Middle Eastern bookbinding – The Islamic book

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Abstract
The paper will endeavour to show the development of book arts across the Islamic world since 800 AD, when Islam started to become a major inspiration to the development of manuscript creation and book production from Indonesia in the Far East to Spain in Western Europe. Early Islam grew alongside Christianity, sharing and cross-fertilising developments in the arts and crafts. During this period, the ‘arts of Islam’ in general began to expand and develop their own unique features and a stylistic unity which is evident in architecture, metal and wood work, ceramics, calligraphy, illumination and printing. Bookbinding emerged at this time as a major Islamic craft, evolving and adapting stylistic techniques from other Islamic arts and crafts to reflect this new art which the written word would play a central part in, the establishment of a literacy religious society. The adoption of Arabic script for the Qur’an throughout the Islamic world and the mobility of artists, merchants, rulers, and the objects themselves along with the importance placed on the arts of the book reinforced this unifying stylistic aspect.

Introduction
The development of Islamic bookbinding and the book arts came about as a direct result of the need to make a written record of the divine revelations that were given to the Prophet Muhammad. According to Islamic teaching the Qur’an was revealed to the Prophet Muhammad by the angel Gabriel from 610 AD until the Prophet’s death in 632. The Qur’an was made known to Muhammad in Arabic, the classical dialect spoken by the Quraysh, the Prophet’s tribe. The Prophet’s followers memorized, transmitted orally and wrote down parts of the divine revelations on whatever material was available to whom they lived.

With the spread of Islam there was concern among believers that it was no longer possible to depend just on memory and oral transmission to spread the words of the Qur’an – there was an urgent need to record the Qur’an in a clear and tangible form that left no margin for doubt, amendment or error. The text as a sacred written message led to the establishment of calligraphy as the highest and most revered Islamic art form; the development of manuscript illumination as an art in reading and recitation of the text, and finally to the binding of the pages into a codex as the most practical method from which scholars could teach. For developing and expanding nations the book format was the most portable way to carry the manuscript.

Only fragments of the early Qur’an produced in the 7th century AH survive. The first dated Islamic book binding is from ninth century Egypt, a fragment of a binding made of cedar wood.1 The first bindings show a marked Coptic influence in materials structure and design.

The Islamic books of the ninth and tenth centuries used a horizontal format and had four flaps that folded over the ends of the book encasing the text. Leather thongs were used on the fore-edge flap to secure the various covers. Bindings from the eleventh to the early fourteenth centuries across the Islamic world adopted the vertical format, maintaining a similar book structure and style. Bookbinding evolved the fully enclosed cover was replaced by a single fore-edge flap hinged to the back board so that it fitted under the front board. This was to remain a prominent feature of the Islamic book until bookbinder’s gradually started to imitate the Western book format and the use of the fore-edge flap slowly disappeared.

The Islamic binding evolved to become a simple ‘cased’ structure with a flat spine. The first Islamic book boards were made from cedar wood covered in leather. As the binding style evolved lighter book boards were needed. Book boards were made from pasteboard (sheets of paper pasted together) and/or discarded text pages pasted together.2 The most common covering material was leather from goat, sheep, and deer skin. Other covering materials such as textiles in the form of brocade, velvet, silk, or cotton and marbled paper were also used. The books were sewn with an unsupported link stitch using cotton or silk thread, in the main using only two sewing stations, though larger volumes could have three or four sewing stations. This style of sewing was distinctive to all Islamic bindings until the introduction of western bookbinding methods.

The spine was lined with a cotton textile that extended two to four centimetres over each side of the spine of the book. Two-colour chevron pattern woven end bands are common to most Islamic bindings.3 The warp threads (tie downs) were sewn through the spine lining into the centre of each section over a flat leather, paper or cloth core to the ends of the book. The well threads in two contrasting colours of cotton or silk were woven over and under the warp threads making the chevron pattern. The end bands formed an important element of the book structure as they consolidated and reinforced the otherwise limited sewing structure. The covering leather was thinned and sometimes edge pared, then washed, and pasted out; the book would be covered while the leather was still slightly damp.

Leather production was well developed in the Middle East and bookbinders would have had access to a wide range of leathers.4 The cover decoration of the Qur’anic bindings follow the non-figurative principle of Islamic art applied to religious works. The tooling designs are generally geometric or based on vegetable ornamentation. Some bindings incorporated stamped text inscriptions of sayings from the Prophet.

The knowledge we have of the techniques and materials used by Islamic bookbinders is derived from a small number of treaties and incomplete manuals of instruction.5 Few completely undamaged or unaltered early Islamic bookbindings survive today. The best Islamic bindings show richness in design and decoration, those features can in some instances help to identify a place and or time where the binding was created.

Arabian Peninsula

The earliest extant dated large fragment Qur’an text (full Qur’an) was produced in the Hijaz area in the Arabian Peninsula in the eight century AH. These early single sheets of text are written on parchment and it is thought they were originally housed unseen, between two wooden boards. Binding the sheets of parchment into codex form, as with early Christian texts, would have been the most practical solution for scholars and teachers seeking to spread the knowledge of The Prophet’s divine revelations. However, so far no complete examples of the very early Hijaz area codices have been discovered.

The later Arabic bindings incorporate elements of Persian binding that became dominant in leather bindings from the 16th century onwards. They have blind lined borders/frames and central stamped medallions, usually with vegetative motifs. The bindings generally incorporated a fore-edge flap. The use of individual hands tools began to disappear in the 19th century as larger and more elaborate central and corner stamps became common. The design, execution and binding structure of the later (14th to 16th) century Arabic bindings did not reach the same level of excellence of the Mamluk, Persian or Ottoman examples.

Yemen

It is in Yemen and Tunisia where the largest and perhaps most important findings of early Islamic bookbinding fragments have been uncovered, usually by accident such as when the wall of the Great Mosque of Sana’a in Yemen collapsed in 1977, and between 12 000 and 15 000 parchment and binding fragments were recovered.6 Of particular interest for this review of Islamic bindings is the description Drehobl (1997) gives in her paper on ‘box books’7. This type of binding has sides or edges boards as well as the usual foredge flap (the flap can be held closed with a single leather toggle that is fixed to the front board) that in the case of these bindings rest on the outside of the front board rather than tucked under the cover as is usual with some Islamic bindings.

Egypt, North Africa and Andalusia

It was the Mamluk (1250-1537 AD) binders in Islamic Egypt who can be cited as the first masters of Islamic bookbinding. The Mamluk binders were heavily influenced by the book designs of the Coptic Christians. The Mamluk binders’ leather work was generally restrained and austere, however some examples of book covers still survive that display the same virtuosity of design that can be seen in other Islamic art forms such as stone, woodwork and metalwork. The book covers feature the same complex repeating geometric designs that can be seen in the other major Islamic art forms. The arabesque in Islamic art is often used to symbolise the transcendent, indivisible and infinite nature of Allah. The patterns were made by combining stamping and blind boring of patterns with small simple but effective use of gold or silver. The main centrepiece on the covers is an eight pointed star pattern interlaced with blind tooled strap work, twisted rope line borders and gold tooled dots.

Following the Arab invasions of North Africa (the first invasion into North Africa was launched in 647 AH) commercial trade expanded along the caravan routes to Spain.8 Among the many articles traded were books and paper. The books were said to be the most profitable trade merchandise to be found in Timgad, according to Leo Africanus who visited Timgad in 1508.9 Records of contemporary Muslim travellers also confirm the importance of books and particularly paper in Saharan trade.

The demand for books and the Qur’an in particular was such that workshops making manuscripts and bookbindings were established along the main caravan routes employing local artisans. They adapted and used their traditional designs and themes in the manuscripts and bookbindings made in cities and along the caravan routes of the Sub-Saharan. In the Western Sahara craftsmen and women of the nomadic tribes made richly decorated sleeve cases/pouches to protect the manuscript folios they made from the harsh climate, so they could carry them on camels, and so the books could be hung on wall/hang pega for storage.

The pages of these manuscripts were not bound or sewn together but were kept as single sheets wrapped between thin decorated boards. As there were few books but many who wanted to read the texts of the Qur’an it was simple logic not to bind the pages but keep them as single text leaves that could be passed among many readers at the same time.

Book binders in the Maghreb, including the Iberian Peninsula under the reign of the Umayyad caliphs (661 – 750 AH) developed a very distinctive book style preferring the landscape or an almost square format rather than the more typical vertical shape. Parchment as a writing support continued to be used well into the fourteenth century, long
Initially Persian bookbinders continued to use methods of bookbinding and decoration that were introduced by Arabic binders. Soon the Persian craftsmen began to develop their own techniques and designs producing perhaps the finest Islamic bindings they had a delicate light feel using highly polished grain-free leathers. The painted and illuminated manuscripts were decorated with a vast range of design elements from geometrical, to vegetal motifs and animalistic patterns – it is a common myth that human or animal depiction is forbidden in Islamic art. The designs were inscribed into hair-on linen or metal blocks (of brass and steel), the patterns were stamped or blocked into the leather covers before the cover dried.

More sophisticated stamping methods began to be used with elaborately decorated tools and with a greater use of gold paint. When the book cover was dry, finely ground very pure gold would be mixed with honey and water to make a paint which would then be applied to the blind patterns with a brush. Once dry the gold paint would be finished until bright. Single blocks were engraved or carved with very elaborate designs and this allowed for the transfer of complete scenes sometimes reflecting the text of the manuscript covered.

It is thought by some that by the late 15th and 16th centuries that a near mass production of bindings started to occur, perhaps still using much of the innovative approach that was being developed by Persian bookbinders using a team of elite calligraphers, illuminators, artists and bookbinders. Timur was responsible for bringing artists and craftsmen, including bookbinders from Egypt and Syria to Herat.25 In Herat at the court of Shah Rokh (the son of Timur d. 1403) and his son Baybars Mirza (Timurid ruler c. 1430-1447) Herat became the most important centre for manuscript arts.

Baybars was an artist and also a great patron of the arts. He had a profound influence on the development of Persian book arts and new styles of production were readily transferred into book making. He had a designers (karsh) for bookbindings, illuminations, ceramic tiles and tent panels working in his Karshkhan where classical Iranian literature was codified, copied, illustrated, and bound.

In the one hundred years the Karshkhan was in existence, craftsmen were trained in all the arts of the book and there was considerable interchange among the major Persian cultural centres. For example, the calligrapher called Jafar Tabrizi prepared responses for Baha al-Din on the work of the Karshkhan, in one report there are four references to the art of bookbinding (Topkapi Isarkah). The Karshkhan grew in importance until 1507, when Herat was sacked by the Uzbeks.
also used as supports for examples of illumination and miniature painting and the making of folding books.

4. Exotic animal skins such as Tiger (ILL. Add 26539) have been used.

5. The direction of the weave and the space between the threads give the pattern to the end band. In Turkish binding the patterns is referred to as, 'rats' teeth', 'right-left way', and single-double Baklava.

6. In the seventeenth century in Istanbul alone there where about 700 carpetiers. Blue leather came from Tokat, red from Deyrulfak and Bagdad, black from Ulfa, yellow from Egypt.


8. Iben Bala (AD1018-1040), Undat al-kutub manuscript, original title 'Book of the staff of the scribes and the implements of the discerning with a description of the line, the pen, sot inks, liq, gall inks, dried and details of bookbinding', is a rich repository of practical chemistry in the fields of tanning and leather dyeing, manufacture of rose and the sources for paints, the making of inks of many types for the application to writing materials, preparations to eradicate inks from paper and parchment, working of gold and silver, the manufacture and dying of paper and the making of the calligraphers tools.

The al-Sufyani, Tashri al-i'rab manuscript: Art of Bookbinding and Gilligie, is devoted to the craft of the master bookbinder, includes chapters on the making of boards, sewing, and end hanging, covering with leather, application. Sini Nakhmi manuscript, Jawha-e Sini British Library Ms Or 7955 Al Qulabshtani, manuscript Subh ala'sha.

8. This year a Yemeni-Italian team doing archaeological and historical research in Yemen found more than 130 ancient rare manuscripts beneath a minaret of al-Jaami's al-Kabeer, the Grand Mosque, on March 10. The Grand Mosque in the old city of Sanaa is undergoing a massive rehabilitation project carried out by this team, which comes from the Venera of Cairo, Damascus and Bagdad. Women who had fled marriage, and dedicated their lives to book hunting, were employed by many of the Caliphate's royal libraries.

Ibn al-Fayud, one historian of the time, notes that in one eastern suburb of Cordoba, the Mosque authorities employed 170 women solely to make Kufic copies of the Quran. PRINCE, C (2002, July). The historical context of Arabic translation, learning and the libraries of medieval Andalusia. Library History (68), 73-87.

12. The oldest Egyptian paper bearing Arabic script dates from the period AD 796-805, the earliest dated Arabic paper AD 879.

13. An adhesive, glue bound a wide use in the stamping of gold leaves on leather covers. ‘You take a red gold which is formed into thin leaves and apply them over the glue on the same day. Do not delay more than that. If the gold resists adhering to the glue, beat the gold on the fire. Then if you stamp it, leave it two days and polish it with a stone with black ashtrum on it, and then polish it with the leathers of the middle finger between the gold letters. Ibn Britis (1007-1010 A.D). Some Notes on the Chemical Technology in Eleventh Century Arabic Work on Bookbinding. By Martin Levey, Mirslov Krek, Husni Haddad.

14. In Baghdad, under the rule Caliph al-Mu'tam (770-813) paper mills were constructed along the rivers. Paper was exported to across the near and Middle East. Book production developed into a vital industry as textual materials, translators, scholars and tradesmen all spread throughout the Near East and Mediterranean. A new sector of the economy was born, specializing in acquiring, duplicating or locating rare books. By the late ninth century, there were a hundred book and paper shops in the Wadiash suburb of Bagdad.


15. After many disappointments, Frederick R. Martin, a well known collector and scholar of Islamic art, was eventually able to acquire various jealously guarded portfolios of sketches, models and paper stencils from Istanbul's calligraphers, arrast and bookbinders. Consisting of seventeenth century material, his collection contained about two thousand items, batches of which he donated to museums and interested individuals. The stencils, done by needlepoint, were used to outline not only patterns but also miniatures, and explain, as he put it, 'why there are so many copies of the same Persian miniatures and why forgeries generally are so good in lines and so bad in colours. Frederick R. Martin (1868-1913). Stencils and Sketches for Decorating Turkish Manuscripts and Bookbindings: A collection of paper stencils and sketches from Turkey, with a date given on each page. MS 43003. Thomas Arnold collection. Objects Of Instruction Treasures Of The School Oriental And African Studies Edited by Anna Centandri.
pattern is transferred to the paper. Whether or not Ebru is related to earlier Chinese or Japanese methods of colouring paper by floating pigments on water has not been proven. A document from the T'ang dynasty (618-907) mentions a process of colouring paper on water with five pigments. In the 15th century, a method of floating pigments on the surface of a size is thought to have emerged in Central Asia. The earliest example of Ebru is thought to be a copy of the Haltamahas (1540) by the poet Attal.

18. Thanks to research carried out by Dr. Naessam Akrat, Keeper at the National Museum of New Delhi, we know the precise labour cost for the making of an illuminated Maghul manuscript from a note written on the title page of a copy of the Khawanama by Persan MS No. 89.805 (completed in A.D.1777). The manuscript was made in the reign of the Maghul Emperor Farrukh Siyar at the imperial atelier.

The Scribe received 80 rupees
The Painter 92 rupees
The Line-drawer 75 rupees
The Illuminator of the title page 7 rupees
Correction charges 9 rupees
The Bookbinder 5 rupees
The cost of the paper 10 rupees


References


Kane, O. The encyclopedia of Islam, 2nd ed. Leiden: Brill.


Author Biography

David is currently the Senior Conservation Officer at the British Library specialising in the conservation and exhibition of oriental and western illuminated manuscripts. David has worked in book and paper conservation for over 30 years and his areas of expertise include Islamic book structures, conservation and exhibition of oriental and western illuminated manuscripts, structures of Islamic paper, history and conservation of Persia. David has lectured and published in Persian engineering manuscripts. His career in conservation commenced with an apprenticeship in book conservation at the India Office Library and Records, where he developed new methods for the conservation binding and storage of Islamic manuscripts and developed and oversaw the production of new repair papers for Islamic manuscripts in collaboration with Griffin Mill. When the India Office Library and Records joined the British Library in 1982, he undertook a wider conservation research role in the library. Research undertaken includes working with Professor Robin Clarke from the Department of Chemistry, University College London on a RAMAN pigment analysis project and developing atomic storage systems for museum, library and archive collections with the Natural History Museum.