emotion felt by its creator, while beauty conveys no such emotion (Hanfling, 1995). According to some Western theorists, to appreciate something aesthetically is to attend to its forms, qualities, and meanings for their own sake, but also to attend to the way in which all such things emerge from the particular set of low-level perceptual features which define the object on a non-aesthetic plane (Cooper, 2003).

Generally, it can be said that we get pleasure from Islamic ornamentation because its forms are not only beautiful or abstracted without any meaning or content, but they carry a divine message and this appears to be the significant factor which increases its beauty. According to one Western "formal aesthetics", namely, Clive Bell:

"pleasurable aesthetic emotions [are] the result of contemplation of an object's *significant form*, and that pleasure derived from attention to any other aspects of an artwork – for instance, its representational content" (Cooper, 2003, p. 331). Bell goes on to say that works of art are items, which present 'significant form', combinations of plastic elements (lines, masses, and colours), that move us aesthetically (Cooper, 2003).

Islamic Ornamentation's Abstract Styles or Designs

The other significant factor that contributes to the beauty of Islamic ornament is the design and style. Whether magnificent designs exist on Islamic architecture or artistic objects, such as glass work or ceramic wares, the designs of these masterpieces carry the Islamic aesthetic stamp. One of the features of wonder in Islamic ornamentation appears to be the utilisation of Arabic calligraphy, and geometric and arabesque adornments in one style. The

creativity of the Muslim artist appears in his ability or skill in distributing and shaping Arabic calligraphy letters or ornamenting them with geometric, plant, or sometimes animal embellishments. Indeed, most stimulating to people is that when they try to understand and explain the ornamentations, but fail to reach an answer, they are satisfied with the fact that the Muslim artist has been able to overwhelm them through this style of ornamentation (Hussain, 1996b).

Harmony of design appears to be a significant element in creating the beauty of Islamic ornamentation. The richly harmonious forms of Islamic ornamentation and elements may be employed in a perfect mixture with ornamentation styles and colouring to reflect the artist's feelings and to awe Muslim spectators. Clevenot and Degeorge (2000) point out that texture can be used to bring into play as many as four or five different density levels, inviting the spectator to draw close to the sculpted surface in order to appreciate the finest elements. As far as aesthetic experience is concerned, the act of drawing closer corresponds to moving from visual to tactile values, as if the pleasure experienced in contemplating this sort of ornamentation has to find its fulfilment in the act of touching. At this degree of proximity, it is not only the plastic qualities of the work that are seen, but also the technical skill of the craftsman. The philosopher Ibn Khaldun referred to harmony and visual pleasure, suggesting that these could be found if the maker acted as the servant rather than the master of the medium, and if the form was closely allied with function. He stated:

> *"If an object of vision is harmonious in the forms and lines given to it in accordance with the matter from which it is made, so that the requirements of its particular matter as to perfect harmony and arrangement are not disregarded – that being the meaning of beauty and loveliness whenever the terms are used for any object of sensual perfection – that [i.e the object of vision] is then in harmony with the soul which perceives [it] and the soul, thus, feels pleasure as the result of perceiving something which is agreeable to it"* (Irwin, 1997, p. 177).

The desire of the Muslim artist to invent and create new styles of ornamentation inspired by abstract styles may be considered one of the factors of wonder in Islamic art and ornamentation. The Muslim artist developed his ornamentation to a high level of creativity and proficiency, and started interpreting plants, leaves, geometric and Arabic calligraphy forms in ways that evoke pleasure through constantly repeating them so they appear as intertwined and rotated infinitely. Al-Faruqi (2001) suggests that Islamic style or design carries the idea of never-ending continuity. An aesthetic impression of infinity may be realised by breaking up the line and forms, and repeating different interior units with complex treatment, so that the implicit symbolic message is fulfilled. Another feature of wonder is the genius and talent of Muslim artists in creating remarkably intricate designs. One of these designs is the arabesque style. An arabesque design, based on an infinite leaf-scroll pattern that, by division of elements (stem, leaf, blossom), generates new variations of the same original elements, is considered the perfect application of the principle of Islamic design and can be applied to any given surface, the cover of a small metal box or the glazed curve of a monumental dome. Both the small box and the huge dome of a mosque are treated in the same way, differing only in form, not in quality (Grube, 1967).

Striking Islamic Ornamentation Methods or Techniques

Another important factor, which contributes to the beauty of Islamic ornament, is the ornamentation methods or techniques. In Islamic art, the technique is distinguished by the novelty and extraordinary quality of methods. The most basic tendency of Islamic art appears to be the covering of the surfaces of objects with attractive pervasive patterns and ornamentations. Further, it involves a range of arabesques, inscriptions, and vegetal as well as animal forms. According to Hussain (1996b), one of the main features of wonder of Islamic ornamentation is that Muslim architects, in decorating Muslim mosques, used the shape of the entrance of the mosque as a means to overwhelm the worshipper through variations in entrance shapes. All are designed with meticulous detail and beauty since they constitute an introduction to the place of prayer. The Mamluk entrances are considered to

be among the finest left by Muslim architects. The architect made them like a picture in which he beautifully drew every detail. The base of each entrance is surrounded by a gently suffused Amustabah tone on all sides; the upper two sides of the entrance are covered by two calligraphic decorations that serve two ornamental functions. They connect the two sides of the entrance to its projecting front and they also connect the frame of the door and the outer frame of the front. The door opening is crowned by stone lintels hinged in a geometric way that evokes the glory of the place. Also, the hanging weights show the ingenuity of the Muslim architect in overwhelming the viewer through varying their shapes in ways that verify their originality and novelty.

In this context, Collingwood (1958) indicated that the artist acquires his skill just as the craftsman does, partly through personal experience and partly through sharing in the experience of others who thus become his teachers. No work of art whatever can be produced without some degree of technical skill, and the better the technique the better will be the work of art. The greatest artistic powers, for their due and proper display, demand a technique as good in its kind as they are in their own.

The other feature of wonder is that the ornamentation of a surface of any kind, in any medium with infinite-seeming patterns serves the same purpose, namely, to disguise and 'dissolve' the surface, whether of monumental architecture or a small metal box. The result is a world which is not a reflection of the actual object, but that of the superimposed element, which serves to transcend the momentary and limited individual appearance of a work or art, drawing it into the greater realm of infinite and continuous being, emphasised by the way in which the architectural ornamentation is utilised. Solid walls are disguised behind plaster and tile ornamentation. Vaults and arches are covered with floral and epigraphic ornaments that dissolve their structural strength and function. Domes are filled with radiating designs of infinite patterns, bursting suns, or fantastic floating canopies of a multitude of stalactites, that banish the solidity of the stone and masonry and give them a peculiarly ephemeral quality, as if crystallisation of the design is their only reality (Grube, 1967).

In short, as discussed previously in the Islamic ornamentation methods section, in chapter three, the Muslim artist was able to express his divine philosophy in art by utilising different and varied methods, both intricate and simple techniques, the outcome of which arouses wonder due to the Muslim artist's high skills and innovative methods in treating and beautifying Islamic art and ornamentation. Clevenot and Degeorge (2000) contend that through the effects of textural saturation, interlinking of shapes and visual ambiguity, Islamic ornamentation appears to distance itself from what could be called the aesthetic of the figure. The unanimous rejection of figures reflects certain orientations of Islamic religion and philosophy, which assert that the shapes that make up the visible world have merely a relative autonomy. Therefore, the shapes of Islamic adornment, deprived of a background that may enhance their position as figures, cannot maintain any kind of autonomy and are nothing more than the creation of modulations of the plastic surface.

Creation of Innovative Colours in the Islamic Ornamentation of Architecture and Artworks

Another significant factor that contributes to the beauty of Islamic ornamentation is utilisation of a variety of colours. Aesthetically, the colours in Islamic ornamentation are characterised by a remarkable diversity. Muslim artists created so many innovative colours in the ornamentation of architecture and artworks that the imagination is fired by their splendour since they please the eye and arouse feelings of wonderment in spectators. According to Muhammad (1996), use of the element of colour in Islamic ornamentation is one of the basic requirements for beauty. The generous use of green and blue is a reflection of the elements of nature, for example, the sky, the rain, and green productive plains, while the use of gold suggests spiritual elation. Afifi (1997) concluded that in Islamic art, the generous utilisation of colours by Muslim artists, particularly the colour gold, which has a magical gloss, lifts the viewer beyond the earthly or physical realm to the sky or the heavens above, the abode of God Himself.

Kant, in '*The Critique of Judgement*', states that the colours "which give brilliancy to the sketch are part of the charm. They, may no doubt, in their own way, enliven the object for sensation, but make it really worth looking at and beautiful they cannot..." (Kant, 1911, p. 67).

Muslim artists displayed a skilful genius in creating and harmoniously blending colours together. Papadopoulo (1979) suggests Muslim artists were highly sensitive to the density of colour parts, and this constitutes one of the principal variables in the independent world of their masterpieces. The result is what we can call logic of densities. He comments:

> *"Each fabric pictured in a miniature makes up a patch of solid colour without internal modulation but filled with tiny decorative motifs "atoms" that are unvaried within any particular patch of colour and constitute a "group" or "ensemble" in the mathematical sense of those terms. When they represent garments, the shapes of these colour areas are empirical, in architecture they are geometrical. The groups can be made up of "geometrical atoms", for example, polygons of all sorts, in which case they are reversible in the sense that beginning with any particular "atom", one can always return to it by passing through the others, or of "empirical atoms", such as the schematised folds. When the elementary forms are arabesques, they may or may not constitute reversible groups. All the various surfaces or colour areas in a picture are involved in never-ending dialogues with each other and all others, and these are determined by their respective densities as well as by their topological relationships to each other and within the whole"* (Papadopoulo, 1979, p.109).

Notably, the diversity of colours is mentioned in the Qur'an several times, indicating and reflecting God's ability to miraculously create, which fact stimulates meditation and contemplation of God's Power. Several verses in the Qur'an refer to the diversity of colours, for example: "Do you not see that

Allah sends down water from the cloud, then We bring forth therewith fruits of various colours; and in the mountains are streaks, white and red, of various hues and (others) intensely black". *Qur'an* [35/ 27-28]

Also:

"And what He has created in the earth of varied hues most surely there is a sign in this for a people who are mindful". *Qur'an* [16: 13]

Islamic Ornamentation Materials

Another important factor contributing to the beauty of Islamic ornament is the materials employed. In Islamic art, the Muslim artist uses the art of ornament as a means to strongly overwhelm the viewer. Whether he utilises materials such as glass, wood, ceramic, stucco, metal, silk or other materials, the aesthetic does not exist in the material itself, but in the high talent and cleverness with which the Muslim artist uses humble tools and through his genius is able to transform the cheap into the expensive. According to Trilling (2001), material and technique have shaped the evolution of patterns throughout history, yet it would be a mistake to identify ornamental styles too closely with particular materials and technique. Working with the material usually implies relatively simple ornament, while complex ornament exalts the will and skill of the maker above the natural properties of the material. Sometimes, however, intricate ornament brings out the beauty and character of the material in ways that simple ornament cannot.

One remarkable example of Islamic architecture is the ornamentation of the Umayyad and Dome of the Rock mosques, where the artists covered the interiors of the two buildings with mosaic, both as a material and a style. If construction of these two mosques was meant to reflect a civilisational victory, the mosaic ornamentation inside these buildings emphasises this concept. Through magnificent architectural and ornamental forms and colours, use of valuable materials and excessive elegance, effective management of the stucco material, and utilisation of reformation and emptying on the pillars and domes as a means of easing the load on them, these embellishment tools proudly

announce the victory of this new empire. Elements of wonder also include the distribution of ornaments in a planned and systematic way within frames, bands, and fillings, as well as using naskhi and Kufi calligraphic fonts in association with floral and geometric ornamentations. The artist focused on decorating each element in the building in an attractive way, and keeping the largest ornamentation for major elements in the building, the *Mihrab*, minaret, and the entrance (Hussain, 1996b).

Finally, Burckhardt (1987) states that before the world of Islam was invaded by the products of modern industry, no object left the hands of a Muslim craftsman without being endowed with some beauty, whether it was a building or a domestic object, whether it was for a rich or a poor customer. Moreover, although the material and instruments used by the craftsman are very simple, the finished artwork is noble and sublime, due to the artist's heartfelt aim to reflect the majesty and glory of God.

CHAPTER SIX

THE ARTIST AND THE SPECTATOR

INTRODUCTION

The relationship between the artist and spectator in the context of Islamic art and ornamentation is important. It is significant because the artist and spectator are greatly interconnected since the artist exhibits his beautiful productions, and the spectator observes and appreciates the innovativeness of the artist's work. The artist's real role, in Islamic art, appears to be to present the significant matters of the society and the religion of the society, as well as to express his feelings and emotions in accordance with Islamic creed. The important question which therefore needs to be clarified is: does the artist's role finish when he has executed the work of art or does it extend with the spectator? This chapter will focus on the relationship between the artist and spectator, and the vital role of both in Islamic art.

THE ARTIST AND THE SPECTATOR

The nature of the relationship between the artist and spectator in Islamic art may be analysed on the basis of perception and representation and the extent to which these overlap to form a platform of communication. Hanfling (1995) states that although works of art play an important role in the emotional lives of both of artists and spectators, the nature of the role is illuminated by thinking of it not only as a means to express emotion but also to convey higher truths. It is true that artists do seek sometimes to create works, the experience of which will move us, but they do so by means of a highly complex process that is intellectually demanding from spontaneous emotional outpouring.

In Islamic art, the artist attempts to express his feelings by the way he fashions his artwork, ornamentation and architecture. Also, what an artist tries to achieve appears to be a positive response from the spectator. According to Western scholars, such as Tolstoy, the true artist equally articulates and evokes feeling. By means of his art he communicates to his spectators the feelings he is experiencing. The role of art is thus to communicate the artist's feelings to spectators. Separation of the appreciation of art from knowledge

and intellectual activity appears to be one of his concerns, but particular training is not required to understand good art (Sheppard, 1987).

Islamic art, ornamentation and architecture may be considered unique and perfect when they have the opportunity to communicate with spectators. Artworks appears to be communication of the artist's cultural art, reflecting what he is trying to interpret or possibly communicate about his religion, the society around him, or what he may believe in. Hanfling (1995) indicates there is a significant point concerning art, emotion and expression as related to the spectator when he refers to the process whereby an artist communicates with the audience as a complex one. He comments: "What the artist does is not like expressing emotion; not all works of art have expressive properties, and when they do have such properties, it is not always the case that the state aroused in the spectator is analogous to the state described by the predicates used to specify the expressive properties. However, even though all that is the case, it still remains true that the central reason why works of art are valued at all is that they enhance our lives in certain irreplaceable ways, and *one* of the ways in which they do this is via the impact they can have on our emotional condition. Many works of art are valued precisely because of the way they make us feel" (p. 233).

In the communication between the artist and spectator, the difficulty may arise, for example, when the artist chooses an abstract subject or ornamental designs for his art that have no specific form or feature in reality, although they stimulate pleasure in the spectator. Trilling (2001) points out that not all ornamental styles are equally accessible. Unfamiliar styles of ornament are like unfamiliar styles of music or cooking, we can enjoy them without understanding them fully, provided we can intuit something about their principles and goals. Further, it may be argued that we cannot appreciate the image until we go through a similar process in our minds, recognising the main elements, observing the interaction of smaller forms within each of them, then mentally stepping back and allowing all the parts, large and small, to come together.

There are different views regarding the status of the Muslim artist in Islamic art and Islamic civilisation. On the one hand, he is considered to have no identity and creativity and therefore his art is stereotyped. On the other hand, he is thought to possess deep thoughts and a philosophy and therefore his art is unique. According to Hussain (1996b), the artist in the Islamic era used to train a group of children in the area of his specialisation (architecture or the minor arts). These children were given some duties to perform until they reached a level in which they could perform complete artistic works. The supporters of this theory in fact deny the creativity of the Muslim artist since it suggests that the artist will follow in the footsteps of his master without realising any creative difference. This, in the opinion of some, is the main reason for the absence of the identity of the artist in the Islamic era, since the evidence would appear to suggest he was not concerned with leaving his signature on his artwork.

Noticeably, the artist in the Islamic era, in most cases, avoided high commendation from spectators by preceding his name with words that indicated humbleness, for example "the work of the poor servant (of Allah) Bahzad" or "the work of the weak slave (of Allah) Bahzad". Signatures left by the artist clarify the nature of the relation between him and the art sponsor and his perception of his work. The more incredible the work of art, the more humble he will be in signing it, using expressions that convey his weakness, inferiority, humility. The artist's aim is to draw the attention away from himself as the artist (Hussain, 1996b).

When considering the identity of the Muslim artist, it is very important to remember that one of the regulations of Islamic law prohibits mimicking of the living creation of God. The reason for this prohibition is that contemplation and reflection on the creation of God are viewed as acts of worship. Such activity should be focused on the Creator alone. Believers are required to look for the signs of God's competence that will result in their acknowledgement and appreciation of God's favour towards them. Therefore, the appreciation of an artwork that mimics living beings distracts from this important act of worship, since it stops at praising the artist and not Allah.

Observing this rule may be the main reason for the Muslim artist renouncing his claim to his artwork. He is more concerned with reflecting the signs of God than with demonstrating his personal skills. Hence, the important point that should be stressed here is that the issue of the identity of the Muslim artist is related to that artist's religious identity based on serving Allah, The Creator of all beauty. In this case, the artist perceives his effort as part of Allah's creation, based on the verse in the Holy Qur'an: "But Allah has created you and your handiwork!" *Qur'an* [37/96], hence, the artist's personal skills dissolve in the Great competence of The Creator. According to Hussain (1996b), some suggest that religion is the fundamental origin of all arts and not Islamic art only. The Muslim artist was committed to the dominant religious ideology in thinking and practice. He believed in the Islamic faith, therefore, the spirit of Islam was deeply rooted in every atom of his being and permeated everything he thought and felt. When the Qur'an refers to "Those who have believed and performed righteous deeds", this means all that a man performs. The Muslim artist was committed to adhering to the laws of the religion in which he believed without losing his freedom. Thus, everything that Islam, as a Faith, rejects would be rejected by the artist as a Muslim. Those who support this theory argue that the artist's commitment to Islamic religious belief did not restrict him to a stagnant form of artistic expression, nor to an art form that was losing its attractiveness or ability to develop because of the restrictions placed upon it. Rather, the "I" or religious ideological identity of the artist is manifested in the form and meaning of the artwork.

The question of whether the artist presupposes certain metaphysical truths, for example, about the nature of reality, in order to produce his art, is important. The main aim underlying Islamic art appears to be helping the spectator to get to know Allah through this creation, since the oneness of Allah is seen in the integrity and conformity of His creation. Concepts in Islamic faith, such as the unlimited Ability and Power of Allah, His far-reaching knowledge, and His direct control and management of nature, cannot be expressed and represented by figural images. Rather, it can be expressed by the infinite-seeming motion

of beauty and patterns in Islamic ornamentations, such as the arabesque pattern. In this way, the spectator through Islamic art and ornamentation may develop awareness of God. Thus, spectators are meant to accept the ornamentation as an attractive background as well as something that engages their attention, making them reflect upon their faith and their place in creation. According to Al-Faruqi and Al-Faruqi (1986), the pattern which has no beginning and no end, which gives an impression of infinity, is the best way to express in art the doctrine of *tawhid*. It is the structures created for this purpose that characterise all the arts of the Muslim peoples. It is these infinite-seeming patterns, in all their ingenious variety, that provide the positive aesthetic breakthrough of the Muslims in the history of artistic expression. It is through these infinite-seeming patterns that the subtle content of the Islamic message can be experienced.

The response of the spectator to Islamic art, architecture, and ornamentation is significant to consider. Does he play a vital role in its creation or in establishing the character of an art object or architecture? How should the spectator respond to Islamic art? This raises another important question of how can ornament and design draw the spectator into active contemplation? It is important to remember that Islamic art rejects imitation of nature in favour of developing spiritual awareness. Ornamentation is not just to make objects and buildings look more beautiful, but to encourage spectators to develop their religious belief and understanding. Al-Faruqi and Al-Faruqi (1986) suggested that Islamic art's aesthetic aim seems to be to lead the viewer away from focusing on this world, towards meditation of *tawhid* and a God other than nature. Hence, the artist is required to deal with artistic resources in a particular way. If the treatment of resources causes the spectator to focus on their naturalistic merits, meditation of *tawhid* may not be achieved. Thus, the spectator's attention is frequently drawn away from the material to focus instead on the decorative motifs and designs performed in different styles that the artist hopes will lead to a perception of God's transcendence.

In discussion of the relationship between the artist and spectator, many important questions arise, such as: does the Muslim spectator enjoy or

appreciate figural image art? Do the human and animal figures used in Islamic art evoke and stimulate the spectator's sense of aesthetic pleasure, or, are they stagnant forms that do not evoke beauty and pleasure? Does the spectator feel aesthetic enjoyment of these animal forms when they are used in art or not? Do human and animal figures invite the spectator to contemplate and meditate on the creation of God, just as the interlocked, abstract geometric forms and beautiful vegetal motifs and the Arabic calligraphy, with its various types and forms, stimulate him? The Muslim spectator's interaction with figural art according to the guidance of Islamic law, which does not encourage the drawing of human and animals images, is considered inappropriate. Apart from this, all types of artwork are appreciated by the Muslim spectator.

Another important matter that relates to the artist-spectator relationship is the obligation upon the artist to propel the spectator into a state of reflection or wonder. To what extent is the artist responsible for creating the wonder, whether in art or architecture? According to Al-Faruqi (2001), in ornamenting art objects, and in order to create beauty and wonder, the Muslim artist to express the idea of *tawhid* (the Islamic monotheistic doctrine) selects forms and styles that will lead the spectator to this message. The artistic goal is not likely to be naturalistic depiction, thus, decreasing the motif's size is not considered to be a negative aspect. The smallness of the elements making up the motif may strengthen the infinite-seeming pattern by forcing the observer to focus on the details of the artwork. Further, it may encourage the spectator to follow the unfolding style of the object. The small plants executed on metalwork, the small geometric design units on carved art objects, the detailing of architectural calligraphic scripts, are all ornamental elements that the Muslim artist might use in decorating divine buildings, like mosques, to build his attractive patterns. Also, the artist may use beautiful designs with complex details, which move the eye and mind of the spectator. Each movement, each change of direction within the ornamental design, catches the eye of the spectator and draws him onto new areas in an attempt to generate the series of tensions and relaxations that the viewing of the pattern entails.

Movement increases as the spectator is caught up in the aesthetic activities and encounters the numerous figures and combinations that make up the design.

How will the spectator perceive, interpret, and appreciate the beautiful designs of the magnificent artworks? The answer to this question depends on how the spectator responds to and interprets Islamic ornament and why he appreciates or values a work of art. What is it in a piece of Islamic artwork that makes a viewer respond positively? According to Ettinghausen (1974, p.286), the style or design satisfies a psychological need:

> *"It caters to human sensitiveness which is bewildered by the surrounding untamed, dangerous, and often phantasmagorical landscape .... it provides a formal linear harmony, which is rectilinear in the case of architecture and gardens. It is further enriched by colour which is the antidote to the all pervading monotony of the ubiquitous sand and stone".*

The beautiful object must also conform to how the spectator perceives things, and how he gets pleasure from beautiful objects. Jalal al-Din Rumi comments: 'Everything that is made beautiful and fair and lovely is made for the eye of him that sees' (p. 286). Al-Ghazali states: 'Everything the perception of which gives pleasure and satisfaction is loved by the one who perceives it' (Ettinghausen, 1974, p. 286).

The key words in the quotes of Jalal al-Din Rumi and Al-Ghazali are 'lovely' and 'loved', respectively, reflecting the highest level of appreciation. Appreciation of beautiful artwork may start with detection of the harmony of the elements and the components of the artwork. This harmony, in turn, psychologically interacts with the emotional state of the spectator. Then the spectator will find pleasure in tasting the artwork and his heart will subsequently love it.

The above analysis may shed some light on the question: what are spectators looking for? Collingwood suggests: "contemporary audiences apprehending a work will likewise have their own emotions clarified and discharged, for,

since contemporary artists and audiences within a common culture are likely to recognise the same things and think similar thoughts, they are also likely to have the same emotions to be discharged" (Cooper, 2003, p.160).

But how does the spectator respond to and interpret Islamic ornament? Are spectators meant to accept the ornamentation as an attractive background or as something that engages their attention making them reflect upon their faith in creation? Al-Faruqi (2001) suggests that through the aesthetic process, the beholder gains a perception and feeling of the infinite, which represents transcendence. He describes this as follows:

> *"Sometimes the extremities of these levels of combination are physically emphasised by strapwork, border designs, or contrasting colours and materials. At other times, the extent of the successive combinations is less clearly delineated and the beholder should search carefully for the various organisations presented by the design. The possibility for new "views" continues to the very extremities of the artistic field. Even there, with the cutting of the pattern before its completion, the design hints at a larger field of vision and at other combinations. These combinations are to be supplied by the beholder as he continues the pattern for as long as his imagination might support him. When the point of collapse is reached, the Muslim observer may only exclaim, "Allahu Akbar" (which means God is the greatest)"* (Al-Faruqi, 2001, p.176).

Finally, to what extent does the Muslim artist succeed in affecting spectators in creating beautiful art and ornamentation? The beautiful designs and charming colours may create artistic works that stimulate in observers a pleasant sensation. Spectators may appreciate the ways in which the artist represents his artwork, and the beauty from all these elements is likely to be appreciated by people from various backgrounds. According to Yusof (1995), the most prominent lines attract the spectator's attention. Whenever he gets closer, the details inside the ornamental construction become more and more

evident and the details increase as he looks carefully. The spectator may also observe that even if the area is irregular, the artist will divide it into equal parts that are then divided into more subsidiary parts filled with the details of the ornamentation in a fine and perfectly geometrical and mathematical way. Further, when looking at a pattern of geometric interlace, the spectator is confronted with two possibilities, either to follow the movement of the line or to stop at the starred polygons springing out here and there. In other words, the geometric interlock acts as a tool whose aim seems to be to perplex the gaze of the viewer. The spectator who enters into the logic of the interlace is enticed into mentally continuing its development beyond the limits of the decorated surface. In other words, the geometric interlace manifests qualities which go beyond material reality (Clevenot and Degeorge, 2000).

CHAPTER SEVEN

CONCLUSIONS AND RECOMMENDATIONS

INTRODUCTION

This chapter will provide an overview of the study's main findings based on the research questions presented in the introductory chapter. The chapter will then offer several recommendations based on the researcher's understanding of the nature of Islamic ornament and its development derived from her investigation of them over different time periods applying the historical survey approach.

CONCLUSIONS

The most important conclusion drawn is that Islamic ornamentations are among the most important constituent elements of Islamic art. They have a unique position and play an important role in both Islamic art and architecture.

One of the major findings that the study has set out to illustrate is that Islamic art and ornamentation are profoundly influenced by the Islamic religion. The most important factor, which has had a significant influence in forming this style, is the Islamic religion's rejection of figural representation in different art and ornamental patterns. The religion's prohibition against imitating nature, whether human and animal figures, is considered the most crucial factor influencing Muslim art. Nevertheless, in spite of the religion's prohibition against the usage of figural images, they are found on Islamic art objects and in Islamic architecture.

Islamic art, ornamentation and architecture have one significant function, that is, to express the Islamic creed and the centrality of God in the Muslim's life. Through his art, the Muslim artist expresses his love of God and devotion to Him by means of a philosophical and aesthetic language which utilises the Islamic ornamental elements of Arabic calligraphy, vegetal and geometric ornament, and human and animal figures. These elements evoke the infinity of the cosmos and draw the spectator to contemplation of God and the wonders of His creation. In addition, Islamic ornamental motifs and techniques are characterised by their movements and transfer from one medium to another, for example, from carpet to textile.

The discussion of Islamic ornamentation elements in preceding chapters has revealed several main historical developments and common features. Arabic calligraphy appears to be one of the most important Islamic ornamentation elements. Its features, whether in form or character, have significantly altered during development. The letters may be adorned with floral adornment and sometimes figural motifs. Arabic calligraphy may also be designed as geometric forms or as circular shapes, for example, medallions in which it is difficult to read its letters. Further, during some periods of its development, Arabic calligraphy was transformed into extremely intricate patterns, interlaced with other ornamentations in a creative way, or its character completely transformed into a bird or other animal form.

Islamic vegetal ornaments were characterised by splendid forms, but their shapes were altered and their character did not remain as in the early periods of Islamic civilisation. Vegetal ornaments developed from simple floral adornment to a truly outstanding abstract style. Vegetal ornaments were affected by other cultures' art and lost their abstract character to became more realistic.

Islamic geometric ornament appears to be the one element whose unique character remains the same during all periods of development. One important observation concerning the development of geometric forms is that geometric ornament becomes more complex and intricate due to the artist's high skill in creating extremely complex geometric designs.

As regards representation of human and animal figures in Islamic art, from the researcher's investigation and observation, the development of human and animal ornamental elements is characterised by variation in its character. A range of factual and legendary creatures were employed in Islamic art and architecture. This type of ornament is probably the least innovative of the three Islamic ornamental elements, nevertheless, the innovation and creativity of the Muslim artist are apparent in his ability to invent and create forms, ornamentations, designs, and patterns, which have never existed in nature, therefore originate solely from his imagination. The abstract designs of these

ornamental forms interlock infinitely and evoke in the spectator an emotional response and an aesthetic pleasure.

Regarding the aesthetic value of Islamic ornamentation, three main findings have been shown. The characteristic values which give Islamic art a distinctive quality among the other arts, are generated from its underlying philosophy. Islamic art and ornamentation are distinguished from other arts in that ornamental forms are designed in an infinite way and cover all empty spaces with varied ornamental motifs that interlace infinitely. The abstract nature of this art directs the spectator to contemplation of the transcendent nature of God and His beauty.

As regards the historical background of Islamic ornament, the researcher's investigation has revealed that the most important ornamental arts to influence Islamic ornamentation were the ornamental arts of cultures that existed before Islam. Although Islamic ornamental art bears traces of preceding cultures' influences, the Muslim artist has gone on to develop his own unique style and identity as well as design and develop the most amazing ornamental patterns and create a totally different art character.

The foregoing chapters have clearly demonstrated the influences of the Islamic religion on Islamic ornamentation, art and architecture. The Islamic religion has a profound influence on all aspects of the lives of adherents, including art and architecture. Thus, as this study has shown, the Islamic religion's rejection of figural images on Islamic art and ornamentation has been an important and crucial factor, leading Muslim artists to create abstract designs which distinguish Islamic art from the art of other cultures. By means of the abstract designs as well as the beauty of its ornamentation, Islamic art and architecture serve to promote the Islamic religion through their globally known Islamic character.

The architect's role in the serving Islamic faith appears to be that of decorating religious buildings with geometric and vegetal ornaments as well as Qur'anic verses that emphasise the power of Allah and His Majesty, and also promoting the splendour of paradise with its beautiful gardens and rivers that God has

promised to all His true faithful followers. Also, the artist's role in serving Islam is that of emphasising the beauty of Islamic art, through the elegance of Arabic calligraphic styles, and abstract and geometric designs. Magnificent artistic Islamic masterpieces in international museums also introduce the Islamic religion and convey some idea of the great civilisation behind this art. Through their observance of this art, people may come to a better understanding of the Islamic religion.

As regards Islamic ornament's influence on other non-Islamic cultures, it may be concluded that Islamic ornamentations have influenced the art of other cultures, both in the fields of art and architecture. In the areas of glass, wood, metalwork, textiles or others, Islamic ornamentation is accepted and admired. European artists imitated Islamic ornamentation designs and techniques, possibly due to the aesthetic of their forms, whether Arabic calligraphy, geometric and vegetal or arabesque motifs, and because of the fantastic colours that please and amaze the eye of the spectator. Also, the concern of Orientalist artists with Islamic art and ornamentations and their utilisation of various types of Islamic ornamentation, for example, geometric, floral and Arabic calligraphy, in their paintings, seem to indicate they were greatly affected by the art and ornamentation of the Islamic civilisation. If it were not for the fact that these ornamentations are magnificent and beautiful, Orientalists would never have adopted them in their paintings. This is perhaps major evidence that Islamic ornamentation is an influential art, has significant aim and intent, contains a variety of themes and ideas, and is not what some Western researchers have asserted, namely, merely ornamental.

With reference to cultures which have influenced Islamic ornament, the study has confirmed that in the early centuries of Islamic civilisation, Islamic art styles, forms, and decoration were affected by the arts of the ancient civilisations that preceded Islam. However, as the power of Muslims and their influence increased, the designs and forms of Islamic art and ornamentation began to take a unique and distinctive aesthetic style of its own, further influenced by the restraints imposed by the Islamic faith on the use of human and animal figural elements. However, in later periods, the influence of other

cultures on Islamic art and ornamentation increased. In other words, through its exposure to culture after culture, century after century, the basic principles and aims on which Islamic art was founded were clearly diluted, since there clearly appears a striving to perfectly depict human as well as animal figures from the natural world as well as depict creatures of myth, legend, and fantasy, such as those found in Chinese folklore. Thus, the influence of other cultures on Islamic ornamentation is manifest. What is also important to mention is that Islamic art seems to have ultimately lost its abstract features, one of its most important characteristics, whether in the ornamentation of arabesques or geometric ornamentation. Further, Islamic art began to lose its ability to arose awe in the spectator due to increasing omission of its basic feature, its aesthetic abstract forms designed to seeming infinity. Notwithstanding, Islamic art and ornamentation still retained its ability to arouse interest, not because of its abstraction and simplicity, but due to the lavish attention Muslim artists paid to emphasising the luxuriousness of their subjects, such as royal princes, whom they depicted in their portraits as majestic and awesome in appearance.

Regarding the most important factors which contribute to the beauty of Islamic ornamentation, the overall conclusion from the study is that in Islamic ornamentation, ideas, forms, themes, abstract styles and designs, methods and techniques, innovative colours, and materials, all jointly combine to form a marvellous Islamic ornamentation that arouses amazement and wonder in the spectator. What is also important to mention is that the beauty of Islamic ornamentation originates from its Islamic character and shows the clear effect of the Islamic religion on the thoughts and emotions of Muslim artists expressed creatively through the ornamental themes and designs they employed in Islamic art and architecture.

Concerning the nature of the relationship between the artist and spectator, three important conclusions can be drawn. The first is that the relationship between artists and spectators in Islamic art can be analysed on the basis of perception and representation, and the extent to which these overlap to form a basis of communication, all directing the spectator to love of God,

contemplation of His creation, and praise of Him. The other significant conclusion is that Islamic art reflects the beauty of value and not the value of beauty alone. This is the core of Islamic aesthetic philosophy, it emphasises the beauty of Allah, as well as the beauty of nature, which is absolute order and harmony and far from chaos and randomness.

The third conclusion is art in general and Islamic art in particular is perceived through love. As a result of detecting the harmony of the elements and components of the artwork, this awareness psychologically interacts with the emotional response of the spectator. When the harmonic motion of the artwork is in conformity with the harmonic motion of the emotions of the spectator, the spectator will find pleasure in tasting the artwork and then his heart will love it.

Finally, the most important conclusion in this study is that the researcher's investigation of Islamic ornamentation has revealed two forms: secular Islamic ornament and pure Islamic ornament.

In secular Islamic ornament, there is a distinction between Islamic art and Muslim cultural art. In the former, the artist heeds Islamic guidance regarding the drawing of animated subjects. This is observed in the decorations of mosques where Islamic calligraphy is the main style and the spectator is directly aware of the philosophical depth of the artwork since Islamic religious values are expressed. Muslim cultural art is widely observed in palaces of conservative Muslims and other places throughout the Muslim world. In this type, the local cultural traits are mixed with the Islamic style without literal observation of Islamic guidance. In both of these types, there is always a strong relationship between the artist and the spectator.

Pure Islamic ornament is ornamentation whose principal elements exist in nature or the imagination and are artistically employed in an artistic way that is dominated by abstract expression due to the teachings of the Islamic religion prohibiting the depiction of human and animal forms that have souls. This type of art work therefore follows a divine and aesthetic philosophy.

RECOMMENDATIONS

Based on the study discussions and in consideration of the underlying philosophy of Islamic ornament in Islamic art, recommendations for artists in the Islamic world are presented below.

1. The most important recommendation is connected to the issue of the depiction of figural images in Islamic art and architecture. The Muslim artist should be aware of which kind of designs and motifs can be produced, in other words, those which basically do not conflict with the Islamic creed and those which should not be produced because they violate dictates to be found in the Qur'an. The important issue then is the Muslim artist's attitude to art that includes human and animal depiction.

2. Conferences or seminars about Islamic ornamentation should be convened which aim to bring together researchers, artists, and experts concerned with Islamic art in general and Islamic ornament in particular. This will lead to improved understanding of the nature of Islamic ornamentation, and the philosophy and aesthetic values connected with it.

3. Due to the increase in other cultures' effects on Islamic art and ornamentation, a future challenge exists since introducing new Islamic ornamental styles and patterns may change the general character of Islamic ornamentation. Therefore, significant attention should be paid to maintaining the pure character of Islamic ornamentation.

4. Although Islamic art has generated enormous interest among Western researchers and scholars, there is a problem in that some Western publications, whether books or articles relating to Islamic art and ornament, tend to falsify some historical facts with regard to the Islamic religion, the Prophet Muhammad, the Qur'an and other issues which this thesis has not been able to rectify due to space and time constraints. Western researchers who specialise in Islamic art must make every

effort to be objective and unbiased, particularly where religious issues are concerned.

5. Teaching Islamic ornamentation as a subject in schools and art colleges and establishing educational courses and training programmes for artist will promote artists' skills and knowledge which will help to maintain the purity of Islamic ornamentation.

6. Islamic artists should be concerned about the form and character of Islamic ornamentation, otherwise pure Islamic ornamentation will disappear as a result of new ornamental forms and figures appearing in Islamic art.

7. There is a need for a new catalogue to be published which should contain most of the Islamic art and architectural masterpieces and treasures of the Islamic civilisation in different museums around the world. Existing Arabic publications are relatively old and photographs are of very poor quality.

RECOMMENDATIONS FOR FUTURE STUDIES

Like any research project, this thesis provides an agenda for further investigation and studies.

1. Further studies need to be undertaken due to the lack of extant research and published articles and books on Islamic ornamentation, especially its philosophical side, its meanings and expressions, as well as the historical development of geometric ornament and the representation of human and animal figures.

2. Future studies should examine the role of the artist and spectator in the field of Islamic art in general and in Islamic ornamentation in particular.

3. Research studies investigating the influence of Islamic ornamentation on other cultures' art and architecture need to be undertaken.

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STUDY FIGURES

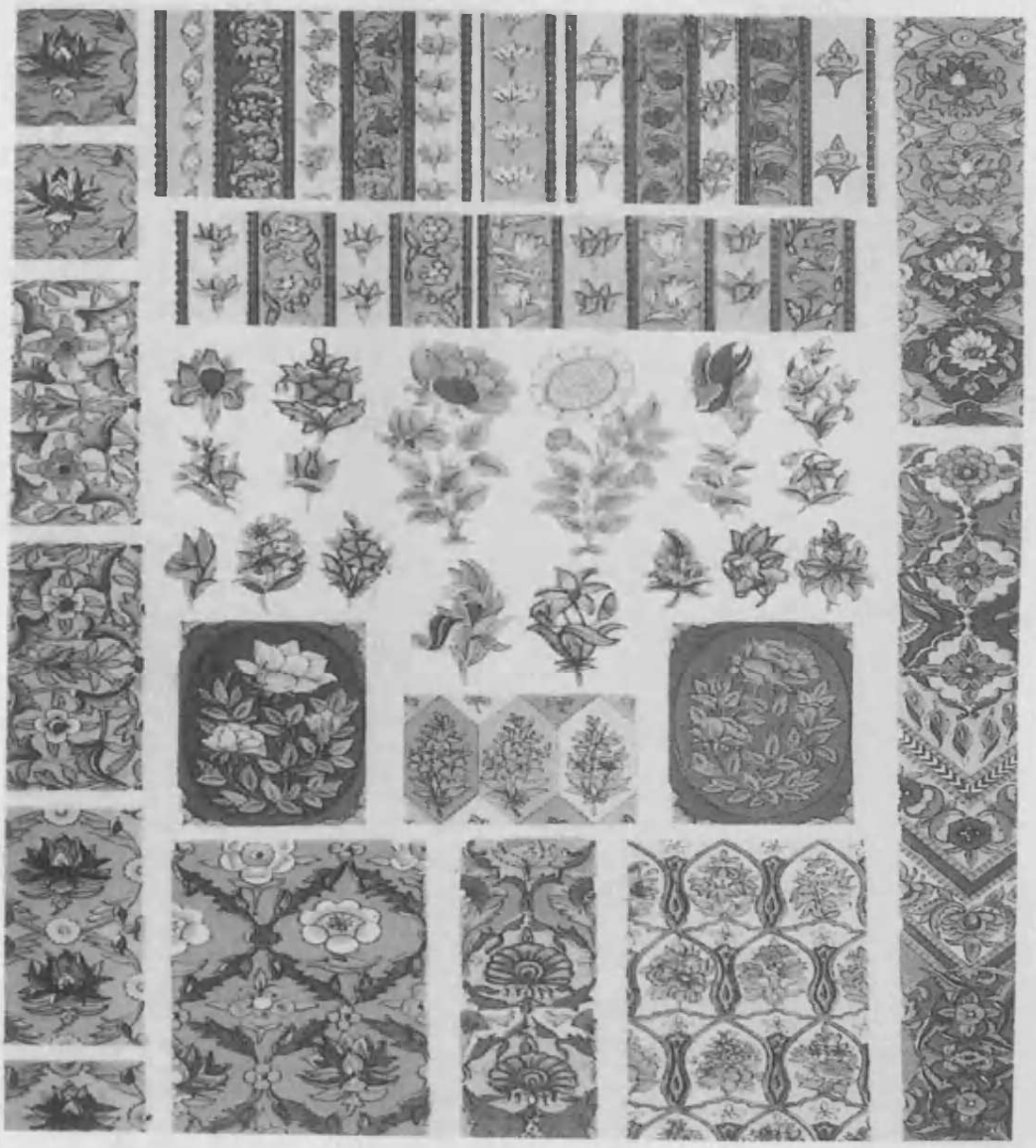

Figure 1.1 Table of ornamental designs (Source: Grabar, 1992)

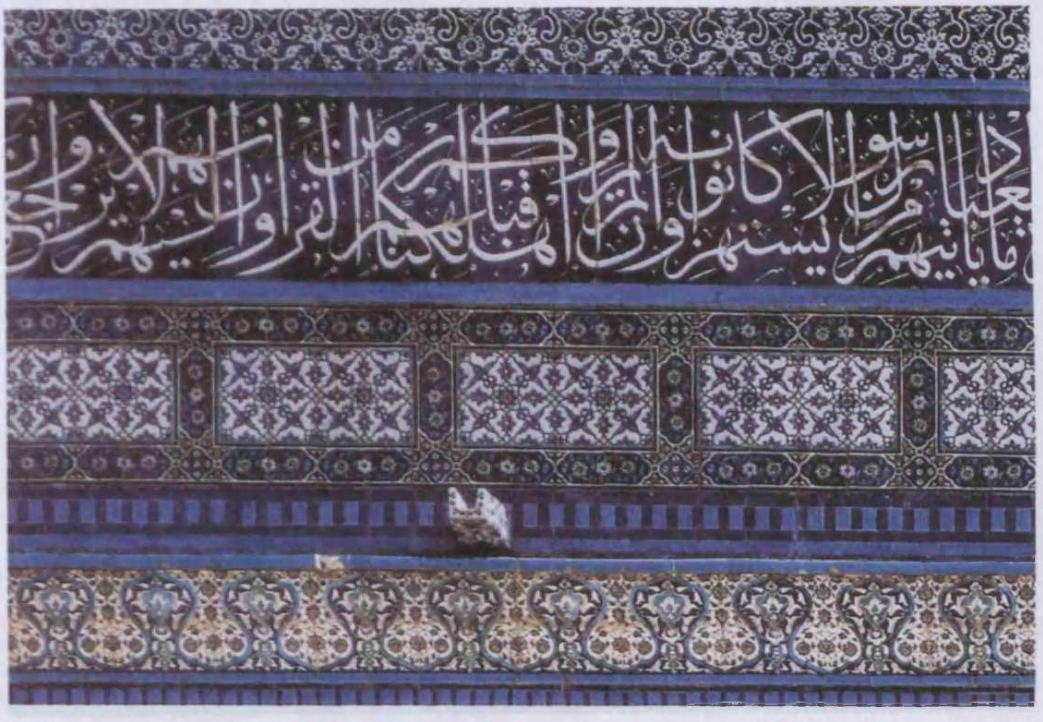

Figure (2.1) Tiled panels on the exterior wall of the Dome of the Rock, Jerusalem 691

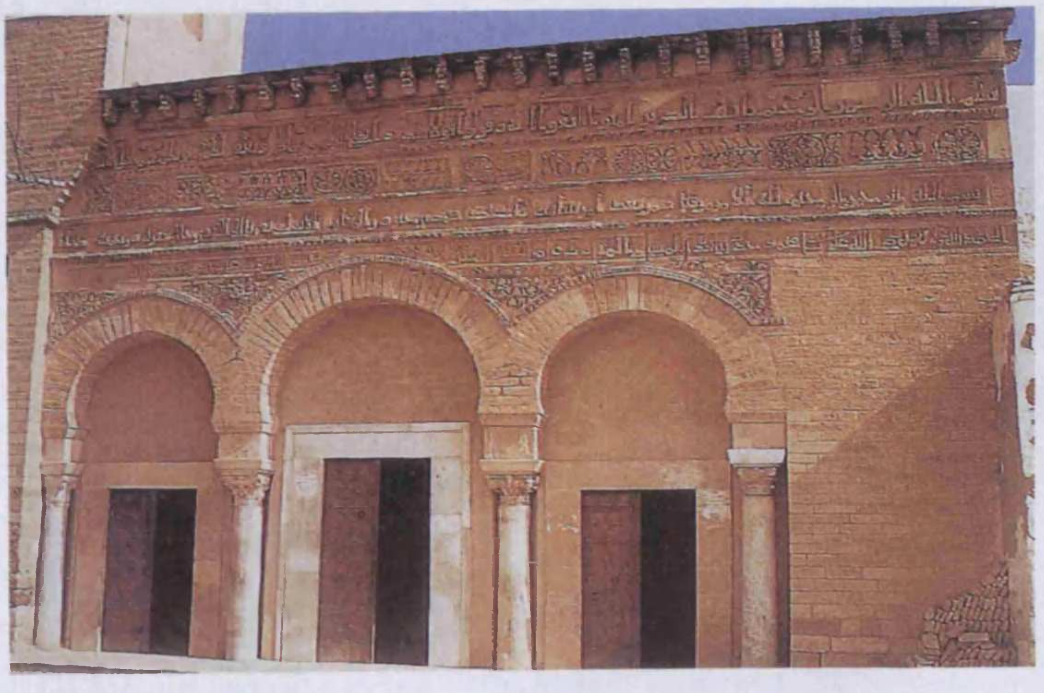

Figure (2.2) Mosque of the Three Doors at Qairawan, 866

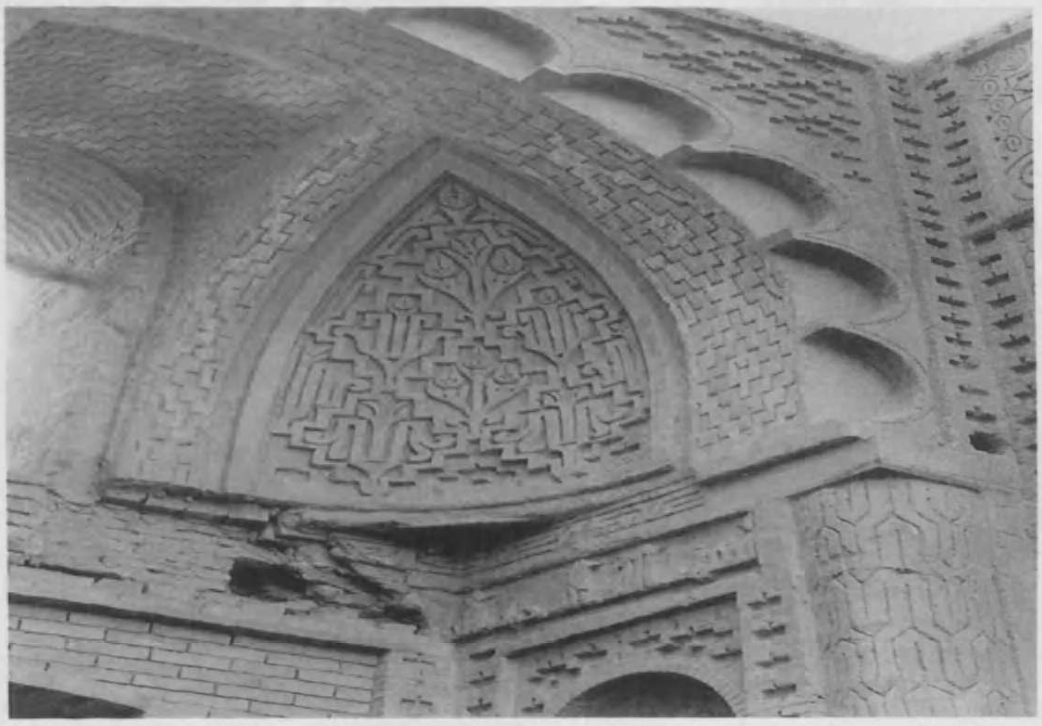

Figure (2.3) Inscriptions above the main door of the Jurjir Mosque in Isfahan.

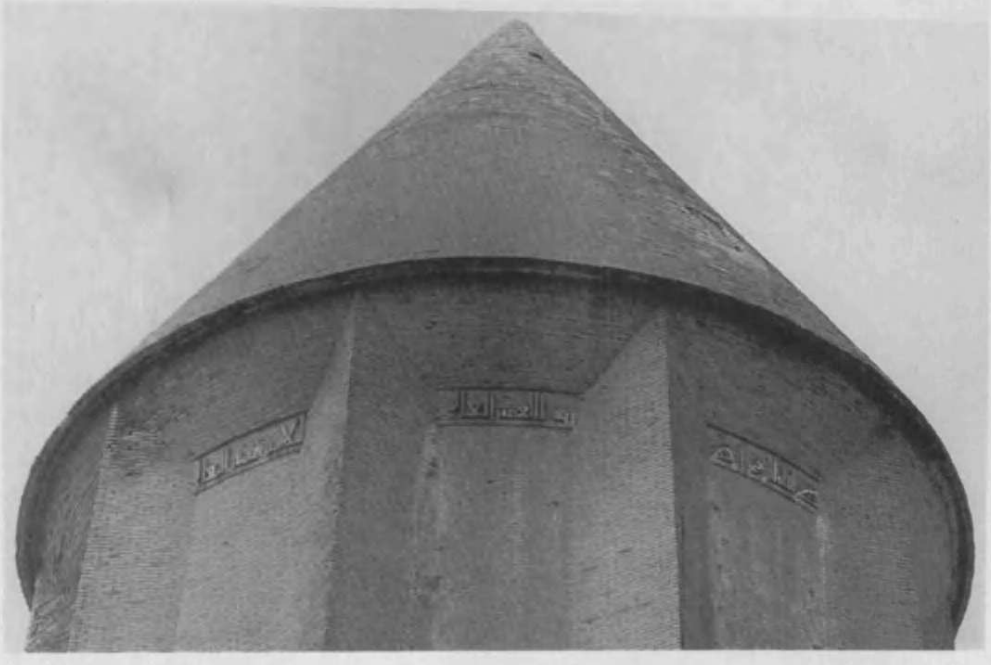

Figure (2.4) Decoration of the Gunbad-i Qabus Tower at Gorgan, 1006–7 Iran.

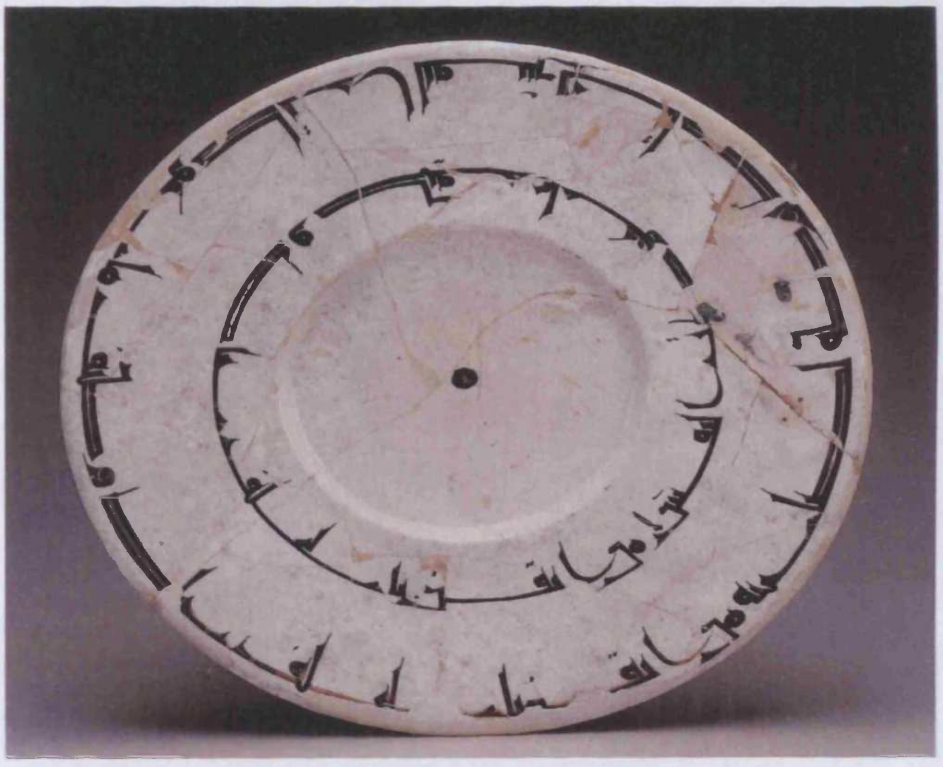

Figure (2.5) Ceramic bowl with decoration from Nishapur, 10th century.

Figure (2.6) Golden pitcher, Iran or Iraq, 10th century.

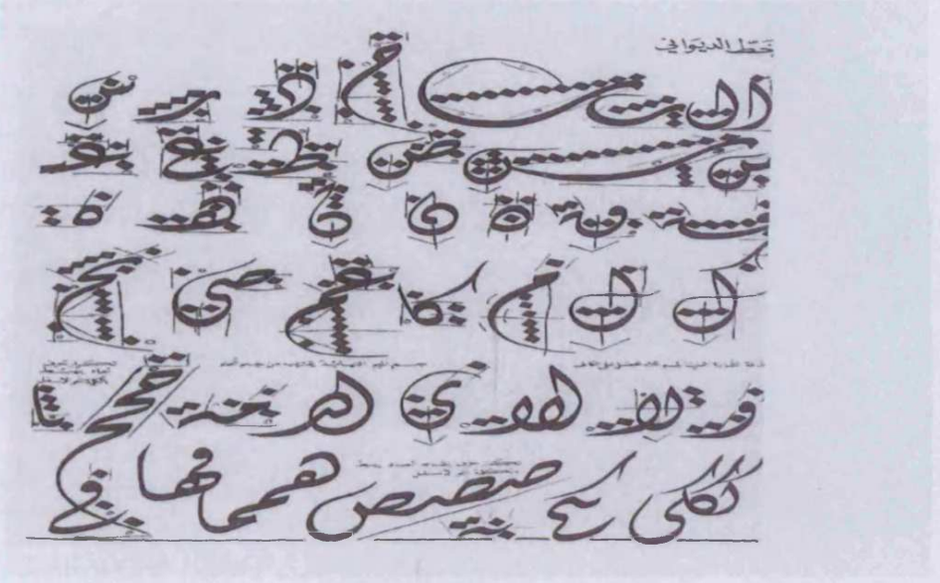

Figure (2.7) Letter measurements using rhomboid dots (Source: Grabar 1992).

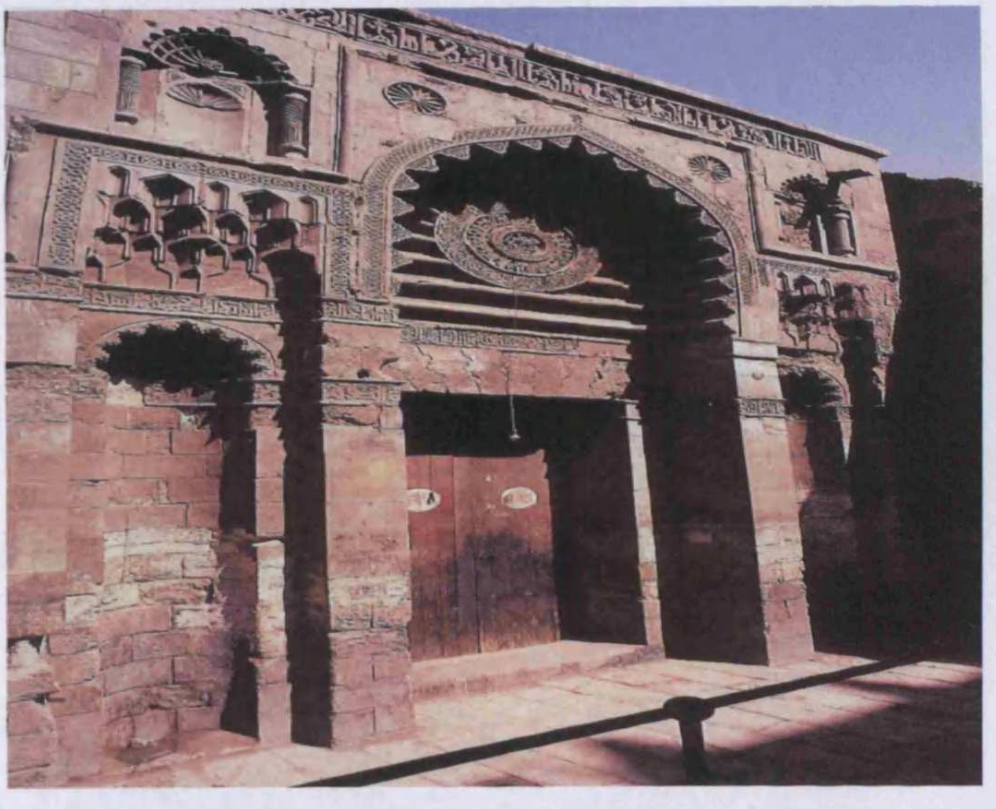

Figure (2.8) Facade of the Aqmar Mosque, Cairo, 1125.

Figure (2.9) Inscribed slip-painted earthenware bowel, Iran, 10th century.

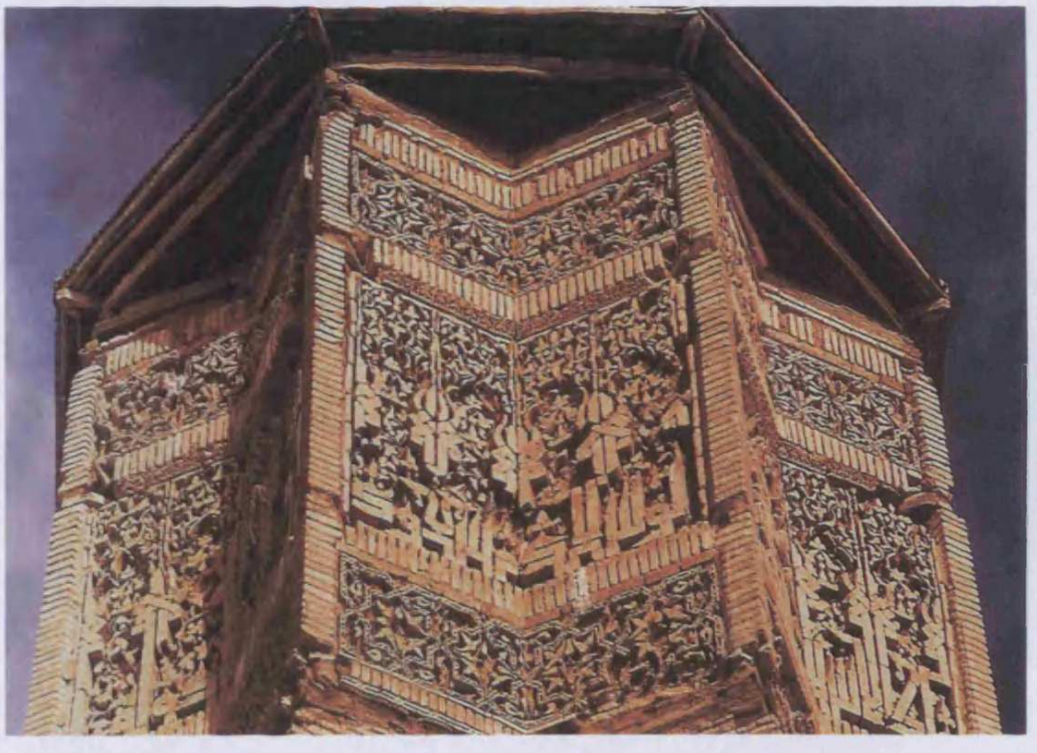

Figure (2.10) The upper panels around the lower section of the tower of Masud III at Ghazna, Afghanistan.

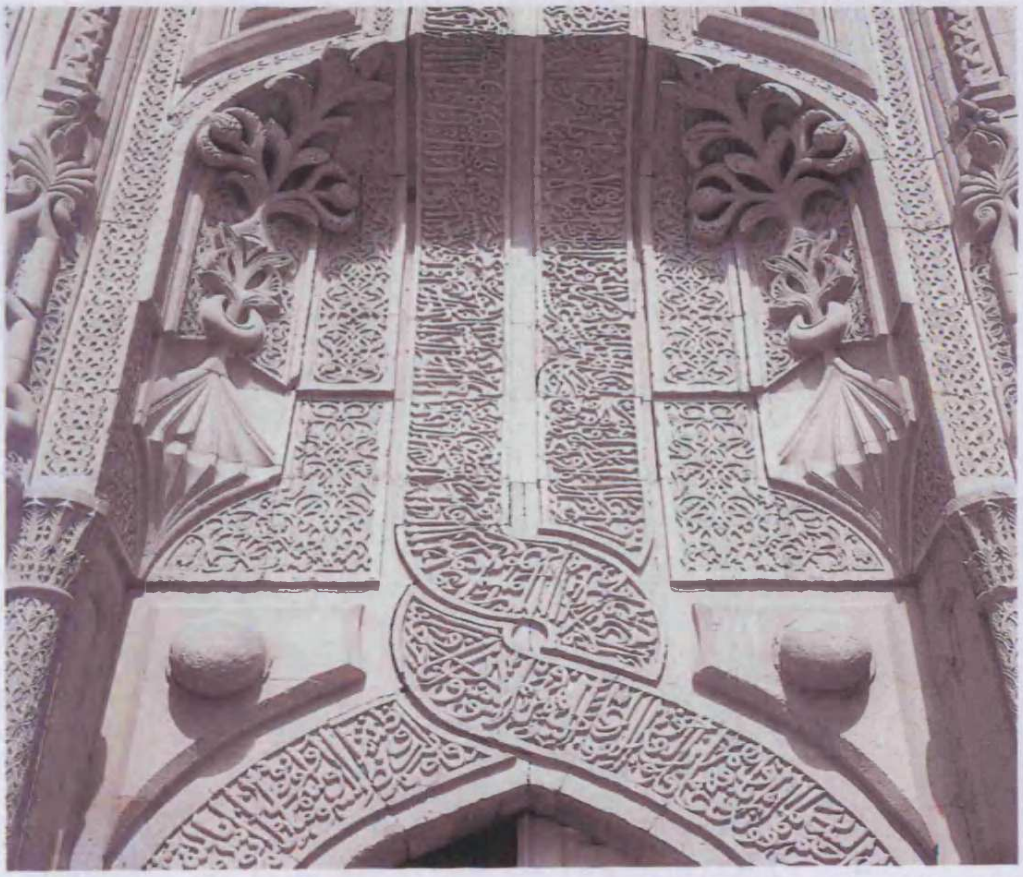

Figure (2.11) Detail of the entrance facade of the Ince Minare Madrasa at Konya, Turky, 1260.

Figure (2.12) Karatay Madrasa in Konya, Turky, 1251.

Figure (2.13) A corner of the Karatay Madrasa, Konya, Turky, 1251.

Figure (2.14) Brass ewer inlaid with silver, Mosul, 1223.

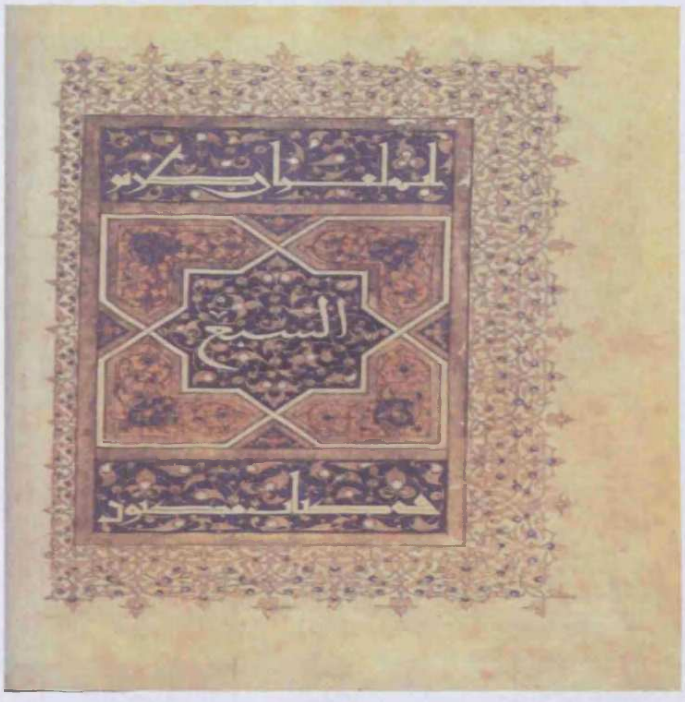

Figure (2.15) Left half of the double frontispiece to volume VII of the Qur'an of the Egyptian Baybars Jashnagir, 1304 – 06, illuminated manuscript.

Figure (2.16) Detail of the glazed ceramic decorations on the doorway of the Friday Mosque in Natanz, Iran, 1304 - 6.

Figure (2.17) Stucco mihrab in the winter prayer hall of the Friday Mosque at Isfahan, Iran, 1310.

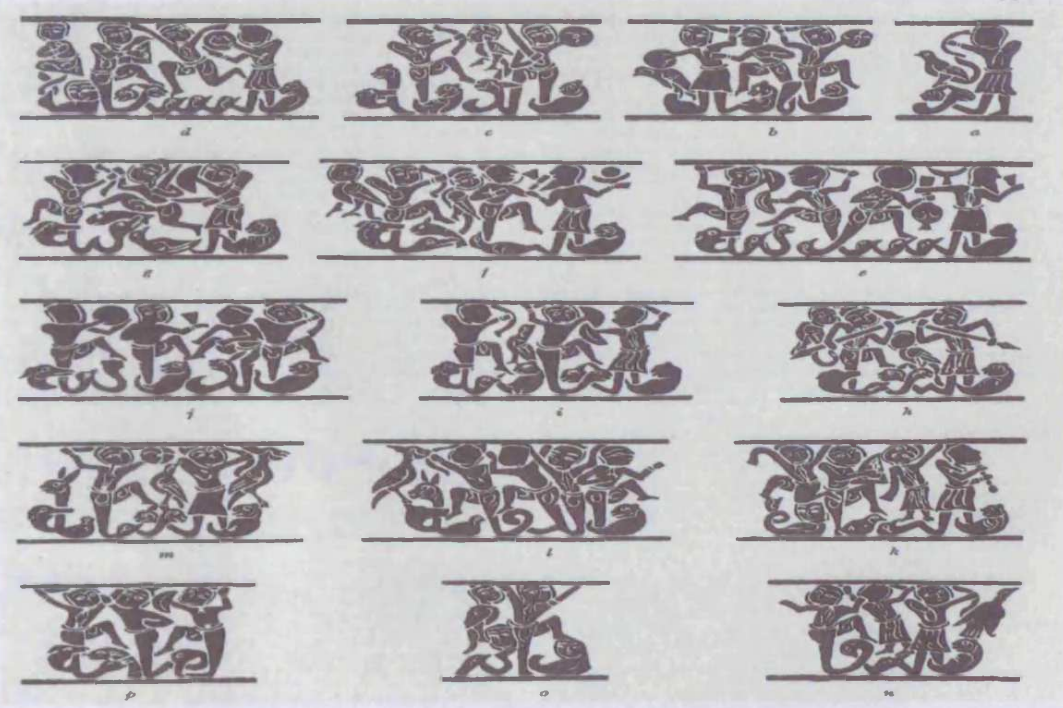

Figure (2.18) The "Animated" naskhi inscriptions on the Wade Cup in the Cleveland Museum of Art (Source: Ettinghausen, 1976a).

Figure (2.19) Cup, inlaid bronze, early thirteenth century.

Figure (2.20) Inscription on a pottery plate from Nishapur, Iran.

Figure (2.21) Pottery bowl with barakah in ornithmorphic script (Source: Ettinghausen, 1976a).

(A)

(B)

(C)

Figure (2.22)

A. Barakah, ornithomorphic script on an Iranian dish, tenth century.

B. Human-headed kufic inscription on an Iranian ewer.

C. Human-headed naskhi inscription on a pen box, Iran or Afghanistan.

Figure (2.23) Incense burner with name and titles of Sultan al-Nasir Muhammad ibn Qala'un written in radiating characters, Cairo, 1320 - 1330.

Figure (2.24) A tray of sheet brass inlaid with silver and gold, Cairo or Damascus, 1345 – 6.

Figure (2.25) Square kufic script, repeating four times the name of the Prophet Muhammad, from a wooden minbar in the Friday mosque of Khva, 1502 - 3.

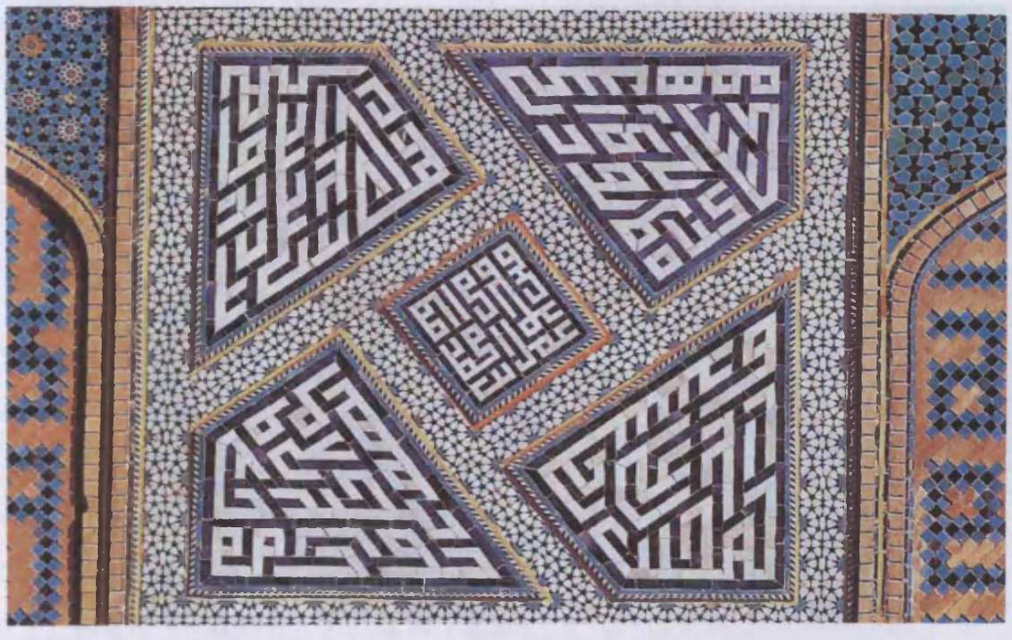

Figure (2.26) Angular kufic inscription on the iwan of the Friday Mosque in Isfahan, Iran, 17th century.

Figure (2.27) A text from the Qur'an in Sulus calligraphy, Dome of Hagia Sophia, Istanbul, 16th century.

Figure (2.28) Dome of the Sulemaniye Mosque, Istanbul, 1550 - 1557.

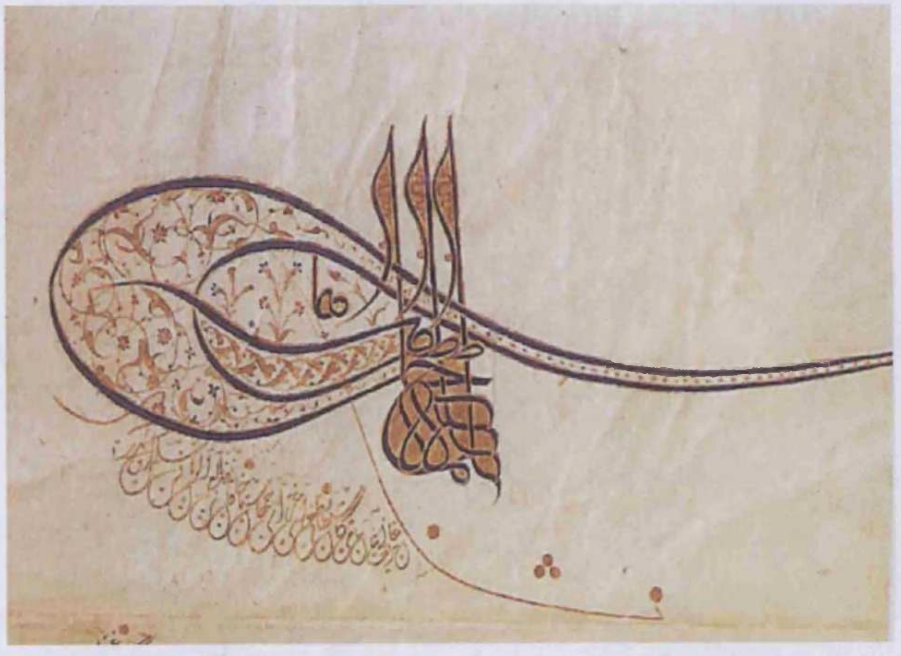

Figure (2.29) Tugra of Selim II, Istanbul, late 1560s.

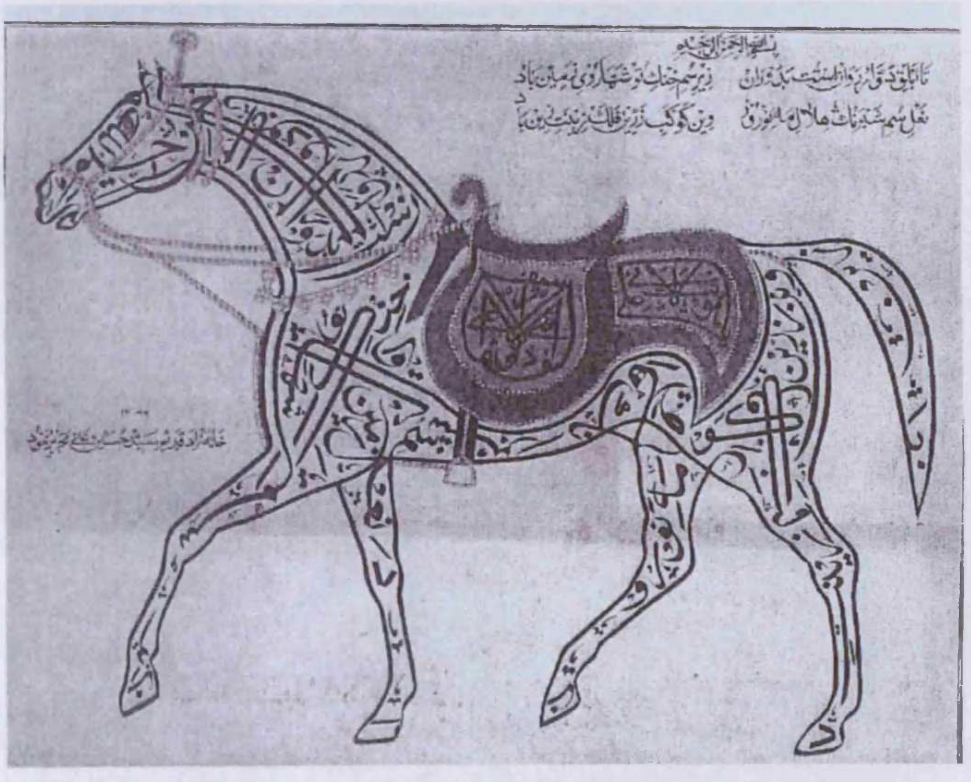

Figure (2.30) Calligram in the form of a horse, Iran.

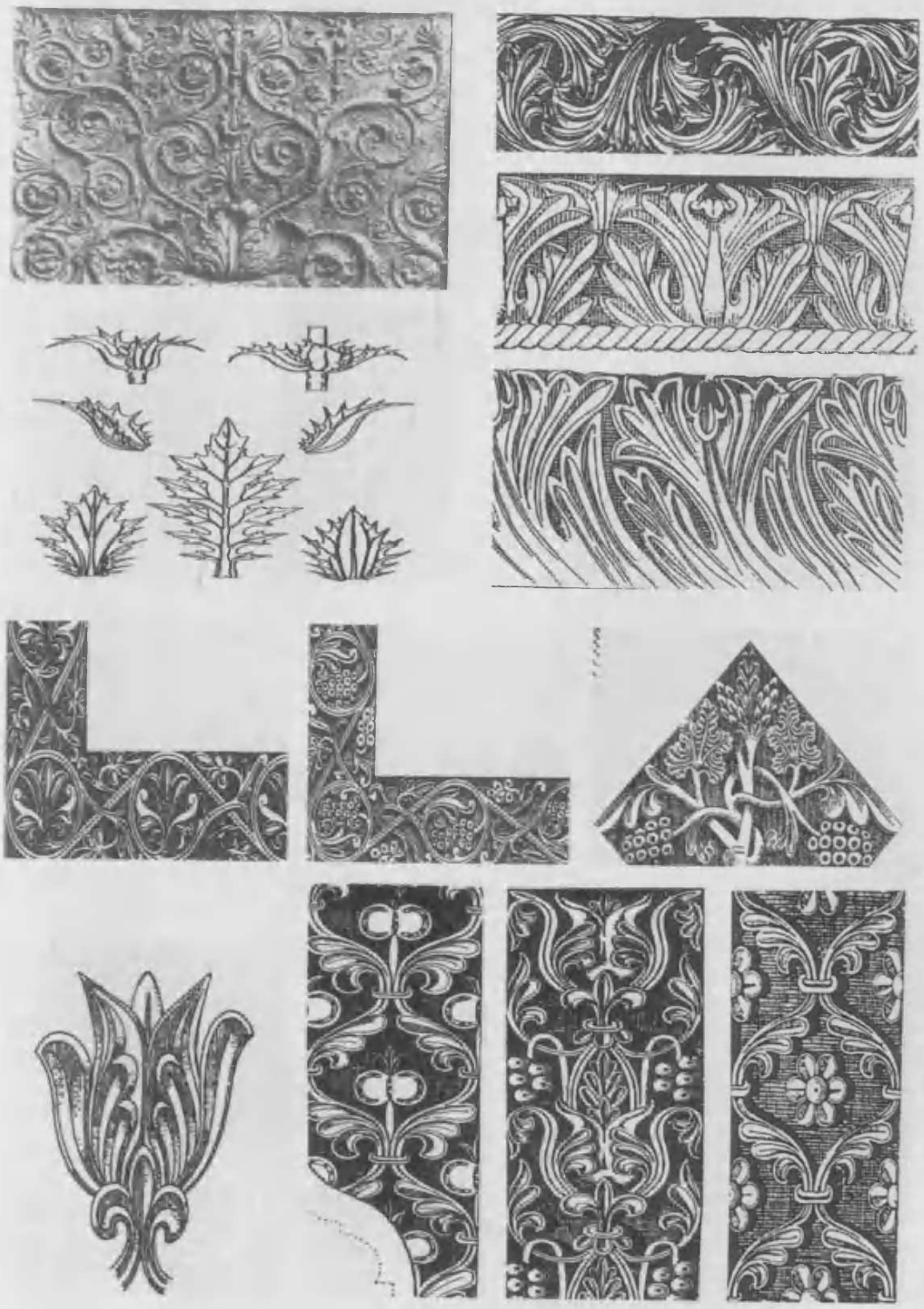

Figure (2.31) Floral ornaments adopted from pre-Islamic civilisations in Khirbat al-Mafjar, Palestine, 725-30.

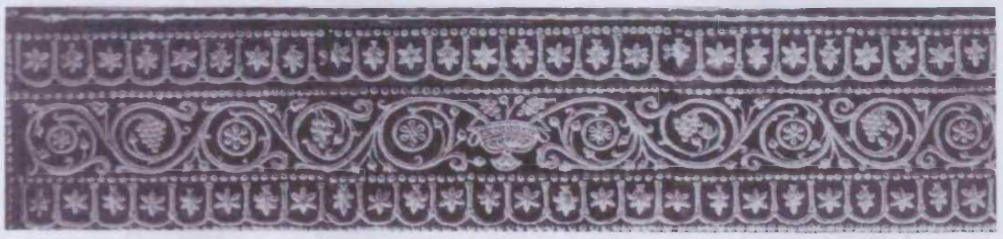

Figure (2.32) Sheet-metal tie-beam covering in the Dome of the Rock, Jerusalem, 691.

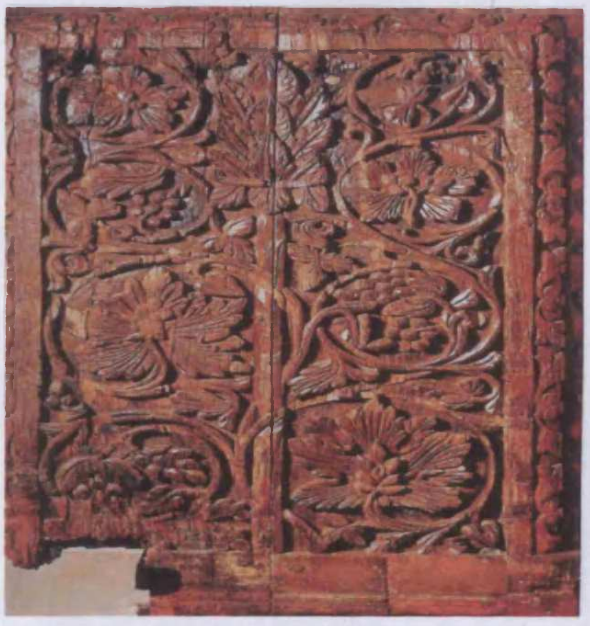

Figure (2.33) Wooden soffit from Aqsa Mosque, Jerusalem.

Figure (2.34) Stucco window grille from Qasr al-Hair al-Gharbi, early 8th century.

Figure (2.35) Detail of a wooden minbar in the Great Mosque, Qayrawan, Tunisia, 856 - 863.

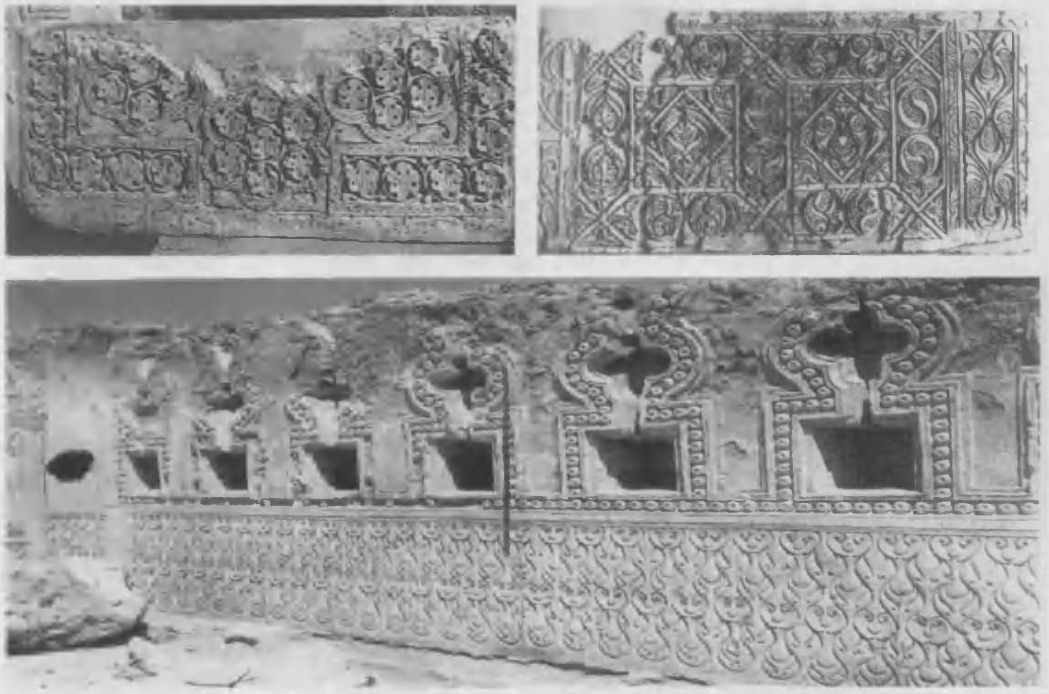

Figure (2.36) Samarra wall decoration styles A, B and C, ninth century, Samarran palace.

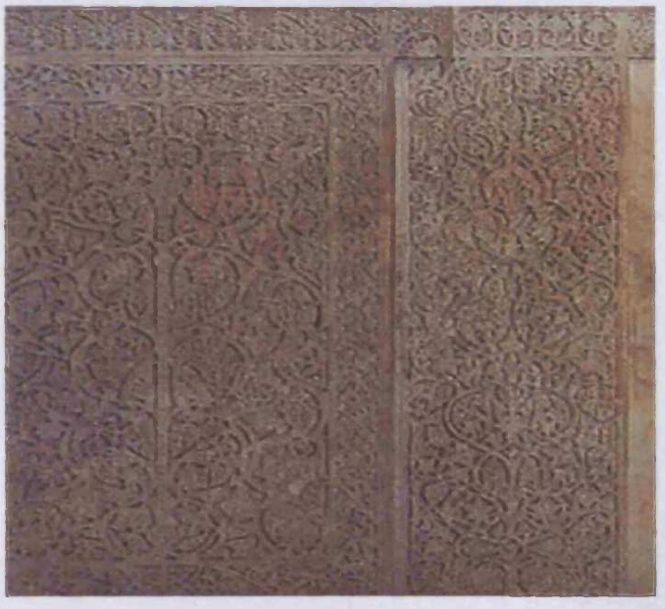

Figure (2.37) Marble fragment from the mihrab area, Great Mosque Cordoba, Spain, 962 - 966.

Figure (2.38) Mosaics in the mihrab area, Great Mosque, Cordoba, Spain, 962 – 966.

Figure (2.39) Vegetal ornamentation from the Great Mosque, Cordoba and Medina al-Zahra, Granada, Spain.

Figure (2.40) Casket, probably Medina al-Zahra, Granada, Spain, 961.

Figure (2.41) Ivory pyxis of Subh, probably Medina al-Zahra, Granada, Spain, 964.

Figure (2.42) Silver casket, decorated with gilding and black organic material, medina al-Zahra, Granada, Spain, 976.

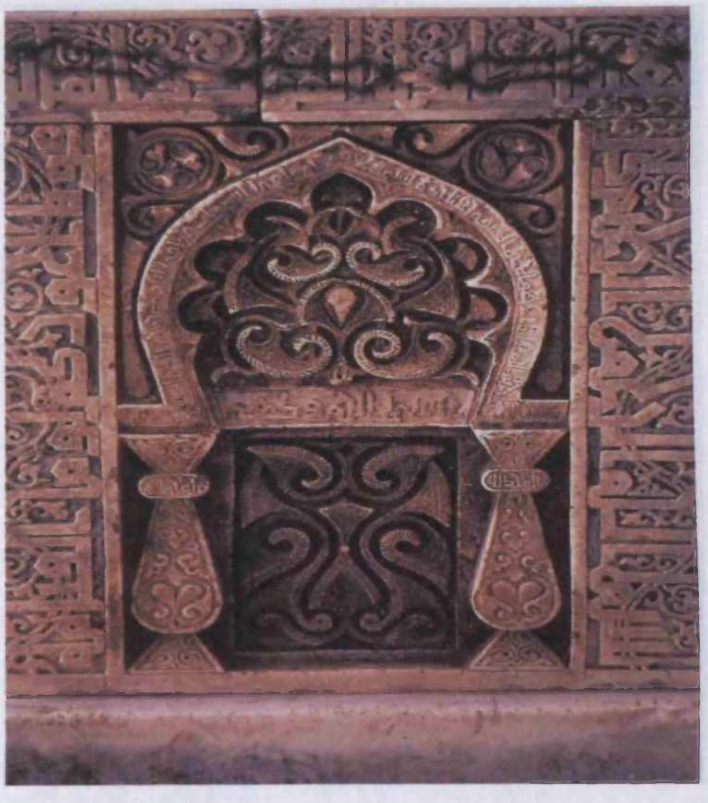

Figure (2.43) Decorative panel on the cenotaph of Mahmud of Ghazna, Afghanistan, 12th century.

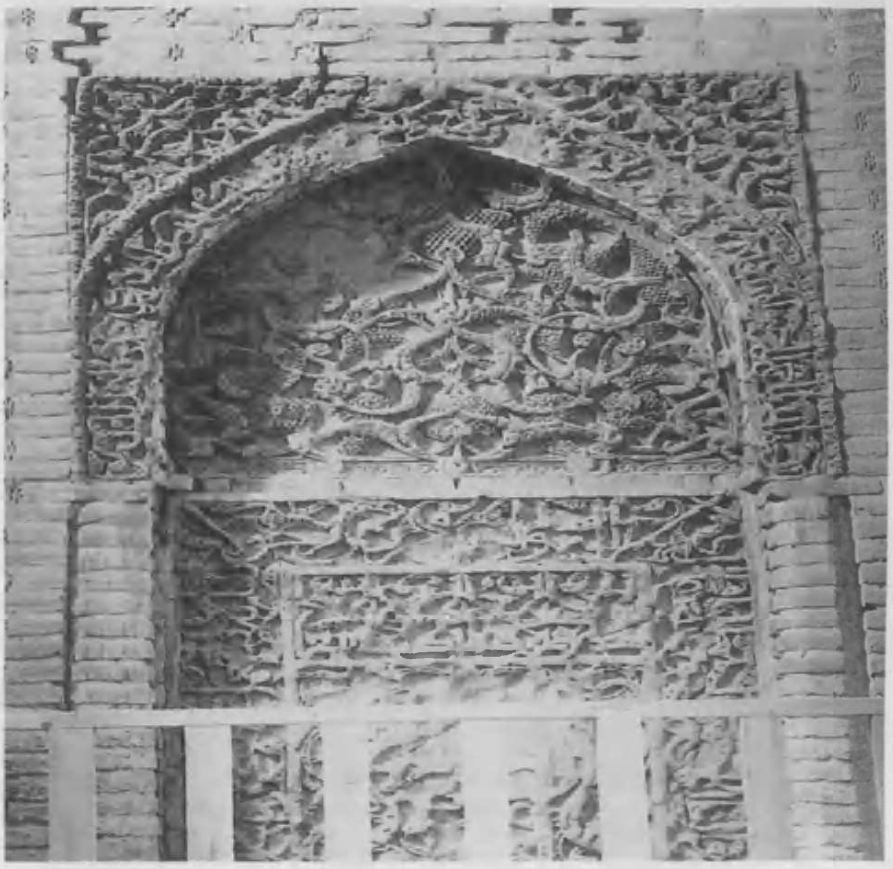

Figure (2.44) Masjid-i Jami' Mihrab, at Ardestan, Iran.

Figure (2.45) Stucco panel from the palace at Ghazna, Afghanistan, 11th century.

Figure (2.46) Lustre decoration on the mihrab from the Maidan Mosque in Kashan, Iran, 1226.

Figure (2.47) Iranian Lajvardina dish, early 14th century, glazed ceramic.

Figure (2.48) Folding Qur'an stand, from Konya, Turkey, 13th century.

Figure (2.49) Right-hand side of the double frontispiece of a Qur'an made in Cairo, about 1368.

Figure (2.50) Glazed tile from the Topkapi Sarai in Istanbul, 16th century.

Figure (2.51) Fritware mosque lamp painted in cobalt turquoise and black in the Kutahya style, Iznik, Anatolia.

Figure (2.52) Fritware dishes painted in under-glaze, colours in the Damascus style, Iznik, Anatolia about 1550 - 70.

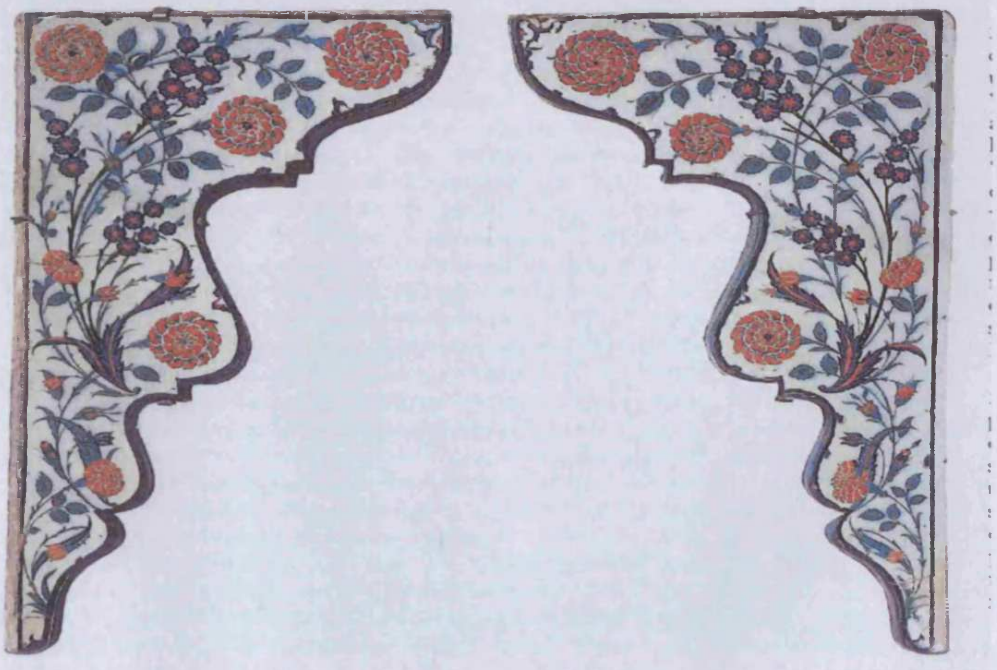

Figure (2.53) Fritware spandrels painted in under-glaze colours in the Rhodian style, Iznik, Anatolia, 16th century.

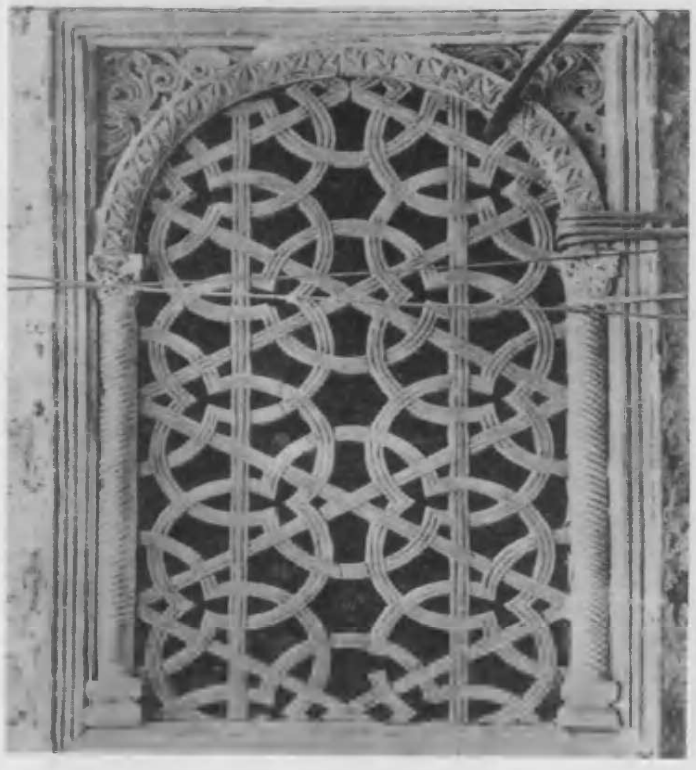

Figure (2.54) Stone window grille in the Great Mosque, Damascus, 8th century.

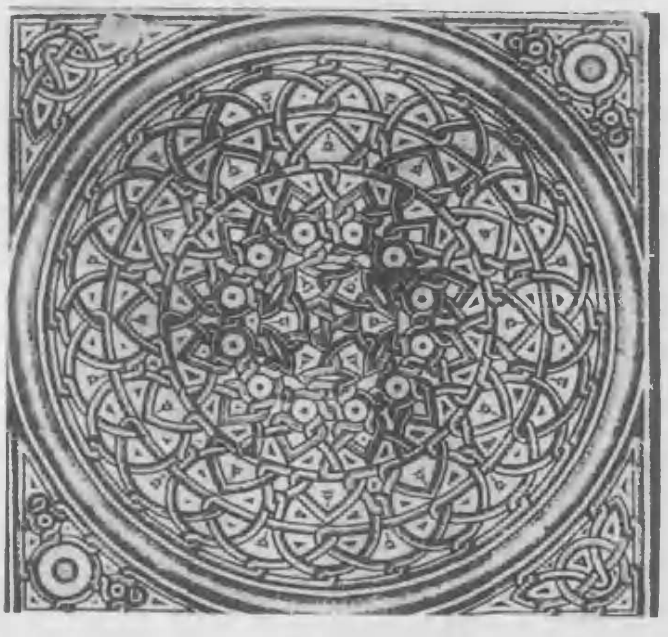

Figure (2.55) Mosaic panel, Khirbat al-Mafjar, Palestine, 8th century.

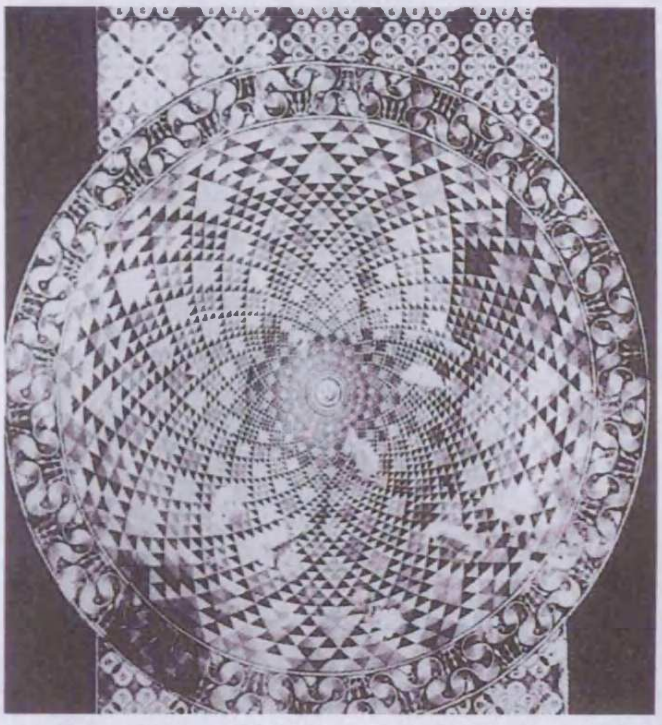

Figure (2.56) Mosaic floor, central panel, Khirbat al-Mafjar, Palestine, 8th century.

Figure (2.57) Plate made for Amir Abrak al-Ashrafi, Syria, circa 1500 – 09.

Figure (2.58) Banner, first half of the 13th century.

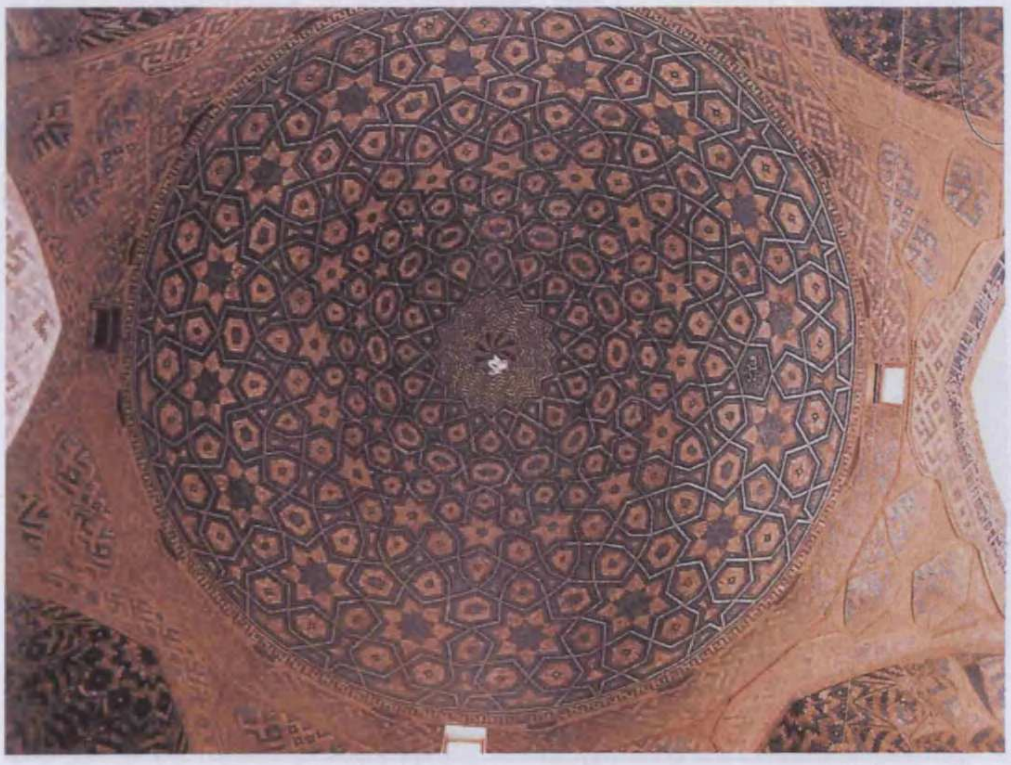

Figure (2.59) Dome of the Friday Mosque of Yazd, central Iran, 1325

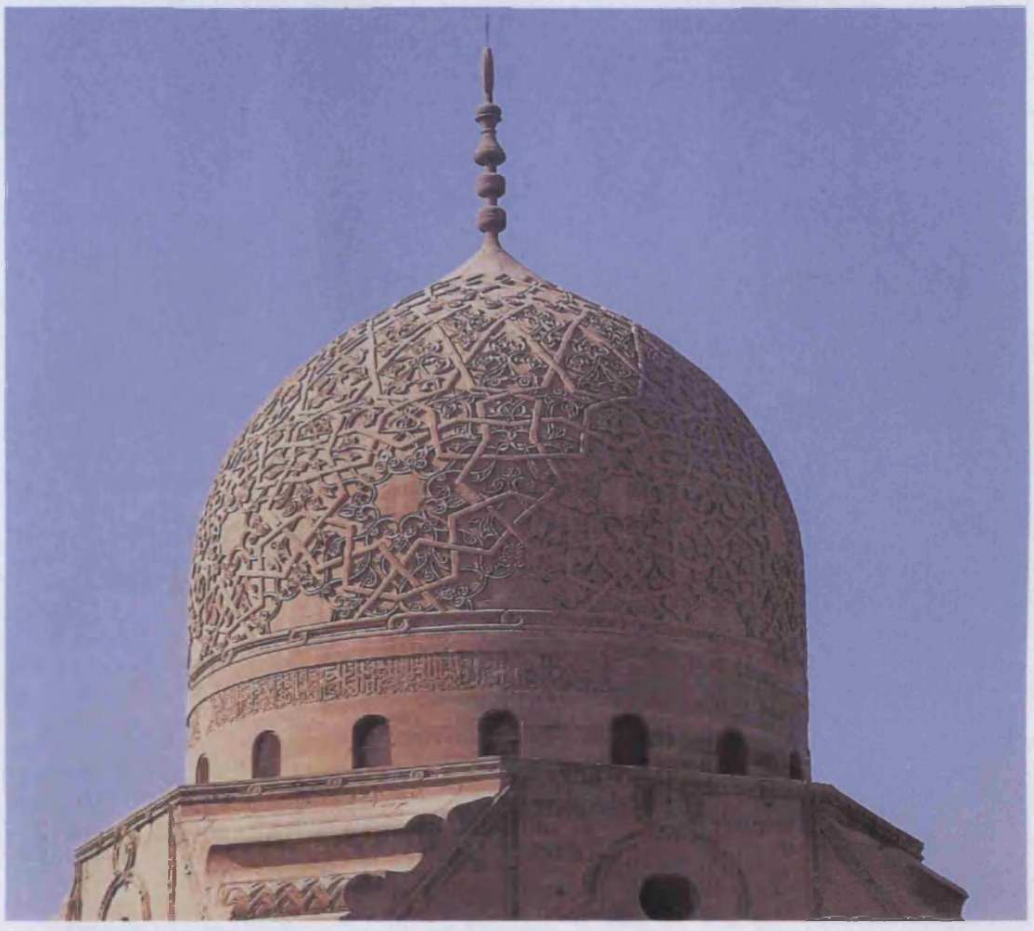

Figure (2.60) Mausoleum of Sultan Qaitbay, Cairo, 14th century.

Figure (2.61) Door panel, Syria or Egypt, 14th century.

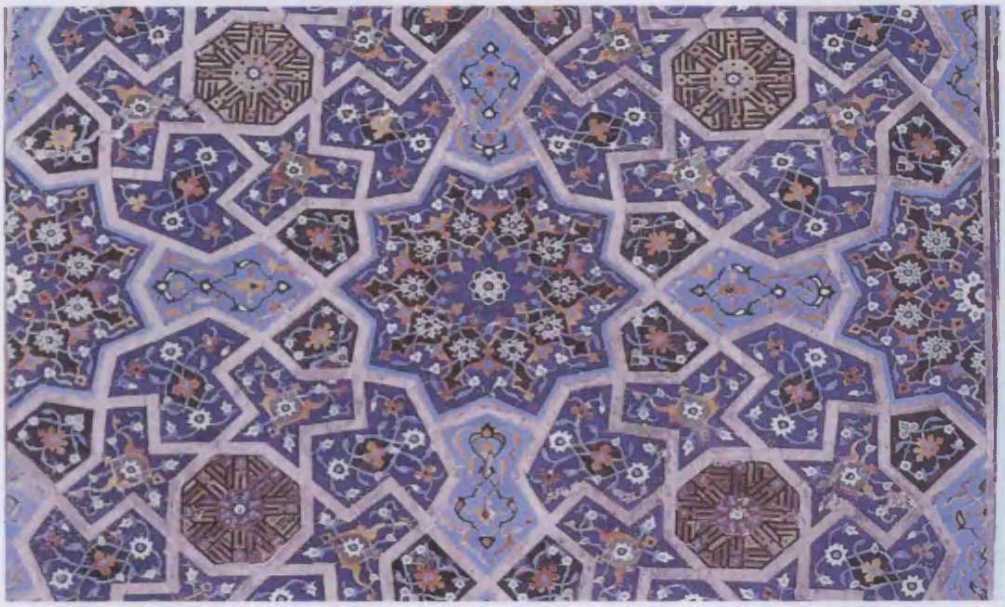

Figure (2.62) Geometric composition in a tile mosaic decorating the principal iwan of the Friday Mosque of Isfahan, Iran.

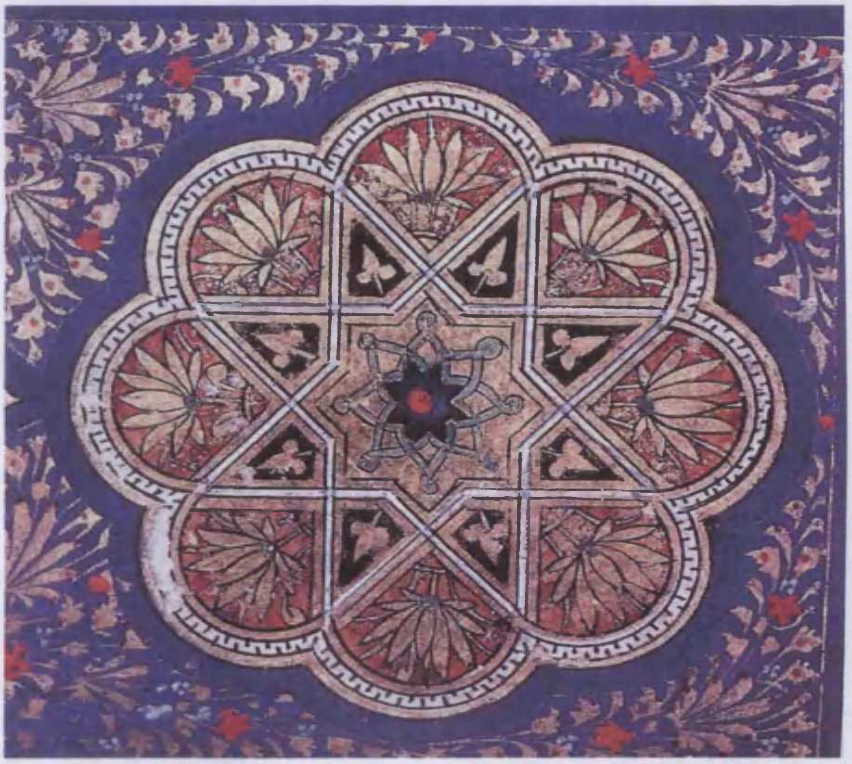

Figure (2.63) Detail of a Timurid Qur'an binding with shamsa (sun) rosettes, 15th century.

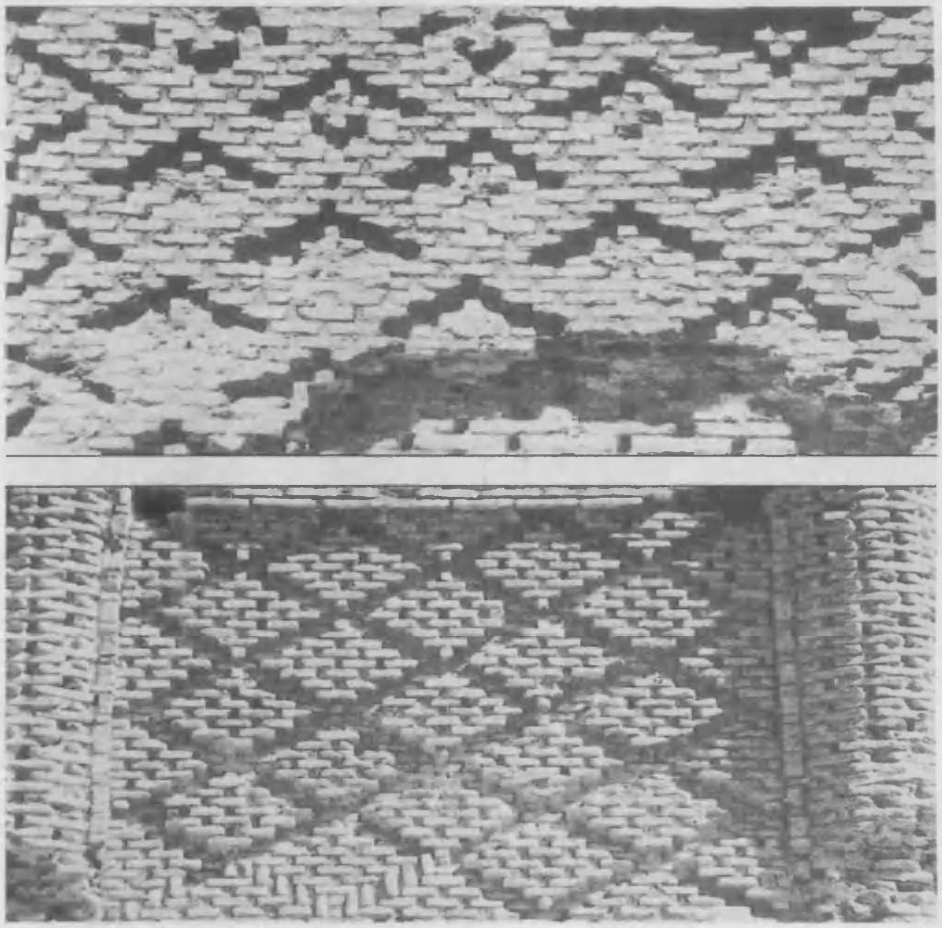

Figure (2.64) Lozenges formed by bricks from the Tomb Tower at Demavand, Iran, 11th century.

Figure (2.65) Geometric ornament on slip painted dish from Nishapur, Iran, 10th century.

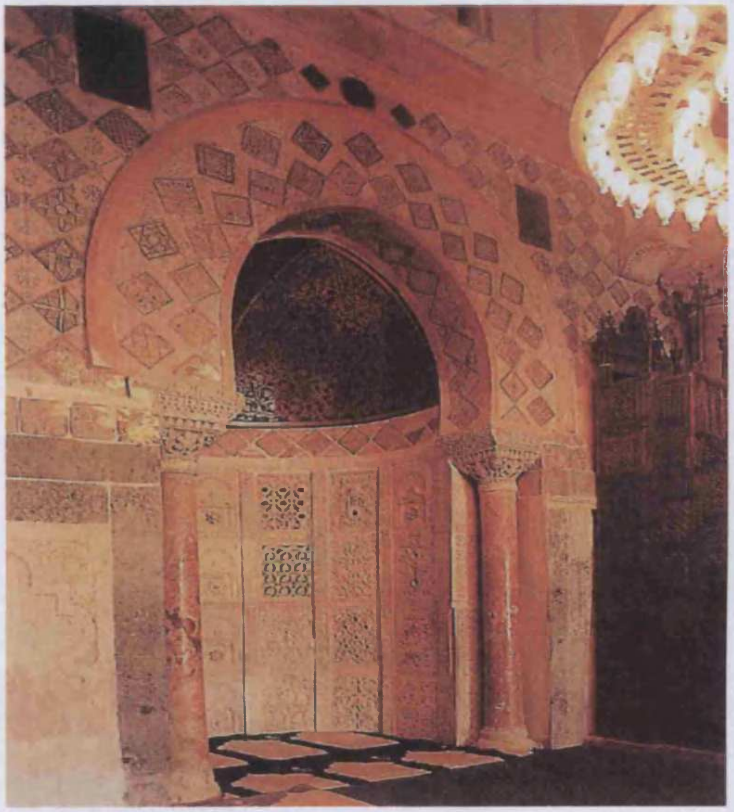

Figure (2.66) Lustre tile decoration on the Mihrab of the Great Mosque of Qairawan, Tunisia, 862.

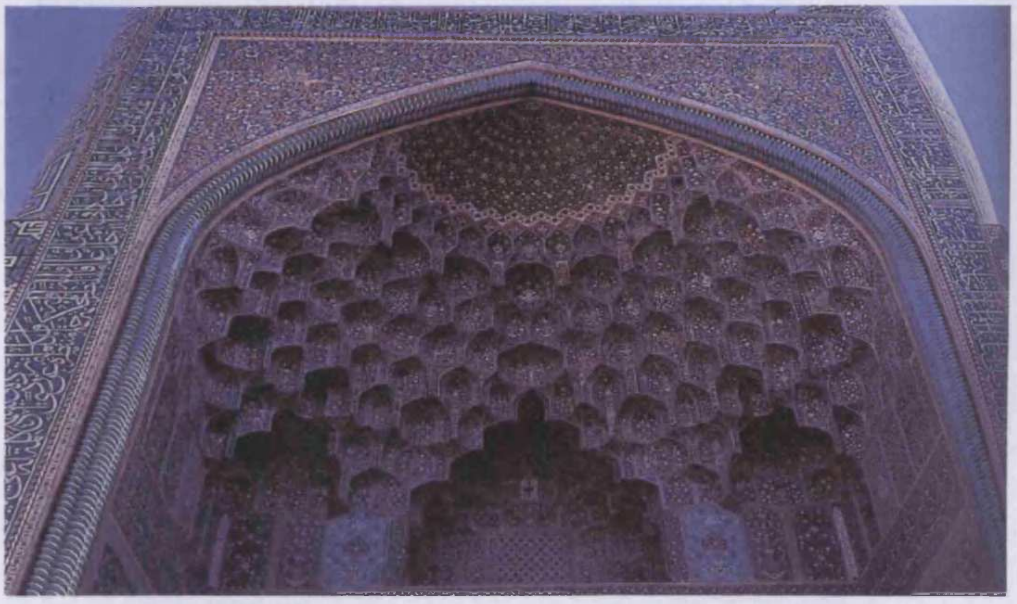

Figure (2.67) Tiled niche from the Masjid-i Shah, Isfahan.

Figure (2.68) Domed side chamber of the Bibi Khanum, Friday Mosque, Samarqand, covered with a stucco stalactite decoration, 1399 - 1404.

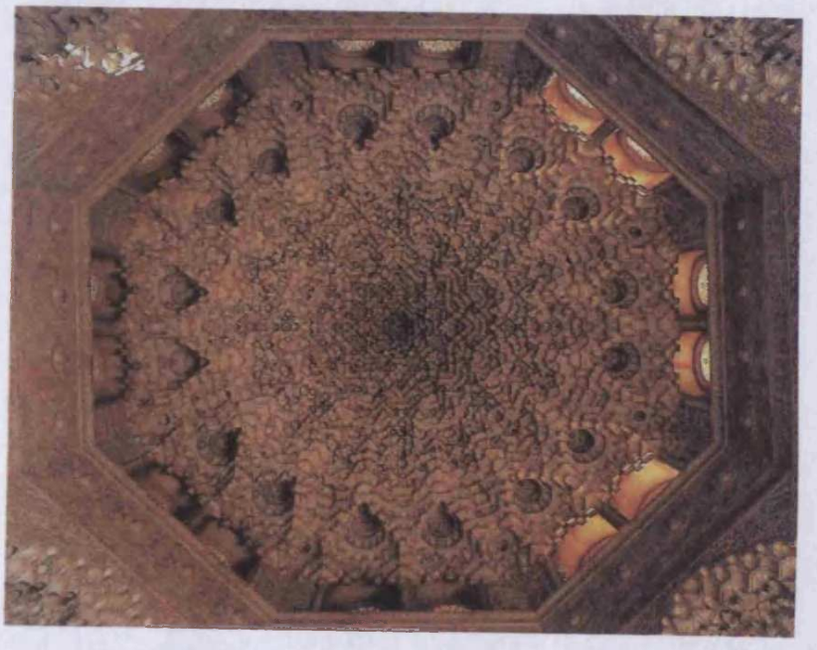

Figure (2.69) The hall of the Two Sisters in the Alhambra Palace, Granada, Spain, 14th century.

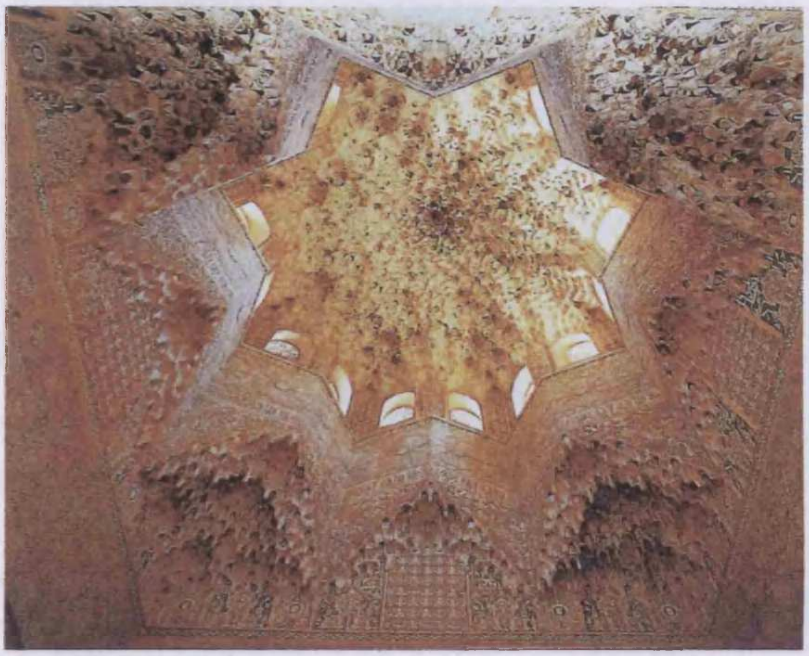

Figure (2.70) Plaster ceiling over the hall of the Abencerrajes, in the Alhambra Palace, Granada, Spain, 14th century.

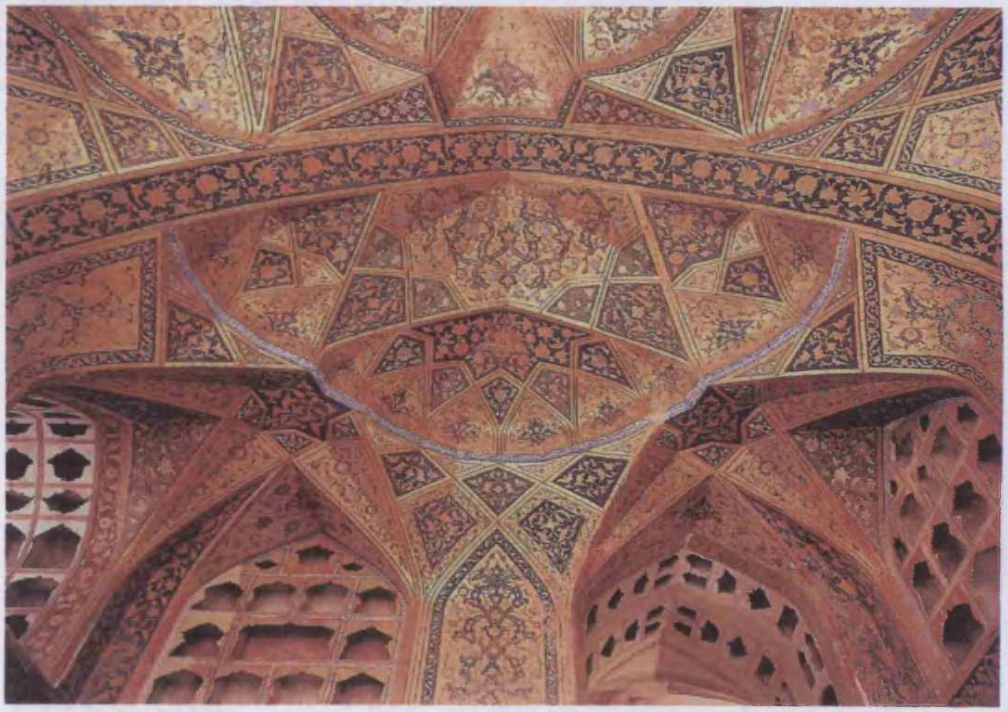

Figure (2.71) Muqarnas covered with gold leaf in Hasht Bihisht, Isfahan, Iran, 1669.

Figure (2.72) Silver dirham, minted 695, idealised portrait of the Caliph as Sasanian emperor.

Figure (2.73) Carved and moulded plaster decoration from Khirbat al-Mafjar, Palestine, 8th century.

Figure (2.74) Fresco from the Umayyad palace of Qaser al-Hair al-Gharbi, Syria, 8th century.

Figure (2.75) Mosaic floor in Khirbat al-Mafjar Palace, Palestine, 8th century.

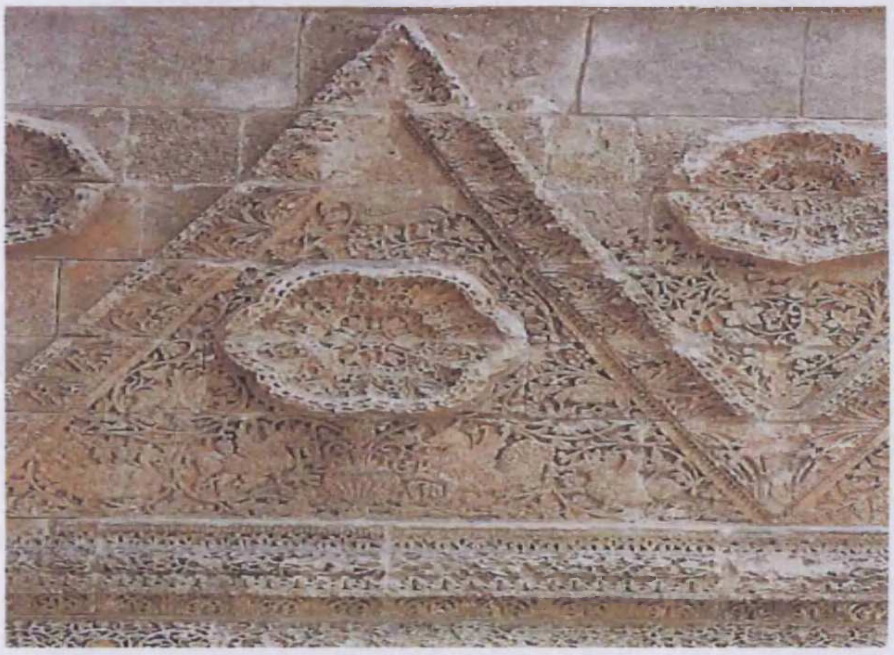

Figure (2.76) Façade of the Mshatta palace, Jordan, 743 - 744.

Figure (2.77) Wooden plaque, Egypt, 9th century.

Figure (2.78) Ivory plaque with hunter and harvester, Sicily, probably 12th century.

Figure (2.79) Ceramic bowel, Egypt, 11th century.

Figure (2.80) Central design on a metal tray, formerly in the collection of M. d'Allemagne, Paris (Source: Ettinghausen, 1976a).

Figure (2.81) Frieze of identical animals, from the Wade Cup, Cleveland Museum of Art (Source: Ettinghausen, 1976a).

Figure (2.82) Decoration of a dragon in foliage from Istanbul, Turkey, 16th century.

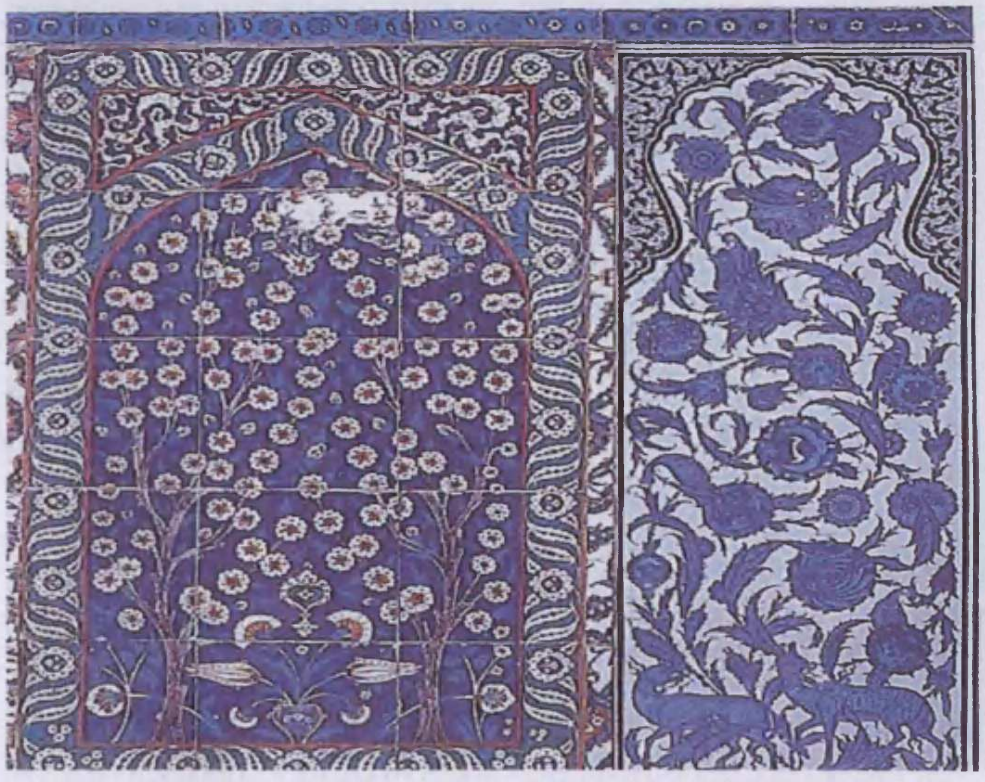

Figure (2.83) Panels of glazed tile work from the Topkapi Sarai, Istanbul, 16th century.

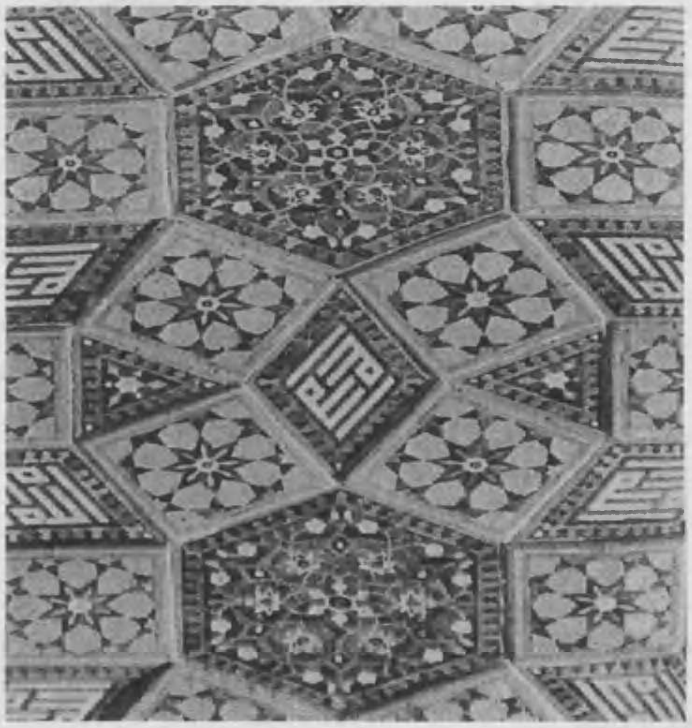

Figure (3.1) Tile work in prayer hall of the Abdullah Ansari shrine, Gazur Gah, Afghanistan.

Figure (3.2) Lustre painted jug decorated with dovetailed hexagons, Kashan, Iran, 13th century.

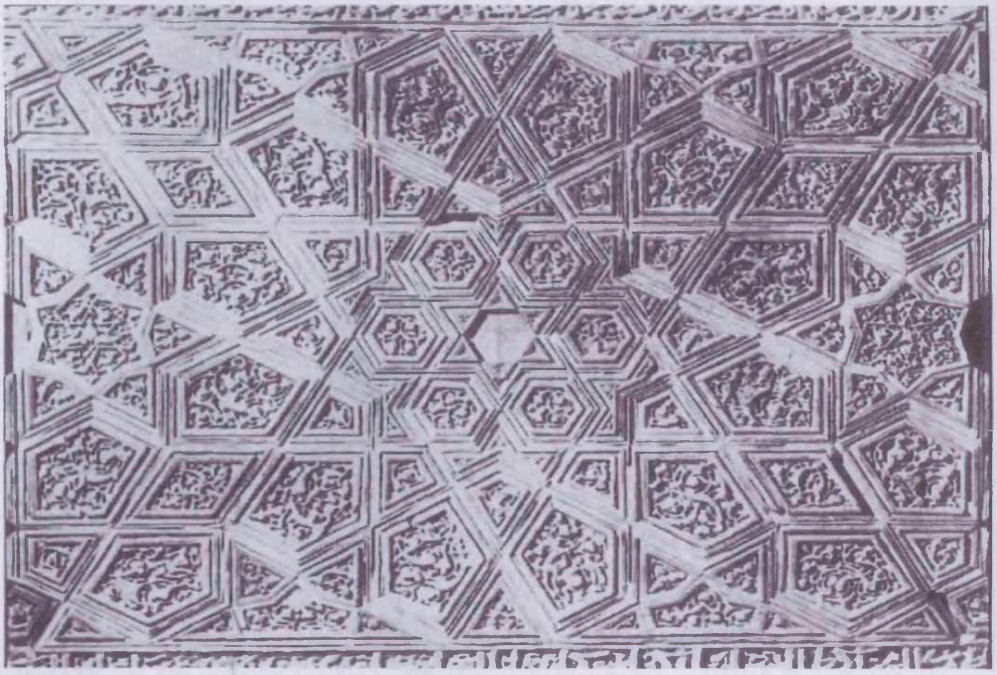

Figure (3.3) Panel from the cenotaph of the Mausoleum of Imam al-Shafi, Cairo.

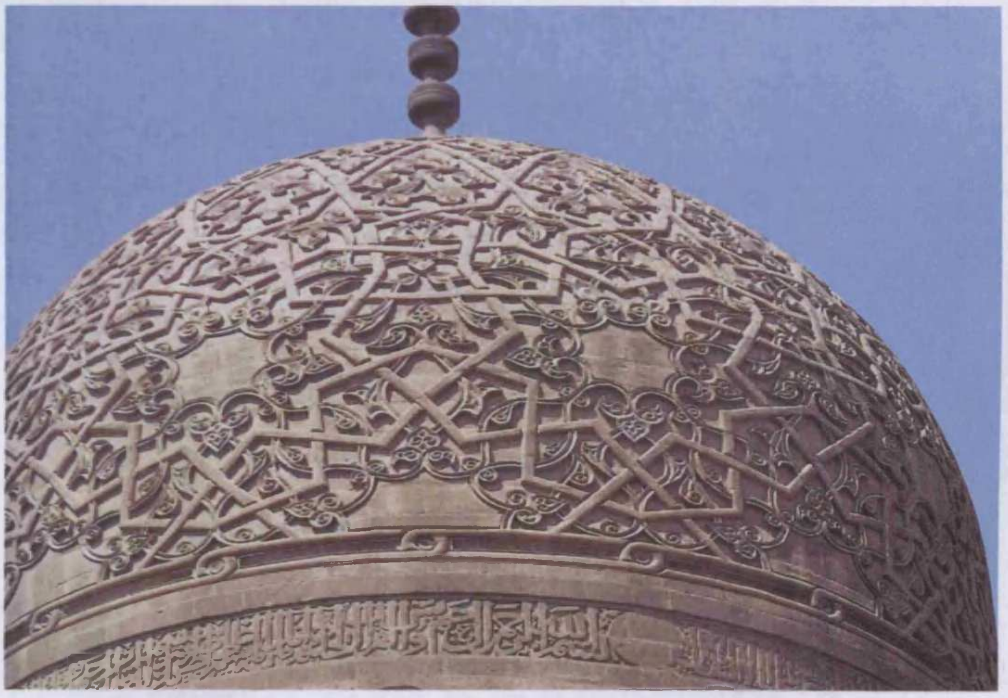

Figure (3.4) Detail from the dome of the Mausoleum of Sultan Qayitbay, Cairo, 1472 - 1474.

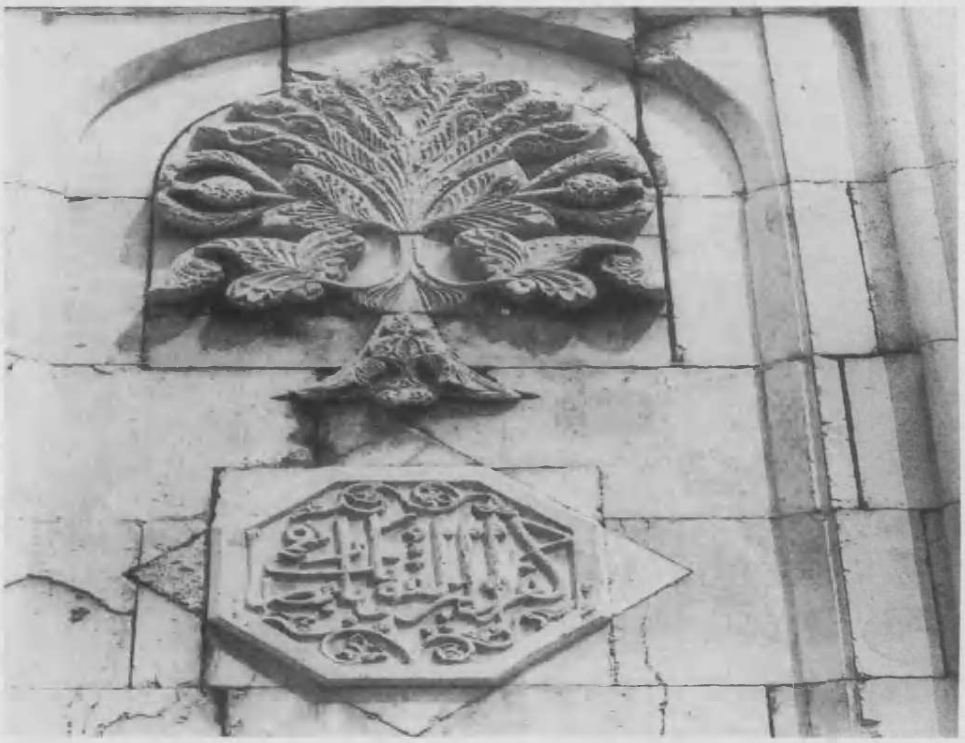

Figure (3.5) Palm tree carved in stone, next to monumental portal of the Gok, Madrasa Sivas, 1250.

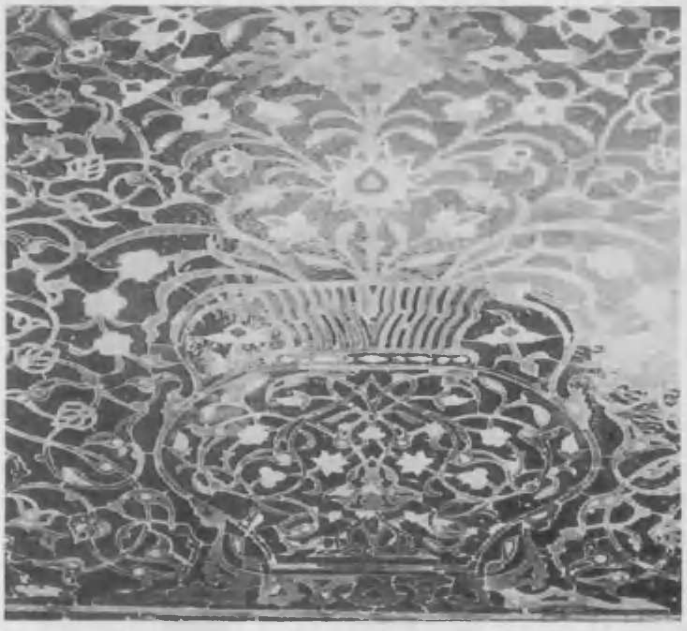

Figure (3.6) Mosaic faience panel from the Darb-i Imam shrine at Isfahan, Iran, 1453.

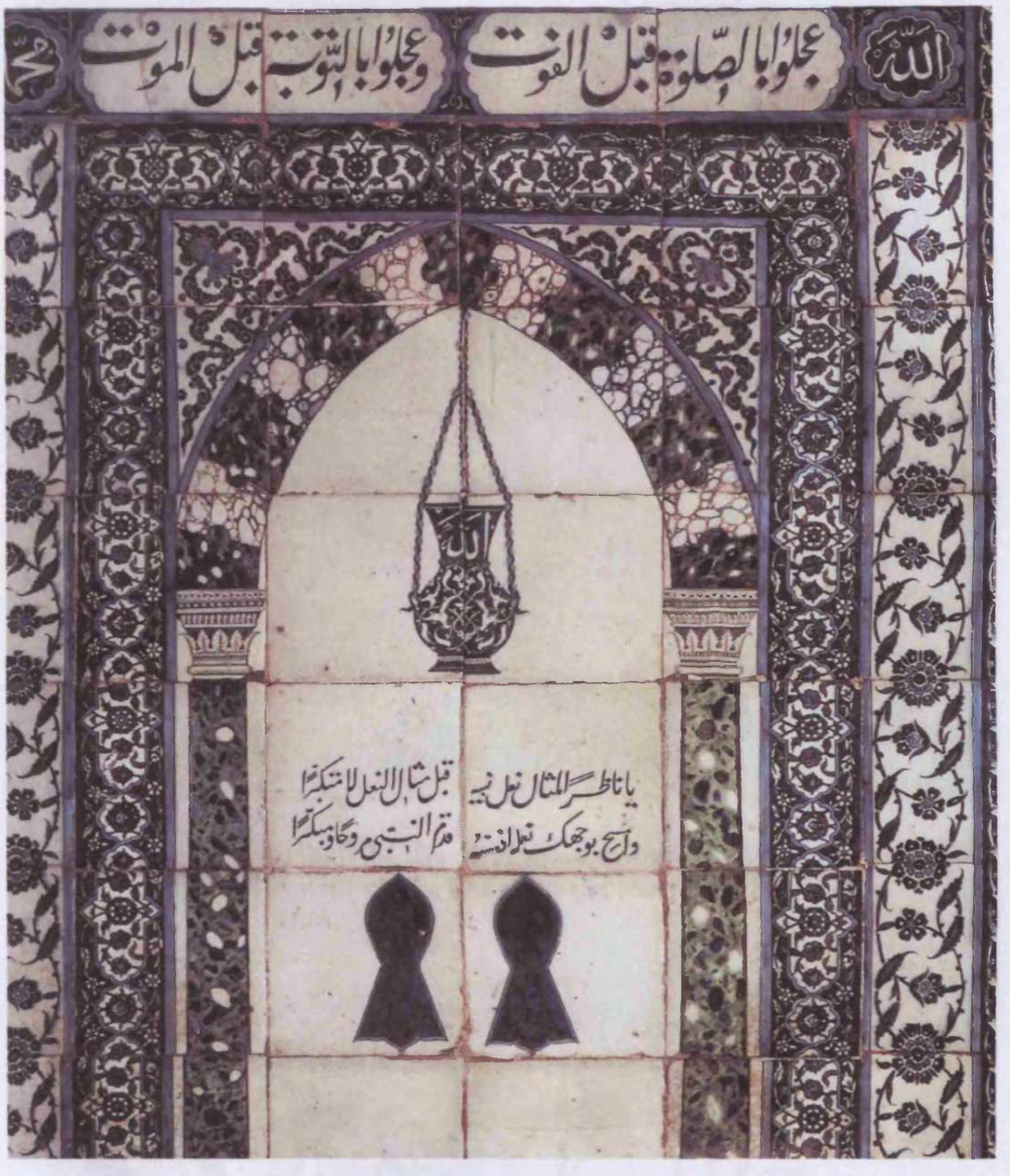

Figure (3.7) Glazed tiles in the Darwish Pasha mosque, Damascus, Syria, 1571.

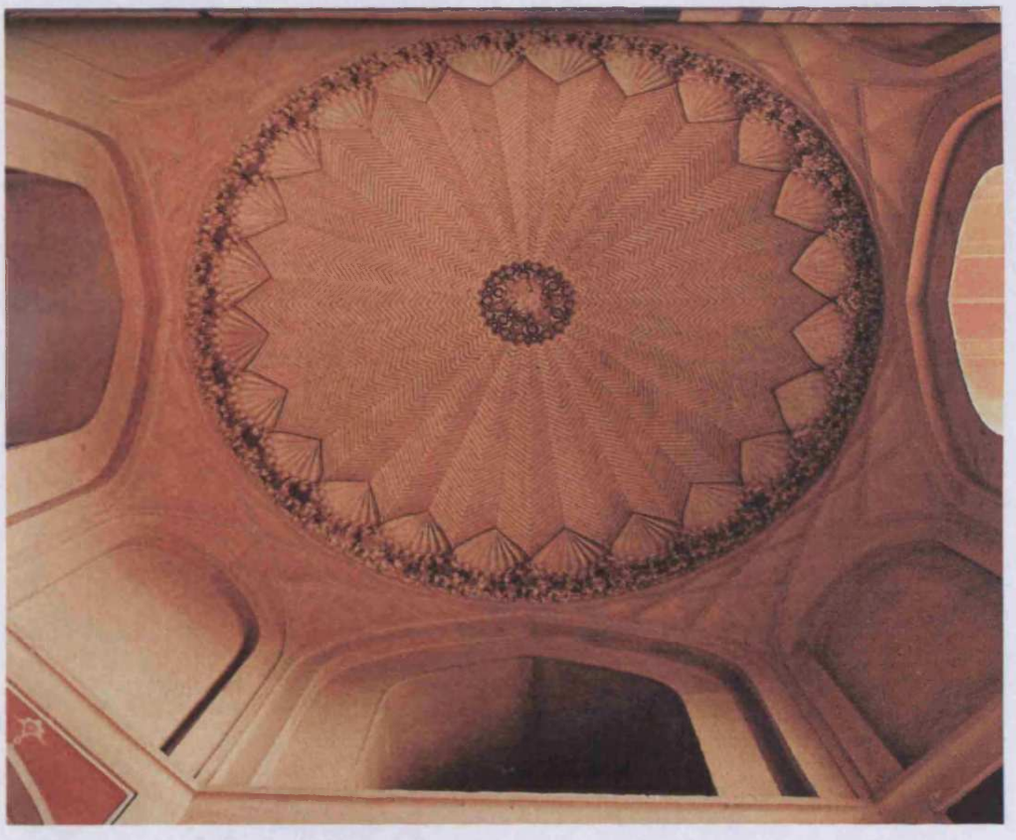

Figure (3.8) Entrance hall of the Humayun's tomb in Delhi. The dome is decorated with ridges linked to the periphery by ribbing.

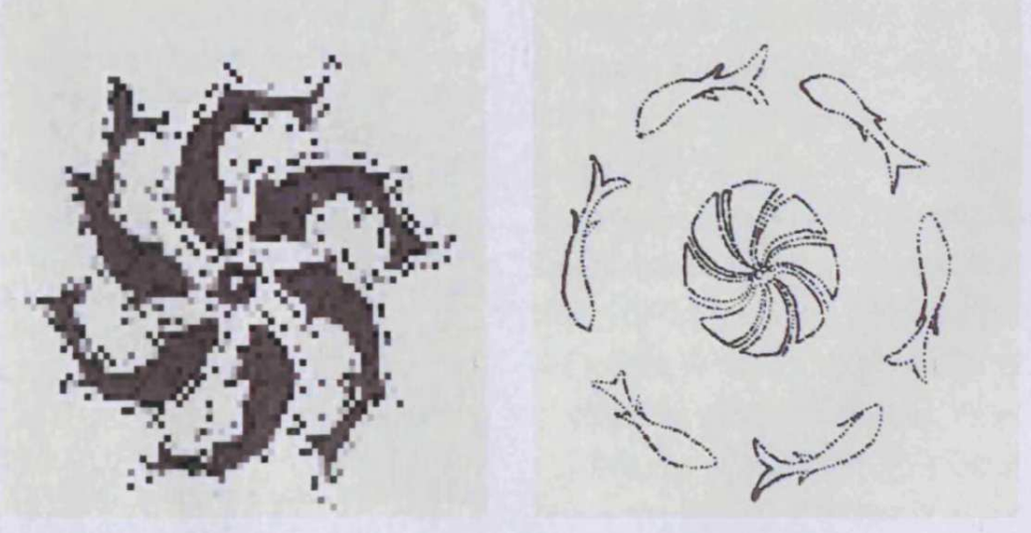

Figure (3.9) Fish whorl and circle of fishes around a whorl on a bowl, Syria, 14th century.

Figure (3.10) Anthropomorphic vase mosaic from the Dome of the Rock, Jerusalem.

Figure (3.11) Eagle stag motif on short side of marble trough, made for al-Mansur, Madrid, 997 - 8.

Figure (3.12) Two headed eagle sculpted on the façade of the Great Mosque of Divrighi, Anatolia, 12th century.

Figure (3.13) Arched vault over the first gateway of Aleppo Citadel, Syria, 13th century.

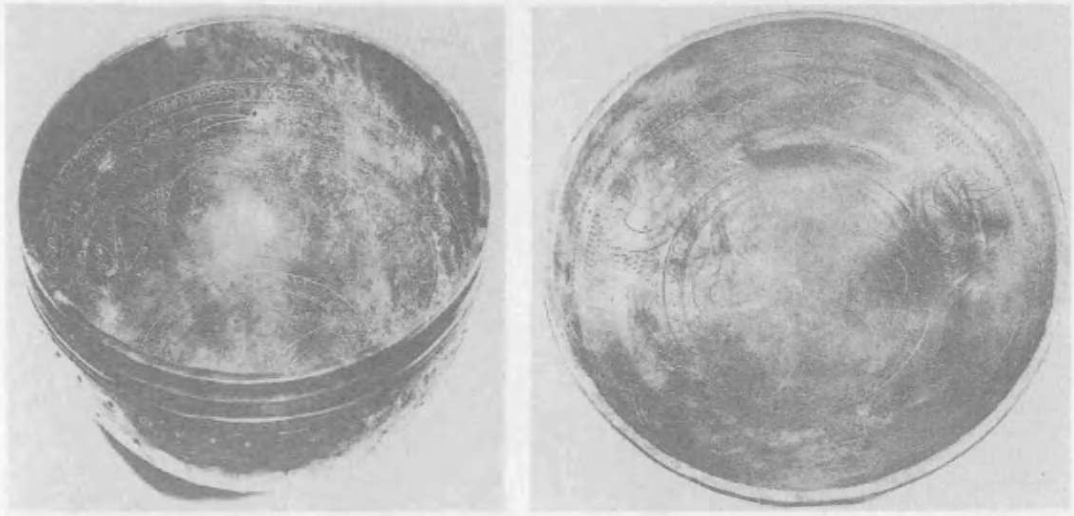

Figure (3.14) Interior of a brass bowl (Source: Ettinghausen, 1976a).

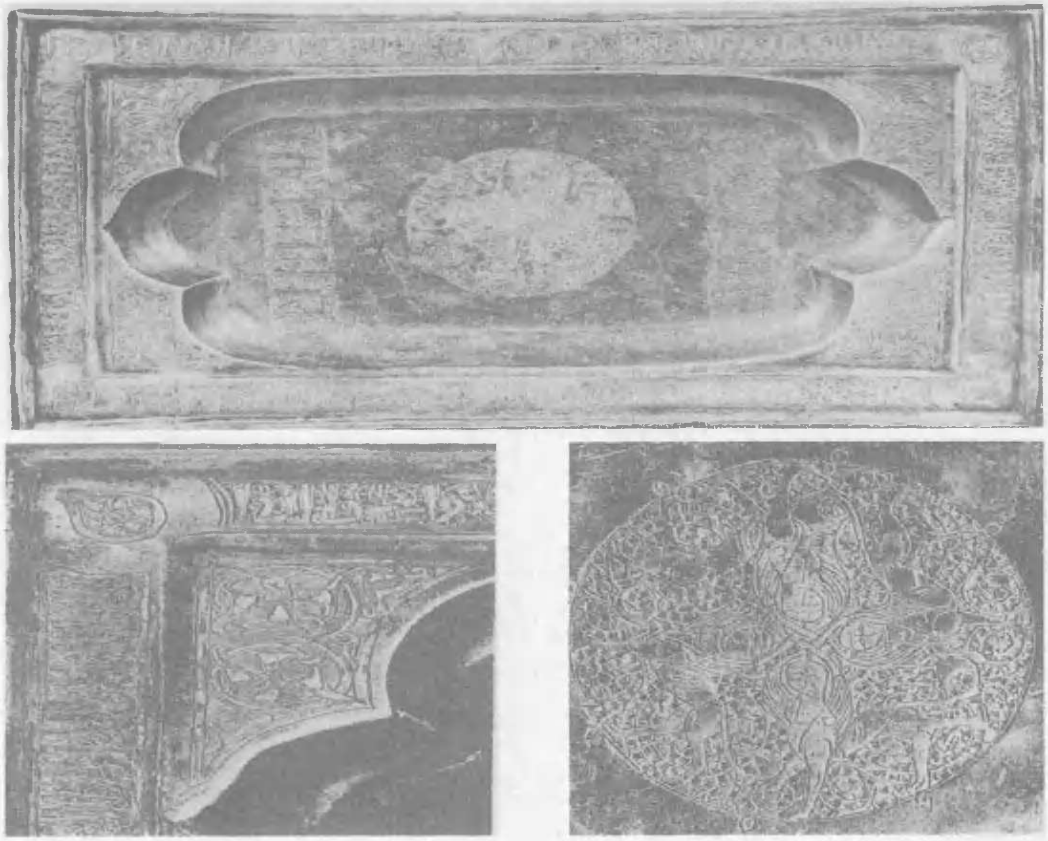

Figure (3.15) Brass tray and its details (Source: Ettinghausen, 1976a).

Figure (4.1) A large griffin cast engraved with blessings in Kufic Script and other motifs, Spain, 11-12th century.

Figure (4.2) Bronze door in the *madrasa*-mosque of Sultan Hasan in Cairo 1356-63.

Figure (4.3) One of the four doors with bronze ornamentation that give onto the courtyard of the *madrasa* of Barkuk, Cairo.

Figure (4.4) Sculpture from the north portal of the Great Mosque of Divrighi, Anatolia, 1228-29.

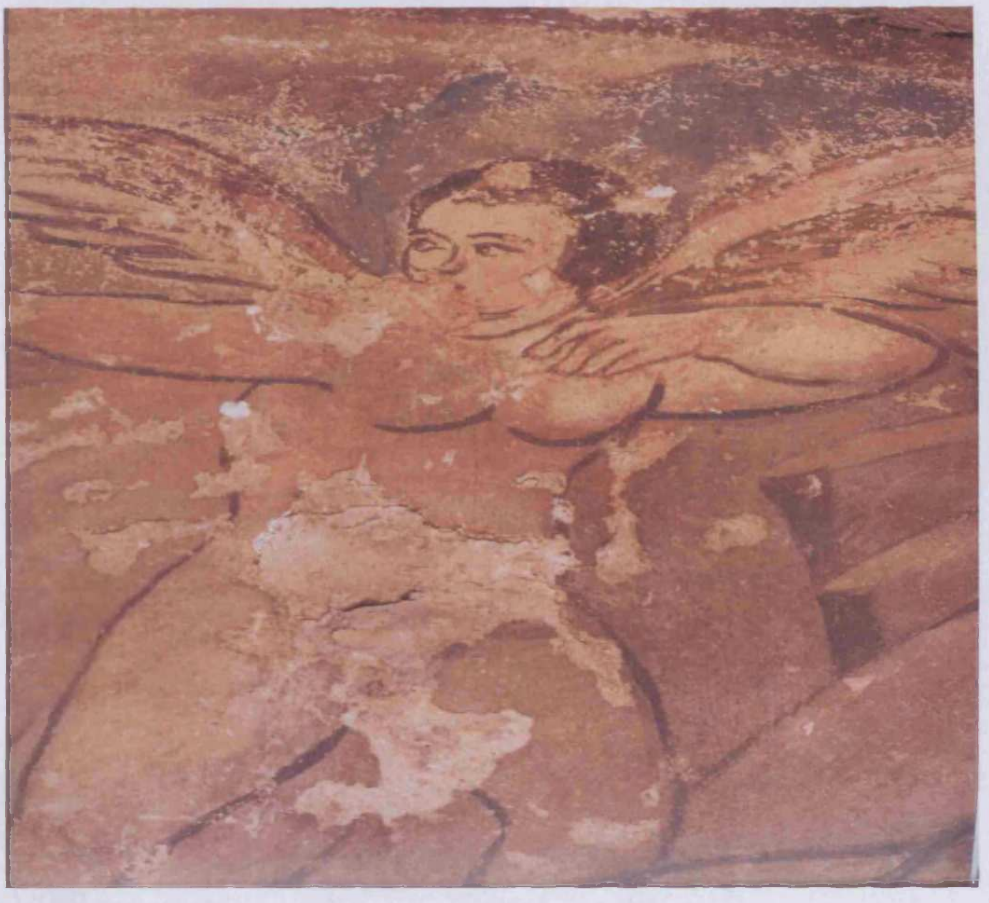

Figure (4.5) The fresco from Qasr Amra in Jordan, early 8th century.

Figure (4.6) Incense burner in the shape of a standing lion, cast brass pierced and inlaid with silver and copper, Khurasan, 11th century.

Figure (4.7) A minaret decorated with Arabic calligraphy and *muqarna*s patterns, and the ribbed dome of the Gur-i Emir in Samarqand, 1398-1404.

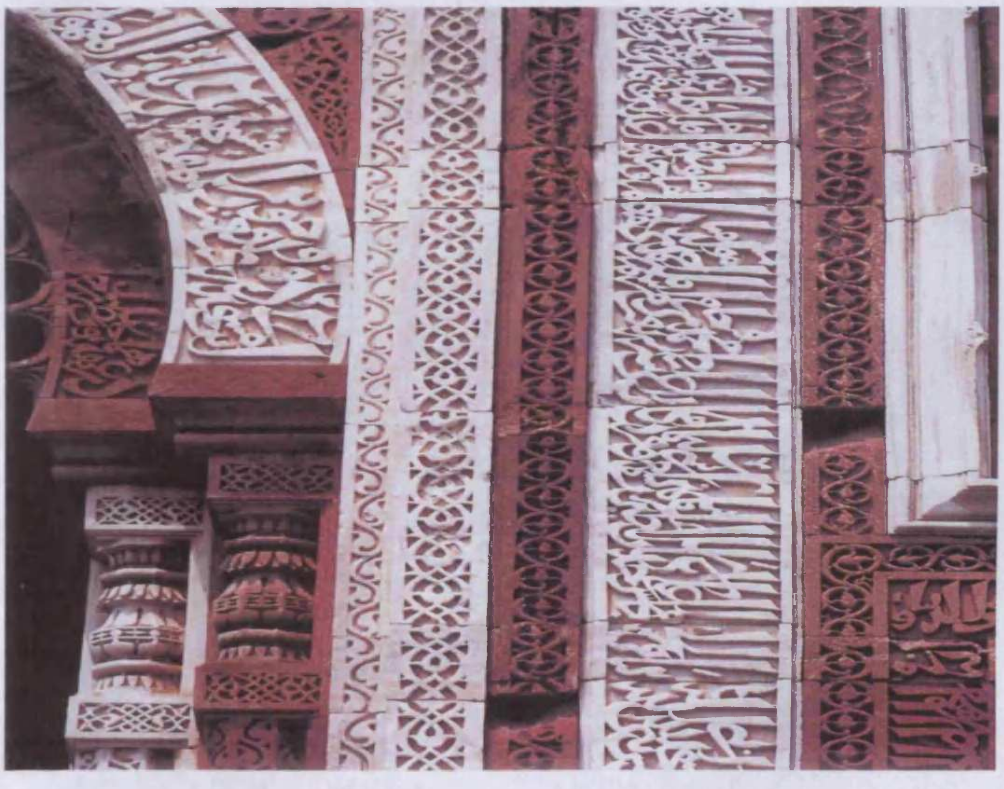

Figure (4.8) System polychromatic bands sculpted with vegetal, geometric and calligraphic patterns that frame a portal of the 'Ala' i Darwaza in Delhi.

Figure (5.1) Large pattern Holbein carpet, Anatolia, 15th century.

Figure (5.2) Hans Holbein, *The Ambassadors*, 15th century, the design of the carpet is based on large octagons within squares, Ottoman Empire.

Figure (5.3) Cloak of the Norman King Roger II, later used as the a coronation robeof the Holy Roman Emperor, Palermo, 1133 - 34.

Figure (5.4) Glass vessel in the form of an Arab mosque lamp, Philippe J. Brocard, Paris, 1869.

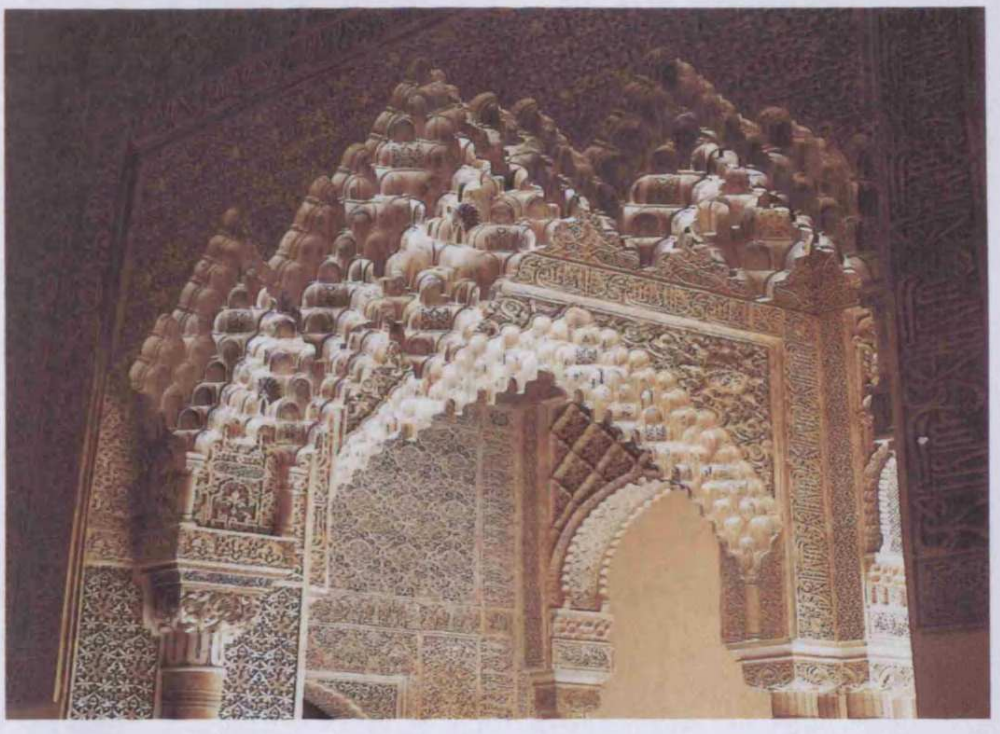

Figure (5.5) The court of the lions, Al-Hamra Palace, Granada, Spain, 14th century.

Figure (5.6) Interior of the Church of Santa Maria la-Blanca, Toledo, Spain, 13th century.

Figure (5.7) The Cathedral of San Miniato near Pisa, 12th century. The church facades and towers are decorated with Islamic earthenware bowels called bacini.

Figure (5.8) Bowl painted in blue and brown, bacino from the cathedral of San Miniato, Pisa, 12th century.

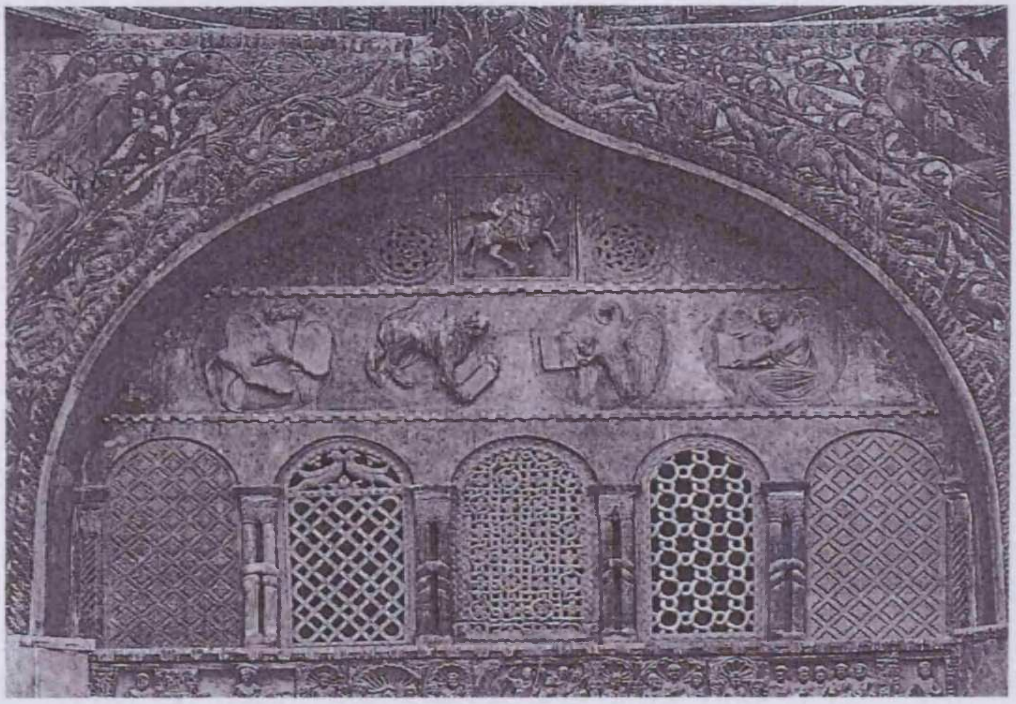

Figure (5.9) Window grilles above Porta Sant' Alippio, Saint Mark's, Venice, 13th century.

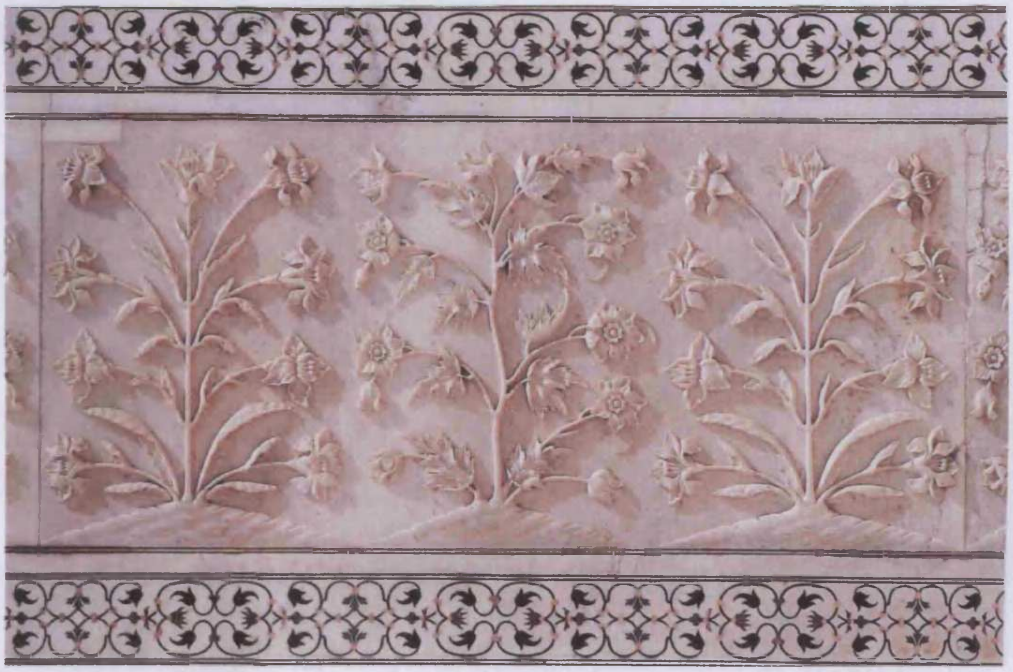

Figure (5.10) Marble panels carved in shallow relief with an endless variety of flowering plants, Taj Mahal, India, 1631 - 47.

Figure (5.11) The main architectural ornament of the Taj Mahal, India, 1631 - 47.

Figure (5.12) Jean Leon Gerome (1824 – 1904), men at prayer in the Amr Mosque, Cairo. Oil on canvas (Source: Hattstein and Delius, 2000)

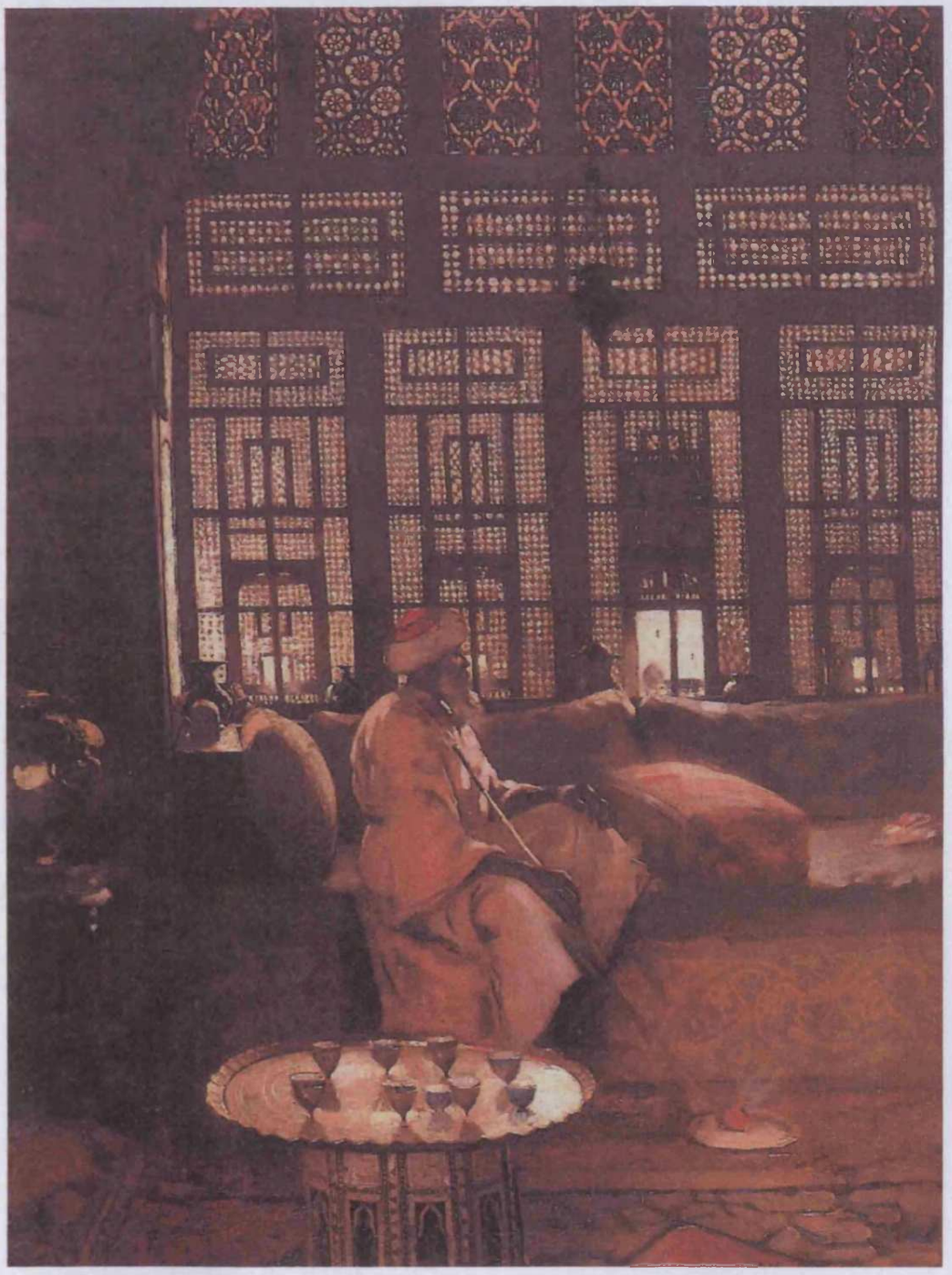

Figure (5.13) Arab Interior by Arthur Melville (1855 – 1904) – showing the *mashrabiyya* allowing filtered light into a sumptuous interior (Source: Mackenzie, 1995).

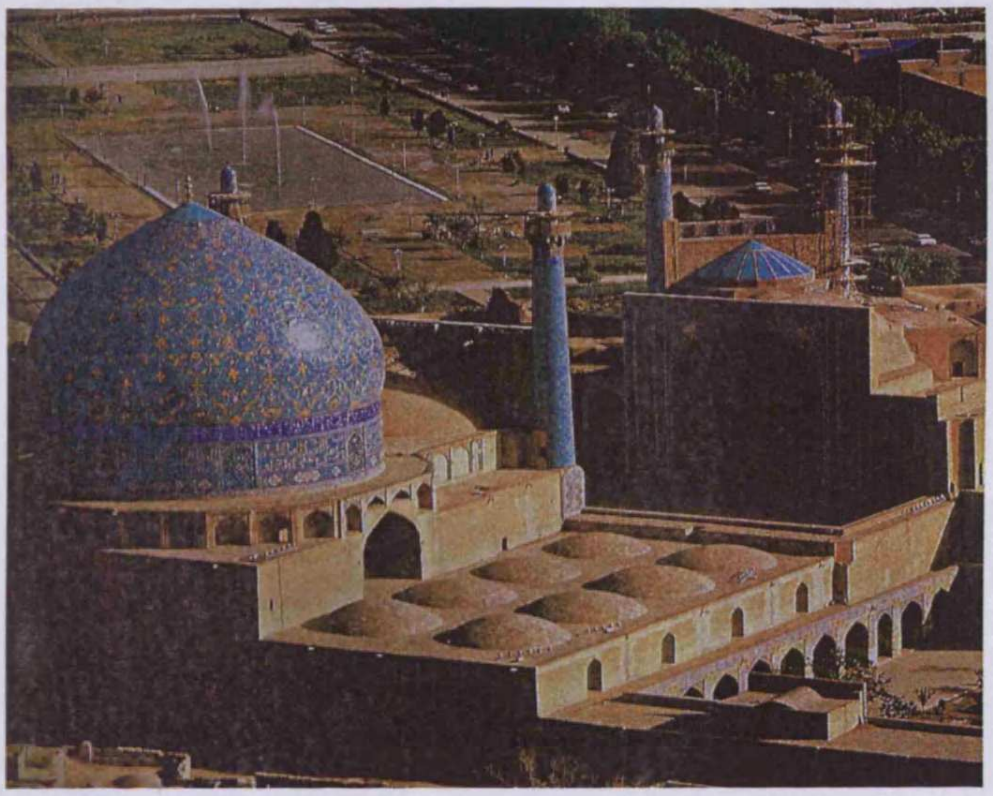

Figure (5.14) The Imam Mosque in Asfahan, Iran, 16th century.

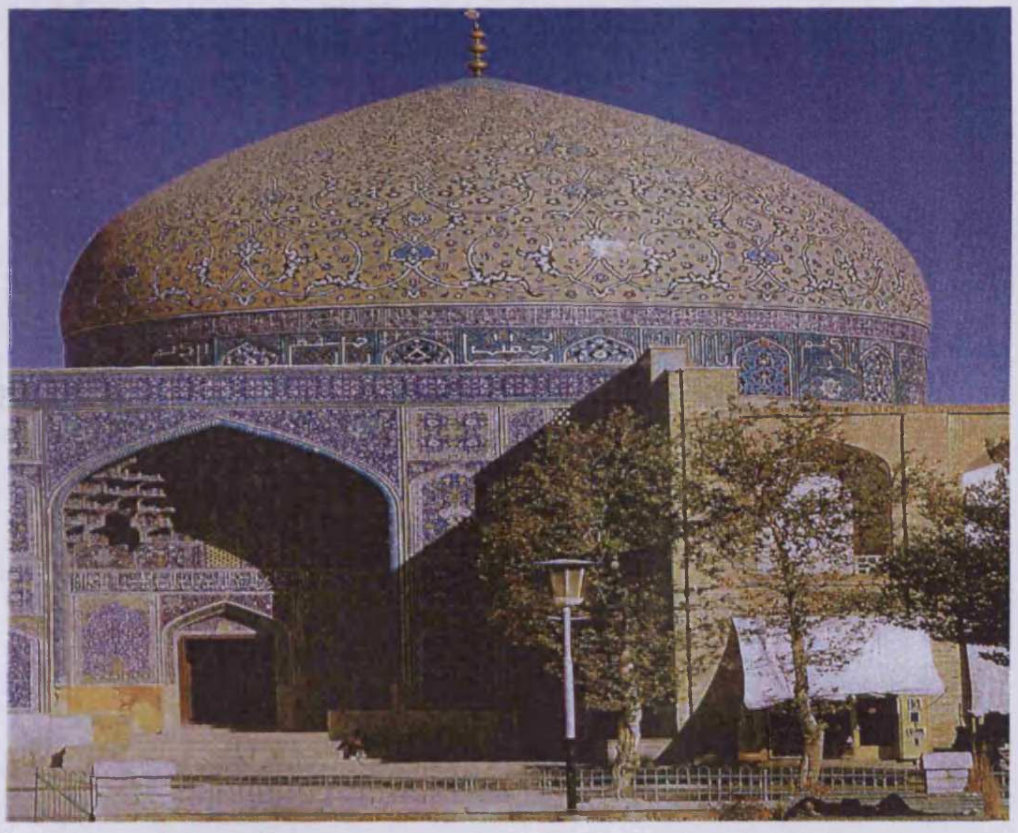

Figure (5.15) Sheikh Lutfallah Mosque in Isfahan, Iran, 16th century.

Figure (5.16) Ascension of the Prophet Muhammad, from the copy of Nizami's Khamsa, Tabriz, Iran, 1540.

Figure (5.17) Tile picture, Isfahan, Iran, 17th century.

Figure (5.18) Coloured engraving of Fath Ali Shah, Paris, Circa 1807.

Figure (5.19) Tilework panel depicting Fath Ali Shah and his court, Iran, 19th century.

Figure (5.20) Mihr Ali, portrait of Fath Ali Shah, Iran, 18th century.

Figure (5.21) Pen box with a portrait of Manuchihr Khan Mutamid al-Dula, Isfahan, Iran, 18th century.

Figure (5.22) Miniature enamel paintings of Fath Ali Shaha, Iran, Circa, 1820.

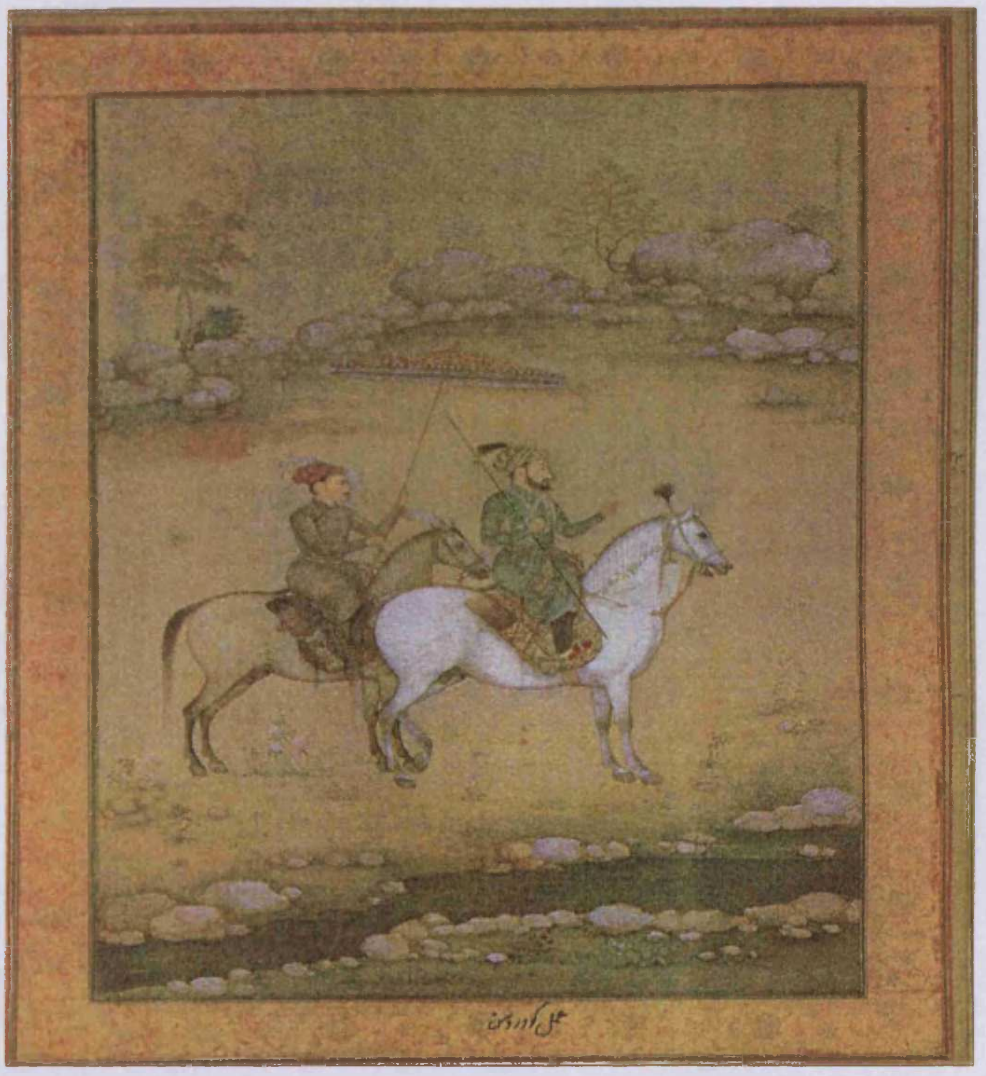

Figure (5.23) Mughal painting from the Minto Album, India, 1630 (Source: Grube, 1967).

Figure (5.24) Court coat for the Mughal prince or emperor, India, 17th century.

Figure (5.25) Decorative pages with calligraphic Zoomorphic animal forms.

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