THE NASSER D. KHALILI COLLECTION OF ISLAMIC ART

VOLUME I

General Editor Julian Raby

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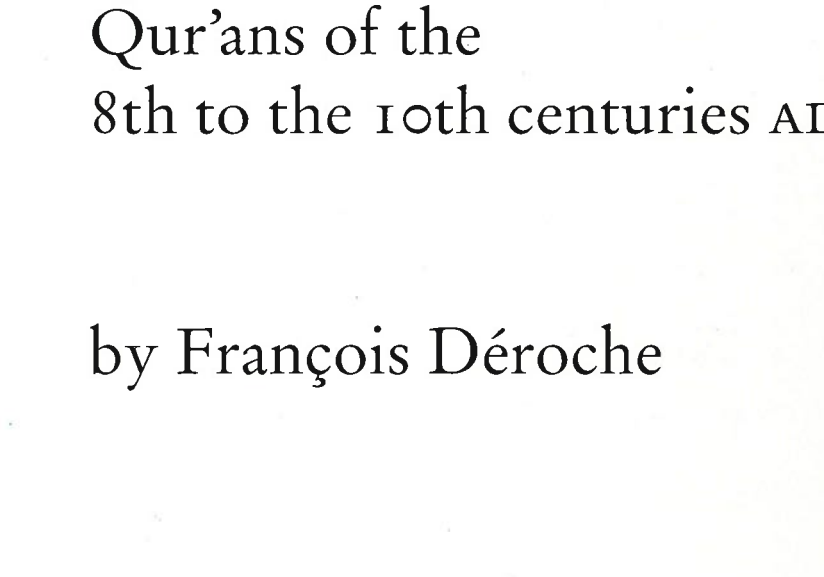
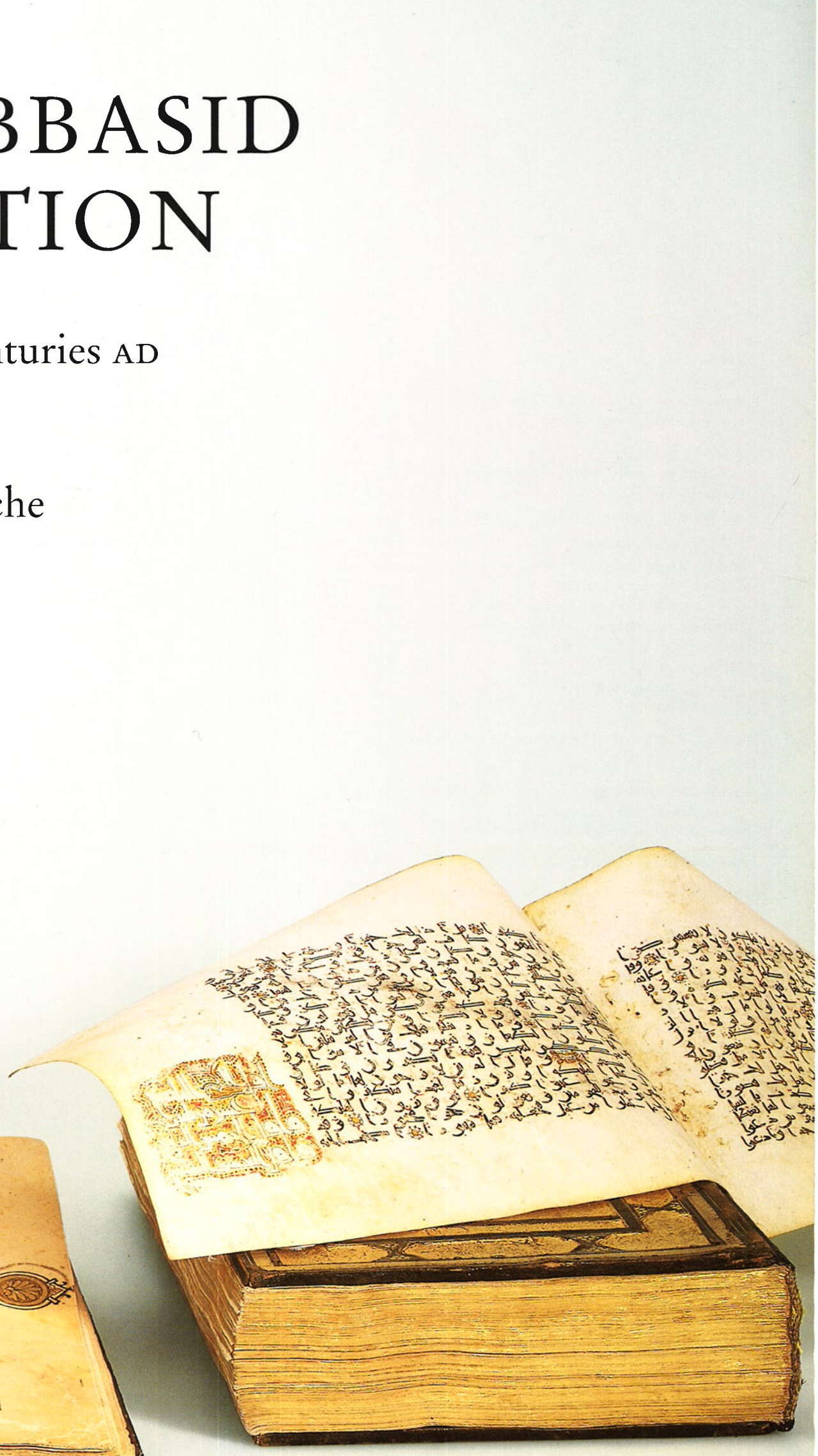
THE ABBASID TRADITION

Qur'ans of the 8th to the 10th centuries AD

by François Déroche





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Foreword

Islamic manuscripts form one of the great intellectual and artistic patrimonies of mankind. Their importance has long been recognized in the non-Muslim West, where private individuals and public institutions have been collecting them for at least four centuries, but most are still to be found in the lands where they were made. Despite the efforts of several Muslim governments in the Near East and beyond and of institutions such as the Manuscript Commission of the League of Arab States, neither the total number of these works nor a full list of their locations can be given. This is so even in the case of Arabic manuscripts, the most extensively studied group. Nevertheless, it is clear that the numbers involved are considerable. A substantial proportion of these contain the text of the Holy Qur'an, for no other work can have been copied out by hand so often in the course of the last 1400 years. The majority of surviving Qur'ans are simply written and sparsely illuminated, but many are magnificent examples of the arts of the calligrapher and the illuminator.

The largest and finest collection of Qur'ans is undoubtedly that of the Topkapı Palace Library in Istanbul, which contains the major part of the former imperial library of the Ottoman sultans. There are also important collections in the library attached to the Astan-i Quds-i Rizavi, the shrine of Imam Riza in Mashhad; in the Museum of Ancient Iran in Tehran; in the National Library in Cairo; and in various libraries and museums in India. While circumstances have made the huge Topkapı collection well-nigh comprehensive, the others are not only smaller but have a more regional bias.

Collecting activity in Europe and North America has led to the accumulation of large numbers of Arabic, Persian and Turkish manuscripts, and as a matter of course these have included copies of the Qur'an. The main collection of Qur'ans outside the Muslim world are to be found in the British Library in London, in the Bibliothèque Nationale in Paris, in the Vatican Library in Rome, and in the Chester Beatty Library in Dublin. However, with the exception of the Chester Beatty Library, the acquisition of this material was never pursued as systematically as in the case of literary, historical and scientific manuscripts. Even though the text of the Qur'an is invariable, palaeographic, aesthetic or historical criteria could have been used to determine what entered these collections, but, with the one exception, no attempt was made to apply such criteria.

It was with an awareness of the need for a consistent approach of this kind that I began to form a collection of Qur'anic manuscripts some 20 years ago. During this time attempts have been made to secure examples from every period and from every part of the Islamic world. As a result the body of material acquired is notable for the wide range it covers. This material can now be used to illustrate the entire spectrum of Qur'anic manuscript development, and, as there are often several examples from the same period, comparisons can be made both within the period and between contemporary manuscripts from different areas. The items in the Collection are of great historical and aesthetic importance. These have been conserved and, where appropriate, restored, and in some cases this has led to interesting discoveries.

The Qur'anic manuscripts that I have brought together are now to be published as the first four volumes of a general catalogue of the Collection. The first volume will cover the Qur'anic material in the three major styles that developed before AD 1000; the second encompasses material produced between AD 1000 and AD 1400; the third continues the task to the end of the 16th century; and the fourth includes the Qur'ans of the 17th century and later. My hope is that, when the publication of these four volumes is completed, they will constitute the most comprehensive survey of Qur'anic calligraphy and illumination yet undertaken. For their help

in achieving this aim my thanks are due to Dr François Déroche, the author of the volume on the earliest items, and Dr David James, author of the two succeeding volumes. My thanks are also due to Gordon Roberton and Christopher Phillips for their photography; to Diane O'Carroll for her drawings; to Don Baker and Henrietta Spink for their work on the conservation and restoration of the Collection; to Yasin Safadi, head of the Arabic section at the British Library, Nabil Saidi, Manijeh Bayani-Wolpert, Dr Marian Wenzel, and, most especially, Nahla Nassar, the assistant curator of the Khalili Collection, for helping with various aspects of the cataloguing work; and to the production team who worked so hard to produce these catalogues, Dr Julian Raby, Tim Stanley, Helen and Misha Anikst and Lorna Raby.

Nasser D. Khalili
London 1992

The Abbasid Tradition

Few collections of Islamic calligraphy outside the Muslim world have the breadth necessary to cover the full diversity of this art form over the first four centuries of its history. The Khalili Collection is an exception, for its holdings include a range of written material that has been deliberately chosen in order to illustrate the early development of the Arabic script as it is currently understood. This volume, the first of the general catalogue of the Collection, presents the Qur'anic items amongst this material. Most were written in one of a large group of special scripts which are usually called Kufic but which, for reasons set out below, we have named the Abbasid styles, after the dynasty which held the post of caliph from AD 750 to 1258. From about AD 1000, the place occupied by the Abbasid styles in the copying of the Qur'anic text was usurped over time by scripts generally but not altogether appropriately described as cursive, the most common of which were *muḥaqqaq* and *naskh*.[1] This process took several centuries to complete, and Qur'ans in one of the Abbasid styles were still being produced in the 13th century AD. Because the development of the Abbasid styles was not interrupted by the appearance of Qur'ans in the cursive scripts, and because their development was more or less distinct from that of the cursive scripts, all the Qur'anic material in the Khalili Collection written in these Abbasid styles has been included in this volume.

Most Western histories of Islamic calligraphy have been based on information found in later Arabic, Persian and Turkish sources, in which one word – *kūfī* – was used to encompass all the early scripts. This was no doubt because the calligraphic tradition that had produced the scripts described as *kūfī* had been dead for some time before these sources were compiled, and Qur'ans written in these scripts could no longer be read without great effort. The evidence for this is to be found in the manuscripts themselves: many Qur'ans that can be dated with some certainty to the 3rd century AH (the 9th century AD), for example, have false colophons, which are supposed to have been written in the 1st century AH (the 7th century AD) by the caliphs 'Ali and 'Uthman.[2] These misattributions were possible because the scripts used in these Qur'ans looked so ancient to the Muslims of later periods that they believed they could only have been made in the 1st century. Some manuscripts produced in the 3rd century AH contain notes written some three or four hundred years later by readers eager to record their prowess in dealing with a style no longer used and no longer commonly understood. People even transliterated early Qur'ans into scripts that were more easily comprehensible, as is the case with a manuscript in the Khalili Collection, cat. 43, whose margins contain a transcription of the text in a later, cursive, hand.

The study of these venerable scripts by Western scholars began at the end of the 18th century, when the task of cataloguing the Qur'anic material in the Royal Library in Copenhagen was undertaken by Jacob Georg Christian Adler (1756–1834), a Lutheran cleric from Schleswig whose knowledge of Semitic languages was connected with his study of biblical criticism.[3] Adler attempted to develop a classification system based on the terminology used by Muslims themselves, and, as the Copenhagen material consisted of only five fragments and the range of styles represented was therefore very narrow, he felt justified in applying to them the single term *kūfī* which he had found in the works of Firuzabadi and Ibn Khalliqan. The Copenhagen Qur'ans thus became the first 'Kufic' manuscripts.[4] The term *kūfī* was an unfortunate choice. It was derived from the name of the town of al-Kufah in southern Iraq and originally referred to the style of Arabic script developed there, but we do not know what this style of writing actually looked like. In the years after the appearance of Adler's catalogue in 1780, more examples of early Qur'anic material were made available, and it became obvious that there was a very wide range of early scripts. The publication in 1808 of part of a 10th-century bibliographical

text, the *Fihrist* of Ibn al-Nadim, showed what an enormous diversity of scripts had existed during the first centuries after the Hijrah,[5] but for some time no-one made the connection between this evidence and that provided by the manuscripts.

The first person to attempt to refine Adler's classification by distinguishing between the various styles of Arabic script used in early Qur'ans was the Sicilian orientalist and liberal statesman Michele Amari (1806–1889). The huge success of Amari's history of the Sicilian Vespers, which was filled with anti-Bourbon allusions, meant that he had to flee to Paris, where he lived in exile from 1842 to 1848. His interest in the history of Sicily under Arab rule led him to use this opportunity to learn Arabic, and, when he returned to Paris after the collapse of the constitutional revolution of 1848, he was able to support himself by cataloguing the large collection of early Qur'an fragments in the Bibliothèque Nationale. (These had been acquired in 1833 from the estate of Jean-Louis Asselin de Cherville, dragoman to the French consul general in Cairo from 1806 until his death in 1822.) Amari's notices were included in De Slane's catalogue,[6] and in 1857 he wrote an essay on the history of the Qur'an for the Académie des Inscriptions et Belles-Lettres, which was published by Dérenbourg on the centenary of the author's birth. The Sicilian scholar's most significant contribution was his identification of the famous Meccan script, the only style mentioned by Ibn al-Nadim for which a description was given. This is the script that we now call Hijazi.

Amari's efforts at analyzing the stylistic traits of the early Qur'anic scripts were not followed by other studies of this kind. Instead, most work in the field was concentrated on interpreting the Oriental sources that deal with the history of the Arabic script.[7] Essays of the greatest subtlety and penetration were written in an attempt to understand the relationships between scripts that were only names in a list, while the manuscripts themselves were virtually ignored. As a result, no progress was made in resolving the two main problems that should have been addressed, namely the chronology and the typology of the early forms of the Arabic script. In some cases, the situation was made even worse when students of the subject misunderstood the sources and created scripts which had never existed. *Mashq*, for example, is a technique that can be applied to any kind of script and is not an independent style of its own.[8] In making these errors, they ignored Ibn al-Nadim's comment in the *Fihrist* that the Arabic script was remarkable for the extent to which one could make the shapes of the letters larger or smaller at will. Despite these mistakes, most studies made some contribution by helping to build up a corpus of Islamic sources for the history of Arabic script, a useful tool for further research.[9] On the other hand, the few attempts that were made to understand the early history of the Arabic script through study of the manuscripts paid almost no attention to the so-called Kufic scripts. One of the beneficial results of the Qur'an exhibition held at the British Museum in London in 1976 was the new light it shed on the precious remnants of the first Islamic calligraphers' creative powers.[10]

The Nature of the Evidence

Most of the Qur'an material that has come down to us from the period before AD 1000 is in the form of fragments which often consist of no more than a single folio or part of a single folio. In the majority of cases, these fragments come from Qur'ans that were discarded because their condition was too poor for them to continue in use, although some may have been put aside because the script in which they were written could no longer be read with ease. The respect that Muslims pay to the Qur'an as the actual word of God meant that they could not be thrown

away, and they were therefore stored on mosque premises in a place where they would not be subject to unseemly treatment, a practice whose closest parallel is the Jewish custom of storing written material in a *genizah*. The parallel with the *genizah* is particularly strong because of the remarkably large quantities of Qur'an material that were stowed away in this manner: many thousands of fragments were transferred from the Umayyad Mosque in Damascus to what is now the Museum of Turkish & Islamic Arts in Istanbul after the fire of 1893, for example. In Damascus, the Qur'an depository was in one of the small buildings in the courtyard of the mosque,[11] while in the Great Mosque of Kairouan the discarded Qur'ans were placed in a room on the northern side of the courtyard.[12] It is not known exactly where they were kept in the mosque of 'Amr in Cairo, but in the Great Mosque in San'a' a huge cache was found lodged between the roof and the ceiling,[13] and in the shrine of Imam Riza at Mashhad the material was discovered in the section known as the Dar al-Salam.[14]

The limited aims behind this practice – to save the disused Qur'ans from destruction – meant that, once the manuscripts had been deposited in a safe place, they received no further attention. The bindings slowly decayed, and many folios were destroyed by natural causes so that, when the caches were rediscovered in the 19th and 20th centuries, the books had been reduced to amorphous heaps of folios. Since its rediscovery, the material from Damascus has remained largely intact, as has the huge cache of material found in San'a' at the beginning of the 1970s, but this was not always the case. The deposits found in Cairo and in Kairouan, for example, were disposed of piecemeal, with the result that folios from a single manuscript have been scattered in collections all over the world. The early Qur'anic material in the Khalili Collection, like that in the Bibliothèque Nationale, is made up of such fragments, and anyone wishing to assess material of this sort must first collate it with items from the same manuscripts held elsewhere. This task is made more difficult by the lack of reliable sources: catalogues are not always available, and those that are available do not always contain the information required.[15] Nevertheless, the work is worth the effort, since, at the very least, it can improve our understanding of how manuscripts were made in the Islamic world during the Middle Ages. In some instances, it can also help in tracing the history of a manuscript, and it may even allow us to fix the date of production with some degree of certainty.

The codicological and palæographic data which can be assembled by the minute examination of the dispersed fragments are all the more valuable because of the paucity of documentary evidence to be found in early Qur'anic material as compared with later periods. Very few Qur'ans from the first four centuries of the Islamic era contain dated inscriptions, and such inscriptions as do occur are mostly *waqfiyyahs*, which recorded the donation of the manuscript to a mosque or other religious institution. In most cases, *waqfiyyahs* provide no more than a *terminus ad quem* for the production of the manuscript itself, as the act of donation may have taken place some time after the Qur'an was made.[16] The Qur'anic fragments found in Damascus sometimes contain dated inscriptions in the form of records of births and deaths which were placed on what had been the first or last pages of the manuscripts, but these are as difficult to interpret as the *waqfiyyahs*. Colophons are, alas, the least common type of inscription found in Qur'anic manuscripts of this period, and a high proportion of the few examples at our disposal are nothing more than fakes.

Evidence regarding the provenance of early Qur'an manuscripts is even more exiguous. Manuscripts, particularly small manuscripts, are very mobile, and the fact that a Qur'an was found in a particular town is no guarantee that it was written there or that its script or illumina-

tion was characteristic of the town. In other words, if a page of a Qur'an were discovered in al-Kufah and contained no explicit reference to where it was made, we could not presume that the script in which it was written was an example of genuine Kufic. There are many examples of the mobility of Qur'an manuscripts. A Qur'an in the Bibliothèque Nationale in Paris, for example, was donated to the Great Mosque in Tarsus, on the southern coast of Anatolia, but it was later taken to Egypt, where it was purchased by Asselin de Cherville.[17] Another illustration of this point is provided by the large number of Maghribi manuscripts found among the fragments in the former library of the Umayyad Mosque in Damascus. Some of these were probably brought from North Africa to Syria, but others may have been written in Damascus by Maghribi scholars, travellers or pilgrims, for medieval Muslim scribes were as mobile as the manuscripts they made.[18]

The Arabic Script as a Basis for Classification

If the type of early Qur'an material described above is to be classified in a constructive way, the method employed must take account of the fragmentary and dispersed character of the physical evidence and the small number of explicit references to the time and place of manufacture. One approach would have been to make the study of the textual sources the starting point of our investigation, but the limits of this approach have been shown by the slow progress made by those who have adopted it: they can boast of the identification of only one script in roughly 150 years! The main reason for the failure to identify other scripts is the omission from these sources of descriptions or illustrations of the scripts listed in them, with the exception of Ibn al-Nadim's description of Hijazi. Moreover, this method presupposes that the texts used have been established with complete certainty, but this is not always the case, as Endress has shown with regard to *mā'il*.[19]

We have adopted an alternative approach, relying on a careful analysis of the script in order to build up a typology which can be related to what little external evidence is available. It is true that the palæographic study of the manuscripts has also proceeded slowly, but in this case the lack of progress has been due to the diversity of the evidence available, for the most striking feature of these early manuscripts is the wide range of styles used in writing them. Even when attempts have been made to introduce some order into this subject, they have been confined to small collections, and the conclusions that could be drawn have therefore been rather limited.[20] This stylistic diversity has also given rise to the notion, clearly expressed by Annemarie Schimmel, for example,[21] that there were as many kinds of Kufic as there were manuscripts written in Kufic: under such conditions, scientific analysis is impossible. We hope that the evidence presented below confounds this pessimistic theory.

Anyone engaging in the study of early Qur'an manuscripts has to face the difficulties outlined above and must also contend with the rudimentary nature of our knowledge of the subject, for the task is in its initial stages, and many collections are as yet unexplored. The researcher is therefore obliged to establish the first principles on which the analysis of the script is to be effected. A long-established method employed in the study of Western manuscripts is the grouping of material on the basis of letter shapes. The use of this method is still in its infancy as far as Arabic manuscripts are concerned,[22] but it recommends itself because it is applicable to all the material to be classified and because it is simple enough to be employed in research conditions where a more sophisticated approach would be impractical. In carrying out this palæographical study, we have been careful to bear in mind the structure of the book as a whole,

which also had some influence on the form of the script, but we have depended primarily on an analysis of the external appearance of the letters, the overall proportions of the script, the thickness of the line, and the ductus, by which we mean the manner in which the strokes that constitute the letters were executed. In all instances, this study has been based on concrete and precise examples.

The first step to be taken is to adapt this method to the peculiarities of the Arabic script.[23] The foremost of these is the lack of full autonomy on the part of the individual letters, most of which are connected by ligatures; there is no parallel in the Arabic writing system for the contrast between block letters and cursive that occurs in material written in the Latin alphabet: of the 28 letters in the Arabic script, 22 are always joined to a following letter in the same word, while six are never so joined. Each letter has a maximum of four forms: the independent form, which occurs where the letter is not connected to the letters before and after it; the initial form, which occurs where the letter is only connected to a following letter; the medial form, which occurs where it is connected to both the preceding and the following letter; and the final form, which occurs where it is only joined to the preceding letter. The six letters which are never joined to the following letter (*alif*, *dāl*/*dhāl*, *rā'*/*zā'* and *wāw*) have only two of these forms, the independent and the final.

Another significant feature is the discrepancy between the number of phonemes used in the Arabic language (28) and the number of basic letter shapes in the Arabic alphabet (18 in the independent form, but only 15 in the medial form). This shortfall was eventually made good by adding diacritical marks, but, in the early Qur'an manuscripts we have so far examined, we have found no evidence of any attempt to modify the shapes of the letters in order to indicate that they represented a number of different sounds. When the letters *bā'*, *tā'* and *thā'* stand on their own, for example, the basic shape of all three is always the same: it was only the addition of diacriticals that made it possible to distinguish them. When the same three letters occur in the middle of a word, their basic shape – a short vertical stroke – is the same as that of *nūn* and *yā'*. When three of these five letters appeared in a row, as in the word *baynahum,* there was a limited attempt to differentiate between them by varying the heights of the three strokes. This precluded any confusion with the letters *sīn* and *shīn*, which are both written at the beginning and in the middle of a word as three short vertical strokes of equal height.

The large number of homographs in the Arabic alphabet makes it unnecessary to include all forms of the 28 letters in any comparison of letter shapes. The fragmentary character of the material to be classified also makes it advisable to limit the number of letters selected for comparison, as not all the letters will necessarily occur in any one item. Furthermore, the restricted size of the sample means that the shapes selected should be those that display the most significant variations. With these criteria in mind, the following six letter forms have been selected as the basis of a first stage in our understanding of the early history of the Arabic script: the independent and final forms of *alif*; the medial form of *'ayn*/*ghayn*; the final form of *mīm*; the final form of *nūn*; and the medial form of *hā'*. The final form of *'ayn*/*ghayn* has also been used on occasion; where no final *nūn* occurs, the flourish at the end of final *sīn*/*shīn* or *ṣād*/*ḍād* has been used instead; and other letters have been used to refine the typology where necessary.

Although the comparison of letter shapes has formed the principal means for developing the classification system for early Qur'anic scripts used here, the other features mentioned above have also been taken into account. As regards the thickness of the line, the degree to which an example may be perceived as thick or thin is, of course, difficult to determine objectively and

must be assessed in terms of the overall dimensions of a script, as a stroke 5 mm wide will appear thicker in the case of an *alif* 20mm high than in one 50mm high. When dealing with some letters, such as *dāl* and *ṣād*, one must also take into account the licence given to the calligrapher to extend the horizontal strokes of the letter form in order to occupy more space in the line. This device, which did not modify the basic shape of the letter, was one of the components of *mashq*, the technique of varying the lengths of the horizontal strokes within and between letters. Other letter forms could be extended vertically, as in line 1 of cat. 55 below. Features such as the varying thickness of the ductus and the use of *mashq* both within the letter forms and in the ligatures which connect them affect the overall appearance of the script, as does the general way in which the letters have been composed within the line and even within the text area of the page; they make it necessary to consider the general appearance of a script and not just the letter forms in isolation.

Our purpose has therefore been to develop a typology of script styles, principally by the comparison of a limited number of letter shapes, and to use this typology as a point of reference in describing the contents of the present Collection. The task is made easier by the presence of colour plates, and the descriptions should merely draw the reader's attention to the salient features of the script. However, a problem of method has presented itself: in the course of describing the scripts, we have naturally tended to refer to a type observed in the best manuscripts, minimizing the scribe's lapses, without ignoring them completely, and concentrating on constant factors. As a result, we have found it necessary to develop a model that takes account of variations from the norm. As a working hypothesis, we have decided to consider each cluster of scripts as a circle, whose centre is occupied by the manuscripts showing the greatest care, the greatest skill and the greatest regularity. The further one goes from the centre, the more examples one finds in which the scribe has only loosely reproduced the letter shapes that distinguish the 'ideal' form of the script. This reflects what we have observed in the course of cataloguing all the manuscripts which we think belong to the same group on palæographical grounds, namely that not all reach the same level of perfection. This judgement is, of course, the present writer's: we do not know, or we know only to a limited extent and indirectly, how this early calligraphy was seen and appreciated by contemporaries.

As a result of the palæographic examination of the visible evidence, we have been able to identify three main groups among the early Qur'anic scripts represented in the Khalili Collection. The first of these is the script identified by Michele Amari on the basis of the summary description given by Ibn al-Nadim in the *Fihrist*; Abbott called this script Hijazi, after the region of north-west Arabia where Mecca and Medina lie.[24] The other two groups are more difficult to define. They encompass the scripts that have until now been called by the inappropriate names of Kufic in one case and Eastern Kufic in the other. We prefer to call them all Abbasid and to distinguish between the two groups as the Early Abbasid styles, of which we have so far identified six, and the New Style. The scripts in the first group are identified by the letters A to F, while those in the second are identified by the letters NS. Where the main styles in these groups have been subdivided into types, they have been identified by Roman numerals, as D.I, D.II and D.III, for example. In a few cases, we have had to distinguish between varieties of these types, and the sub-types, such as C.Ia or D.Vb, are indicated by the addition of a lower case letter to the code. The same process of subdivision has also been applied to Hijazi, which is represented by the letter H for this purpose. The letters and numbers do not grade the scripts, nor attempt a chronological sequence, and the system is open to new additions, as we must expect

further discoveries in the field. It also allows for the discovery of hybrid styles, such as that used in cat. 40 below.[25]

The Structure of Early Abbasid Qur'ans

The revelation of the Qur'an in the early 7th century AD and the formation of a distinctive Muslim civilization in the years that followed gave a new and unprecedented importance to the Arabic language, which had previously been confined to the desert zone south of the Fertile Crescent and the adjoining cultivated areas. Arabic became the language of a great religion and of a great civilization, and the spoken and written forms began to be used in a vast belt stretching from the Atlantic to western India. Both the religion and the civilization depended on the written word for their propagation and perpetuation, and this gave rise to a period of intense creativity during which the norms for the production of Arabic books were fixed then transmitted all over the Islamic world. The norms established during this period – the 7th and 8th centuries AD – grew out of the bookmaking traditions current in the Middle East before the rise of Islam. Papyrus and parchment were the main materials available for the construction of books, and it seems that parchment soon prevailed, at least in the case of Qur'ans.[26] Parchment retained its predominance for at least five centuries in the eastern half of the Islamic world and until the 14th century in the Maghrib. In the East, paper became available as an alternative at an early date, but its use for Qur'ans was resisted for some time, and the earliest Qur'an on paper that bears a date was produced in the first half of the 10th century AD.

Parchment is the skin of an animal which has been cured and then scraped to remove any remaining fat or flesh from the inside, sanded, stretched taut, and dried. The aim was to prepare both sides of the skin for writing and, in the process, to make the two sides of the skin alike. Nevertheless, it is generally easy to distinguish the hair side from the flesh side: the traces of the scraping of the flesh side can often be detected, for example. In this respect, cat. 41 below is an exception. While it is usually possible to tell the two sides apart, it is never easy to tell what animal was used. Sheep and goat skins seem to have been the most commonly available, but we have not been able to identify any examples of the gazelle parchment to which many sources – both Eastern and Western – refer. Before it was used, the parchment was sometimes dyed. This practice, which was not limited to the Islamic world, is represented in the Collection by a fragment of the famous Blue Qur'an (cat. 42) and another dyed orange-red (cat. 11).

In Classical antiquity books were produced in two principal formats, the roll (*volumen*) and the bound codex, but by the time of the Muslim conquest, the codex had the upper hand, and the number of books being made in roll form was relatively small.[27] The codex form was adopted by the Muslims, and the Qur'ans that seem the most ancient, those in Hijazi script, are usually codices with the dimensions we would consider normal for most books, both ancient and modern: they are taller than they are wide. At some point, however, Qur'an codices began to be made so that they were wider than they were tall, and this horizontal format continued to be employed until at least the 10th century AD. The change of format was not accidental, but it was not linked to the nature of the material used or to any technical change. Aesthetic considerations may have been a factor, and it has been suggested that the introduction of the new format was a response to the more horizontal emphasis of the so-called Kufic scripts in which these oblong Qur'ans were written. The reason for the change may equally have been the need to give an immediately recognizable shape to the Qur'an so as to underline its unique status as the word of God. Manuscripts written in the Abbasid scripts were also produced in the vertical

format, and the evidence provided by the fragments in the Khalili Collection suggests that the return to the vertical format was the result of the use of paper in Qur'an production.

The number of examples in Hijazi is so small that no definite conclusions can be reached about the structure of the manuscripts from which they came, and the following remarks apply only to the far larger sample of manuscripts in the Early Abbasid scripts. (The extensive changes in Islamic manuscript production which began at the end of the 9th century AD are reflected in New Style Qur'ans; they are discussed in the essay that introduces these New Style scripts, pages 132–137.) The basic unit of the early Qur'anic manuscript was the quire, which was almost always composed of five parchment bifolios. For these bifolios to be turned into a quire of ten folios, they were folded along their central vertical axis and were then sewn together along the crease (see figure 1). The arrangement of the bifolios within the quire was quite different from that employed in the contemporary Christian West. In the West, it was standard to make flesh sides face flesh sides and hair sides face hair sides in an open quire, an arrangement that has become known as Gregory's rule,[28] whereas Muslims arranged the bifolios with the flesh sides uppermost. As a result, openings that consisted of the last page of one quire and the first page of the next always had two hair sides; the central opening of the quire always had two flesh sides; and the other openings consisted of a hair side facing a flesh side or *vice versa*.[29] There are rare exceptions to this rule, but at present it is impossible to say whether they are the result of some regional practice, for example, or merely a matter of chance. The standard arrangement of flesh sides and hair sides within the quires gave most openings within a book an unbalanced appearance, as they combined a flesh side and a hair side; the craftsmen responsible for preparing the parchment were seldom able to eliminate the difference in look between the two sides, as they did in the case of cat. 41. Given the importance of the concept of the double page in Islamic art, it is surprising that virtually no attempt was made to arrange the folios in another way so as to achieve a more satisfying solution. The current state of research does not allow us to say whether this way of arranging the bifolios within the quire was inherited from an earlier book culture or was developed by Islamic artists themselves.

In the West, as a corollary to Gregory's rule, the quire was obtained by folding the dressed hide once (*in folio*), twice (*in quarto*), three times (*in octavo*) or more, thus producing one, two, four or more sets of bifolios.[30] As the quires of Islamic manuscripts were almost always composed of an uneven number of bifolios, the quires could not be produced by folding a dressed hide, and the habit of assembling all the bifolios of a quire with the flesh side uppermost also excluded this possibility. We must therefore conclude that the parchment was first cut into bifolios. Those required for the horizontal format were very long rectangles – almost strips – of parchment, and the natural size and shape of the hide made it difficult to obtain ten bifolios from a single skin. Parchment was expensive, and the craftsmen responsible for making the quires had to avoid any wastage when the hide was cut into elongated oblongs. They did this by trimming the offcuts to make smaller bifolios or to make single folios that were arranged in pairs and used instead of bifolios in a ten-folio quire. From the available evidence, we may presume that the procedure for compiling a quire using some single folios went something like this: the craftsman took, say, four bifolios and folded them in two; he then took two of the single folios, which were slightly longer than half a bifolio, and folded them near one end so as to form a folio of the correct size and a short flap of the type seen in cat. 49; he then inserted the two folios opposite one another in a quire – as folios 3 and 8, for example – as though they were a true bifolio; and, finally, he sewed the four bifolios and the two folios together (see figure 2).

A limited examination of one group of manuscripts shows that only about a quarter of the quires were made of five bifolios, approximately 40 per cent used four bifolios and two isolated folios, and the remaining 35 per cent incorporated up to eight isolated folios in a quire (see figure 3).[31] It is interesting to note that, although this practice would have permitted quires with any number of leaves, on the whole the makers of the quires remained faithful to the ten-folio format and to the disposition of hair and flesh sides explained above. We may conclude from these observations that the making of a book was divided into a number of tasks performed by different craftsmen. The copyist may well have used ready-made quires bought from an artisan who specialized in the management of the parchment, and these artisans may have been the *warrāqs* referred to in Arabic sources.[32]

The make-up of quires in Qur'ans written in the Early Abbasid scripts

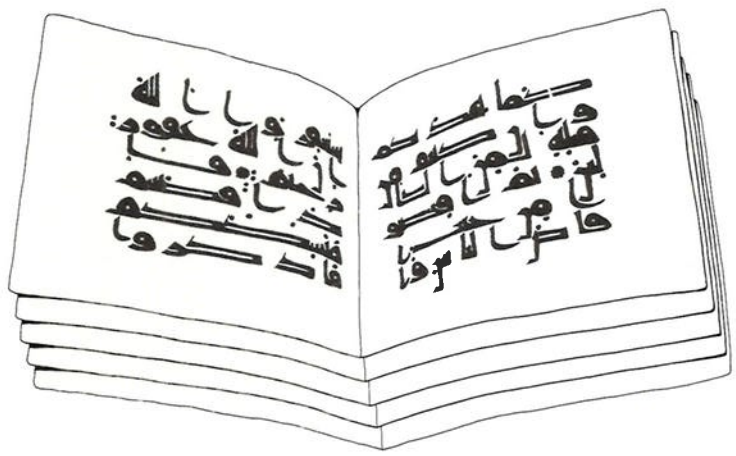


Figure 1

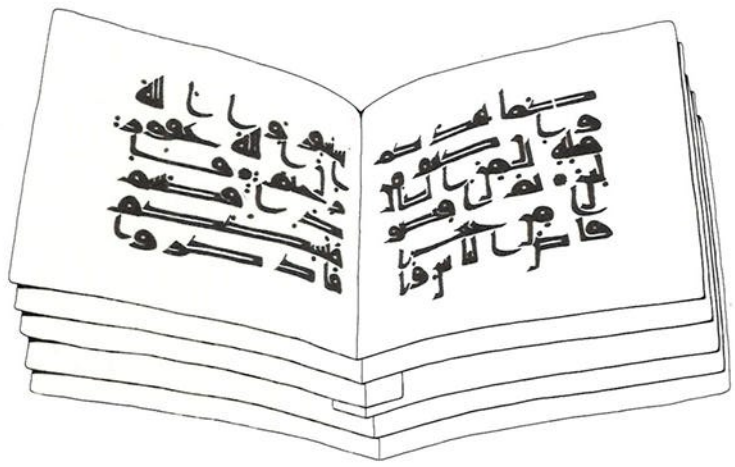


Figure 2

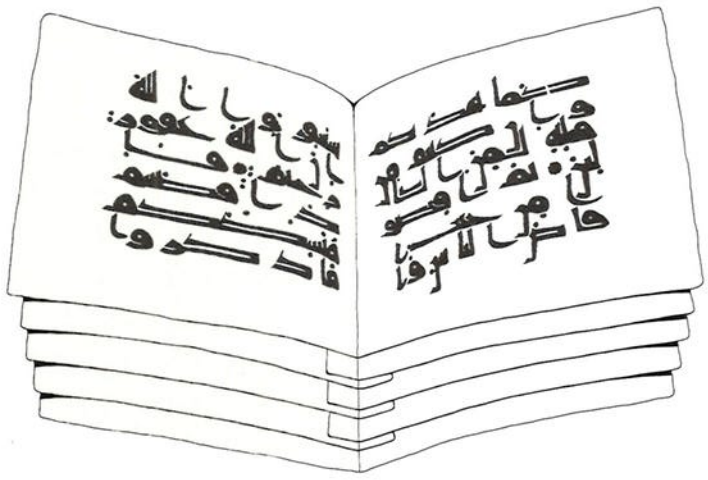


Figure 3

Bindings

Few early bindings have survived. An important group was found in the Great Mosque of Kairouan with the Qur'an fragments mentioned above,[33] but other examples are scattered in libraries all over the world.[34] The extant examples consist of wooden boards covered in leather. In most of the cases we know of, the bookbinder used at least two pieces of leather, one covering the boards and the spine, and the other glued on to the inner cover of the lower board to make a case to protect the sides of the text block.[35] Leather straps attached to the foredge of the upper cover (the short side in the case of Qur'ans produced in a horizontal format) were used to secure the book shut, and there were sometimes straps of the same type in the middle of the long sides of the upper cover. In all cases, a metal nail was hammered into the edge of the lower board facing the straps so that they could be tied round it and the book closed.[36] The leather of the binding was sometimes left plain, but more often it was tooled. To judge from what we now see, the inner faces of the boards were covered with a sheet of parchment, and nails with large heads were frequently hammered on to the outer faces of the two boards in order to protect the leather surface of the covers against rubbing, a common practice in the Middle Ages.[37]

The main problem that faced the bookbinder was to find the best way of keeping the text block and the covers together, as the weight of the wooden boards put a great deal of stress on the means of attachment. Nevertheless, it is quite common to find manuscripts in which the first folio of the first quire and the last folio of the last quire have been glued to the upper and lower boards respectively. This solution seems to have been inadequate, for most manuscripts have a second spine whose function was either to reinforce the original spine or to replace it after it had been broken, and we occasionally find that a piece of string has been used to tie the two boards together and has been run through the stitches that hold the quires together in order to strengthen the whole.

Ruling

Ruling is the system of horizontal, vertical, oblique or circular lines drawn on the page before the copying of a text or the execution of a decorative scheme, with the purpose of allowing the scribe or artist a planned layout. The ruling was usually effected with a dry point, but black lead and ink were also used on occasion. When a dry point was employed, it left a furrow on one side of the leaf and a mark in relief on the other.[38] We know that the practice was current at the time the oldest fragments in Hijazi script were copied, because traces of it can be found on examples such as cat.1. On the other hand, very few examples in the Early Abbasid scripts bear clearly legible marks caused by ruling – cat.42 below is a rare exception. This absence is rather disconcerting, firstly because ruling was employed relatively frequently in the preparation of contemporary illumination, and secondly because the dimensions of the text area indicate that, in some cases at least, the space was constructed according to the rules of geometry.[39]

We have already had occasion to demonstrate that a group of manuscripts in the B.II style show a strong tendency for the length of the text area to be two-thirds the width, and it is possible that these proportions bear some relationship to the Arabic term *thuluthayn*.[40] The quotient of the width divided by the height is 1.5, which is that of the geometric figure known as the double rectangle of Pythagoras. This remarkable rectangle is easy to calculate, and it reappears with some frequency in the material in the Khalili Collection: the text area in cat.15, cat.17, cat.41 and cat.42 seem to have been constructed on these lines, and it should be noted that two of these were copied in the D.IV style. Even allowing for a margin of error, other examples – cat.32 and 37 (both in D.IV), cat.9 (in B.II) and cat.44 (in C.II) – are less clear and need

Individual verse markers from the early Qur'anic material in the Khalili Collection. Illustrated on pages 21, 22, 23

1.1.1
Several oblique strokes, arranged one above the other

1.1.2
A single row of oblique strokes

1.1.3
Two rows of oblique strokes

1.1.3
Two rows of oblique strokes

1.1.4
Three oblique strokes, arranged in a triangle

2.1.1
Three dots, arranged in a triangle

2.1.4
Six oval dots, arranged in two horizontal rows

to be treated with caution. Despite the difficulties presented by this way of approaching the scripts, one cannot fail to notice a number of striking coincidences: a group of fragments in D.III (cat. 26, 27, 30, 31 and 35, in particular) have a text area in the form of a double square, for example, and a predeliction for the formula $a \times a\sqrt{3}$ is apparent in fragments in E. We should also note that in fragments that can be presumed to be relatively early on the basis of palæographic criteria, such as cat. 6 (in B.I) and cat. 66 (in F), the text area was constructed on a different set of proportions, those of the rectangle of Pythagoras, with a quotient of 1.333.

Given the present state of research, it is difficult to come to any firm conclusions regarding the methods by which copyists of manuscripts in the Early Abbasid scripts developed the page layouts they used. Geometric formulae similar to those set out above were employed in more recent periods,[41] and we can only suppose that they were already in use in the 9th century AD, even if the texts do not provide any information in this regard. The archæology of early Qur'an material has revealed two factors that may provide some support for this hypothesis. One is the importance of geometry in the preparation of the illumination.[42] The other is the possibility that letter forms were not the only criterion used in defining a particular style of script, for the dimensions of the script also seem to have played a role. It therefore seems logical that calligraphers who seem to have established a link between scripts and their dimensions would have widened this concept to take in the page as a whole by defining the written surface in terms of a set of proportions.

The hypothesis that a script was defined by a set of rules governing its proportions as well as by the shapes of the letters and that geometrical formulae played a part in the design process is supported by evidence that great importance was attached to the size of script. By studying two particular scripts, B.II and D.I (see Tables II and IV), in some detail, we have been able to show that the number of lines to the page and the height of the script were strictly controlled.[43] Roughly 78 per cent of D.I manuscripts had between five and nine lines to the page, while 75 per cent of our sample of B.II Qur'ans had between 14 and 16 lines to the page; in the first case, the average height of a single line was between 11 and 22 mm, while in the second it was between 5 and 6 mm. Calligraphers did occasionally adapt a script to an unusual format, as in cat. 23. This fragment was written in a form of D.I, a script developed for use on a relatively large scale but modified in this case to fit the reduced size of the line. The notion of a geometric basis for page design finds some confirmation in the discovery of Qur'anic manuscripts in which the calligrapher has organized the script to create geometric patterns.[44]

These findings demonstrate two things. Firstly, they show that the calligraphers of the Abbasid period must have been using a form of ruling which has left no visible mark on the parchment, and, secondly, they prove the need to take the full measure of the complexity of early Islamic calligraphy. It is clear that we need to search for the origins of this strictly regulated art form in early periods that are still very obscure.

Illumination

It is still difficult to estimate the proportion of early Qur'an manuscripts that contained illumination. In the case of the cache of Qur'anic material found in the Great Mosque of San'a', a figure of 12.5 per cent has been suggested.[45] Illumination was always used to mark the various divisions of the Qur'anic text. This is as true of the modest type of illumination attempted in some Hijazi manuscripts as it was of the more complex forms developed after the introduction of the first Abbasid styles in the 8th century AD. Although the illumination in the later examples

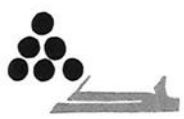
2.2.1
A single gold dot

2.2.3A
Three gold dots, arranged in a triangle

2.2.3B
Three gold dots, arranged in a triangle, with coloured dots added

2.2.3C
Three gold dots outlined in ink, arranged in a triangle

2.2.3D
Three gold dots outlined in ink, arranged in a triangle, with coloured dots added



2.2.4A
Six gold dots, arranged in a triangle

was always related to the way in which the text was divided and never occurred without a function, it was sometimes more elaborate than was strictly necessary. The main sources of inspiration were geometry, the plant life of the Middle East, and architectural motifs. Geometry provided the basic structure of the more elaborate compositions, and even plant-based motifs were stylized, simplified and subjected to a kind of geometrical reconstruction.

A close study of the illumination in early Qur'anic manuscripts reveals that the artist often drew an outline as a first step, particularly in the case of full-page designs, whether in horizontal or vertical. Ruling never entirely disappeared, even if no traces of it can be found on the written surface. This raises the question of whether the illuminator and the calligrapher were the same person, as was often the case in later periods. We cannot be certain, for there is evidence pointing in both directions. What we can say is that, if they were different people, they must have worked together or used the same proportions, because, within a given manuscript, the decorated area on pages that contain only illumination usually has the same dimensions as the written area on pages with text, as if they were both conceived according to the same rules.

The junctures in the text marked by ornament, whether simple or elaborate, included those between two verses, those between two surahs, those between two larger sections of the text, such as thirtieths (*ajzā'*), and those at the beginning and end of the text as a whole. The illuminated manuscript is visibly articulated by these elements, most of which are situated within the text area. The exceptions are the illuminated pages at the beginning and end of the text and the illuminated projections – notably palmettes – and frames that have invaded the margins around the text. The projections either explain or emphasize information already inserted in the written area, while the frames provide a protective surround for the text or emphasize a division within it.

Verse markers were of two types, those placed after each individual verse (*āyah*), and those placed after groups of five or ten verses. The markers used for individual verses underwent an evolution from purely utilitarian device to functional ornament. The groups of dots used in Hijazi manuscripts such as cat. 1, and the clusters of short strokes employed in Qur'ans such as cat. 17, which was produced a little later, were all made by the copyist with his pen; they were replaced by circular motifs often derived from the devices used to indicate the end of groups of ten verses, the origin of which is unknown. Verse markers of this new type can be categorized as illumination, as they were made using colours as well as ink. The specialized techniques required for the execution of such ornament eventually led to the emergence of specialist craftsmen, and this, of course, had an effect on the cost of the manuscripts. We can get some idea of the relative expense of having a Qur'an illuminated from the large number of Qur'ans that were not illuminated, and we can also note that some markers were rendered in yellow paint rather than gold.[46] The appearance of illuminated Qur'ans seems to have had a detrimental effect on the practice of marking the ends of verses, for, if we can rely on the material already published, it appears that the use of verse markers was more frequent in Hijazi Qur'ans than in those of the B.II group, and it would seem from this that it had become the custom in the 3rd century AH for the ends of verses to be marked either by an illumination or not at all.

Non-geometrical dividers are rare. The only exception is the use of letters that indicate the number of verses according to the *abjad* system, especially the use of a 'Kufic' *hā'* to mark groups of five verses, but even this element was transformed almost beyond recognition. Starting with the simple rubricated circle used to mark the end of every tenth verse, circular shapes became the most commonly used geometric devices for marking both individual verses

3.1.1
A rosette

3.1.2
A rosette with coloured dots

3.1.4
A rosette inscribed within a circle, with coloured dots

Markers for five verses

A Kufic *hā'*

A pear-shaped ornament

An *alif* in two colours, outlined in red

and groups of verses (see Table 1).[47] Those used to separate individual verses have been given a code which features three Arabic numerals (1.1.1, for example). The first numeral tells you whether the device consists of strokes (1), dots (2), or a rosette (3); the second tells you whether the marker was executed in ink (1) or colour (2); and the third identifies the particular type. The codes for markers used to separate groups of verses consist of an Arabic numeral, a letter and a Roman numeral (1.A.II, for instance). The Arabic numeral tells you whether the marker is a simple circle (1), a medallion with a petal border in which there are spaces between the petals (2) or a variant (2'), or a medallion with a border of large petals (3) or small petals (4). The letters show whether the device is in its simplest form (A), has coloured dots decorating its petals (B), is surrounded by an outer circle (C) or contains an inner circle (D). The Roman numeral I indicates that there are no dots around the device, while II shows that dots are present.

The way in which surahs were separated varied greatly.[48] An empty space was sometimes left between two surahs, as in cat. 71, where the title is a later addition, but in most cases one of the two main options was employed. In the first, exemplified by cat. 7, the space between the two surahs has been taken over by illumination, while in the second, the juncture between the two surahs is occupied by information about either the preceding or following surah. This could include the title, the number of verses, the place of revelation or the chronology or a combination of any of these. The two options were sometimes combined, in which case the information was inserted into the illumination, as in cat. 17.

An increasingly important element of Islamic illumination at this early stage was the use of the vignette, a composite ornament placed in the margin, as an extension of the main body of the illumination. The vignette, which was oriented towards the edge of the page, marked the presence of the rest of the illumination within the text area and thus emphasized the information that the main illumination carried. By comparing examples in the Khalili Collection, we can observe the evolution of the vignette from a motif that was comparatively realistic in inspiration, as in cat. 3 and cat. 17, for example, to one more distant from nature, as in cat. 44.

Some Qur'an manuscripts contain a decorative composition (or several – see cat. 24 and 67) that filled a double-page spread at the beginning or the end of the volume. If one excludes the rare examples of this type of illumination that occur in vertical-format Qur'ans,[49] those that we find in manuscripts in the Early Abbasid scripts usually take the form of a rectangle wider than it is high, and the use of a surface with this shape was the main problem faced by illuminators of the period. They generally created designs that were both symmetrical and autonomous. The symmetry worked at two levels: the composition was organized along the horizontal and vertical axes, and it was repeated on both pages of the double-page spread, which produced a mirror effect. The internal symmetry of the composition had the effect of emphasizing its autonomous, self-sufficient character, for a complementary relationship between the two pages did not develop until later.[50] The fact that the design was closed in on itself reinforced its autonomous appearance, for, unlike later compositions, which seem to be a fraction of an infinite pattern, these earlier examples are entirely contained within the rectangle that frames them. In some cases – cat. 24, folios 1b–2a and 98b–99a, for example – the illuminator has deliberately placed different designs on facing pages, while remaining true to the principles of internal symmetry and self-sufficiency.

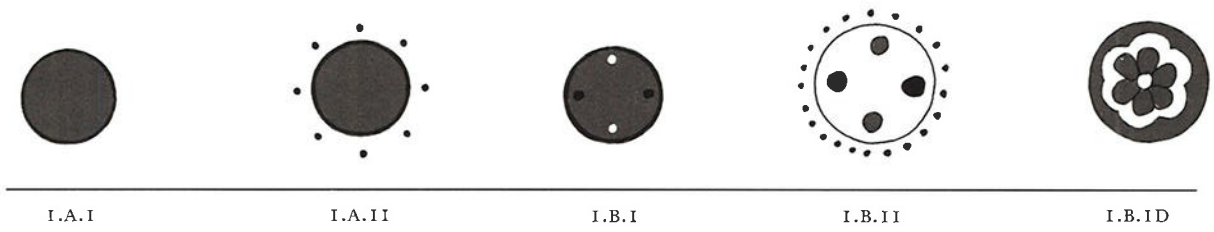
The element of symmetry in these compositions would lead us to expect that they were constructed along geometric lines, and an examination of the preparatory ruling that formed the framework of the design shows that this was indeed the case.[51] The rectangle was often used as

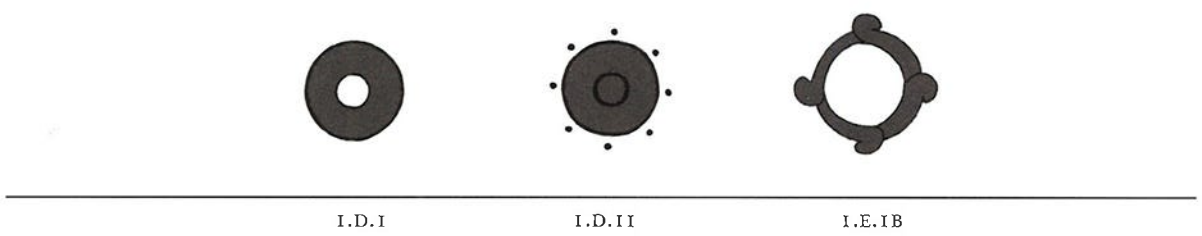
it was (cat.67 and 73), but attempts were sometimes made to create a field that was easier to manage by dividing it into two squares placed side by side,[52] or a square flanked by two rectangles disposed vertically (cat.59, folios 1a and 69a). The square was later replaced by a circle, a substitution that was easy to effect but was used relatively rarely.[53] The frame was sometimes extended so that the space it contained was restructured according to a specific rhythm. In cat.73, for example, the field is divided in three along both the horizontal and vertical axes. Together with the symmetry employed, this partitioning of the field bears witness to the 'geometric spirit' of Abbasid illumination.

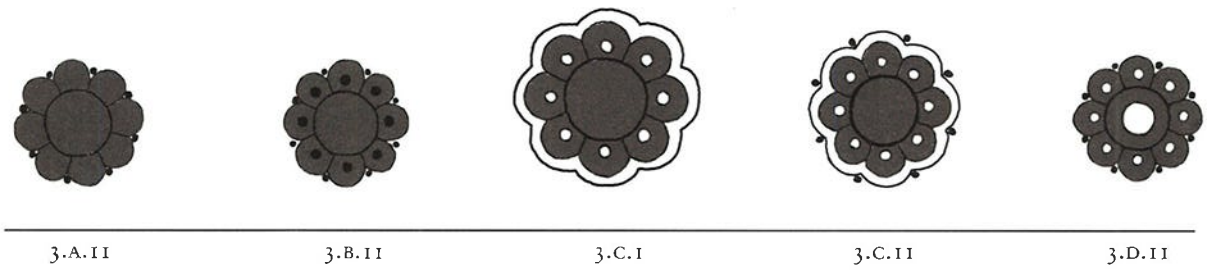
It was not a question of simple solutions. The taste for geometric prowess was satisfied by the more subtle designs that appeared in the more carefully executed examples. Some of the elements of these designs appear to be a combination of elementary figures but are in fact complex: one thinks of the loops described by golden fillets to which the task of dividing the space into smaller units was so often devolved.[54]

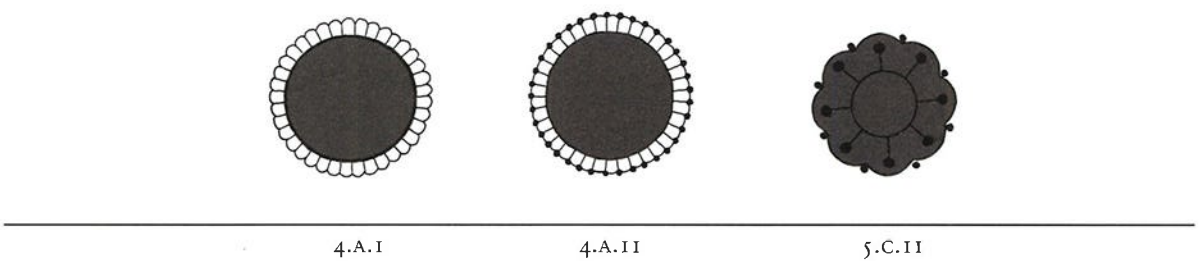
To fill the field or the surfaces delimited by the passage of fillets, the illuminators only exceptionally had recourse to calligraphy, which was difficult to reconcile with their quest for symmetry. They preferred simple forms which seem to have been derived from Classical mosaics,[55] interlace patterns that one also finds in contemporary bindings,[56] or yet stylized vegetal motifs. Frequently, these elements contrasted in their orientation with the horizontal and vertical lines that formed the basis of the framework of the decoration. It is not, however, the only rupture which they established: the colours constitute another resource which the illuminator had the possibility of exploiting. The use of gold, often associated with the geometric component, is heightened by touches of green, of red and, more rarely, of blue, in the form of dots, strokes, etc. It is not rare to find rinceaux drawn in sepia or plant forms reserved on coloured grounds.[57]

Table 1
Ornamental devices used to mark groups of ten verses in the early Qur'anic material in the Khalili Collection









Catalogue