Bookbinding

The process of making a codex generally concludes by its being bound, a stage at which the manuscript is encased in a protective outer shell. As will be seen, the various materials and techniques employed in binding offered an extensive range of more or less economical solutions, so that for most individuals having a codex case did not necessarily represent an undue outlay. Nonetheless, it seems that not every manuscript was in fact bound — at least not immediately on completion of copying. On the other hand, this is a component of the book which, due to its place and function, is cruelly exposed to wear and tear and the need to repair or even replace a binding was common. If such operations took place when the manuscript had been already absorbed into a Western collection, the new binding was most often made in keeping with European practice. This type of cover will be discussed only briefly in the following account, since this study centres on bindings produced in the Arab-Islamic world, knowledge of which is based in the first place on direct observation, supplemented by information gleaned from a specialist literature whose earliest materials are presumed to date from the fifth/eleventh century.

Certain bookbindings among the enormous output of Islamic binderies attracted the attention of specialist book historians at a very early date as they were seen as prototypes for Western bindings. Such early investigations were

1 See e.g. Muzeselle, Vocabulaire, p. 183, s.v. ‘couverture’. 2 See OCTAVIAN 1981, p. 45 and note 156; the authors quote in this connection an anecdote from al-Tarabūshī in which a manuscript is kept in a series of gatherings that these deers of copying them can borrow. This situation brings to mind the case of MSS. Paris BNF suppl. t.anc. 983, 984 and 986, which gather together in a single more recent binding quires that had originally circulated separately; several of them are protected by a parchment bilādism (see chapter “The Quires of a codee”, G. Viala, “Essai sur la structure de la bibliothèque du sovent denancien Yûsuf ibn ‘Abd al-Hađā”, FF 370, 1982, pp. 229-256). 3 It is a matter of regret that there are so few studies on binding techniques. 4 In Arabic, five authors dating from prior to the thirteenth/nineteenth century have so far been recorded: Ibn Bāḍī, Bahr al-hāštah, al-Māthī al-Mazaffar, Ibn Abī Hamidsa and al-Sufīfī. Ibn Bāḍī, “Usūd al-kamāb wa-naddar dhaul 1-l-sābi”, ed. ‘A. al-Hāswaj and ‘A. Zāhī, RAMA 17 (1391/1971), pp. 64-172 (translated in M. Levey, Medieval Arabic bookmaking and its relation to early chemistry and pharmacology (Philadelphia, 1962), pp. 33-50); A. Gāsī, “Arabic bookmaking and terminology as portrayed by bāḍī al-lābīhī in his ‘Nāsīh al-Fayyīr fi ‘ilm al-sīrāf”, MME'S 3 (1990-1991), pp. 106-113; ‘Ibn Abī Hamidsa’s didactic poem for bookbinders”, MBR 6 (1992), pp. 41-56; Instructions on the art of bookbinding attributed to the Rashid ud-dīr of Yemen al-Mālīk al-Mazaffar”, in Scribes, pp. 55-63; al-Sufīfī, Ṭṣīḥa dīr al-sīrīh wa dīr al-durar, ed. P. Ricard (Paris, 1925), transl. in M. Levey, loc. cit., pp. 31-55.
inevitably highly selective and not all periods and geographical areas were explored with equal rigour and depth – far from it. As has already been stressed, the adoption of the ‘codes’ in the Islamic world pursued a natural course, and early techniques for protecting books were most probably handed down in a similar fashion.

Some authorities hold that the roots of Islamic bookbinding are to be sought in Egypt. Berthe Van Regemorter is of the opinion that ‘the technique [of bookbinding] is more or less the same over the whole eastern side of the Mediterranean zone and derives from Egyptian techniques […] and is totally different […] from the technique of the Islamic book.’ Several years previously, Adolf Grohmann wrote that ‘early Mahometan bindings show as regards form and technique some relation to Coptic bindings.’ Patently, the issue of origins has thrown up conflicting ideas, and it would therefore be somewhat premature to make definitive judgements, since the materials themselves remain poorly known.

Basic principles

By dint, as it were, of its very position, the binding bears the brunt of the external world’s assaults on a book, especially those resulting from the use of the manuscript: opening and closing the codex or repeatedly storing and removing it can expose the binding to various kinds and degrees of damage. Over time, a bookbinding can be subjected to a level of wear that may lead to its needing to be being repaired or even replaced. This observation, though self-evident, has important repercussions on the study of the binding of a given manuscript, which can be encapsulated in a single question: ‘What connection is there, if any, between a bookbinding and the manuscript it covers?’ The answer is sometimes simplicity itself: the MS. Paris BNF arabe 405 – a Qur’ān copied before the mid-fifteenth century – has a red morocco bookbinding in Greek style (with headcaps) bearing the coat-of-arms and monogram of King Henry IV of France. It is of course a replacement and was made in 1602 (most likely in Paris) to cover a manuscript copied at an earlier date, probably in Turkey. When on the other hand a book has an Oriental binding, only

8 Déroche, Cat. I/2, pp. 138-139, no. 552. 9 The covers of the Morgan’s Manṣūb manuscript and other early Persian bookbindings in D. Mincer (ed.), Studies in art and literature for Belle du Cosa (Princeton, 1954), p. 460. B. Schuch (Islamic and Indian Manuscripts in the Pierpont Morgan Library [New York, 1997]), p. 10) disagrees with this explanation and considers the binding to be an eighteenth century imitation of the original one.
IOB 3105 and Paris BNF arabe 6772 (illus. 75). Such instances, however, are limited to a specific period and region. Overall, signed works seem to be uncommon: on the outer covers, signatures normally figure inconspicuously in subsidiary zones of tooling without any indication of date, though they also occasionally turn up on decorations on the inner cover. Artists who produced lacquered bookbinding decorations were far more likely to sign their work, albeit discreetly, than more 'traditional' craftsmen.10

Materials and techniques

Component parts of the binding

A number of kinds of book covering were known to the Islamic world. These types can be divided for convenience into three major groups (Types I, II and III). All three share certain elements in common, namely covers (or 'sides')11 and a spine. The 'upper' (or 'front') cover is the one visible when the volume is shut, with the 'spine' (also known as the 'back') equating to the sewn part of the gathering block – lying in the present case to the right for an observer; in this position, the 'lower' ('back' or 'reverse') cover lies beneath the volume. The elements enumerated above are the basic parts of a binding that will be here called Type III (illus. 76).

10 See ISAMOD, 250; Direkte, Cat. 1/2, p. 144, no. 564. A reproduction of a tool of this type appears in Witkom, Cat. 5, p. 505; I. Afshar (ed.), Subway-i namari (Tehran, 1973?1978), pl. BOR binding 40-45. According to E. A. Reznik, O. F. Akhmedshin, the origin of this type of signature back to around 1730 in Kashmir (E. A. Reznik, 'Yet another “Ulamanic Qu'ran”' (On the history of manuscript II 20 from the St. Petersburg Branch of the Institute of Oriental Studies), Manuscripta Orientalia 6/1 (2000), pp. 65-66, note 8). 11 M. Weisweiler (Buchbinden, p. 38) notes several examples, Haldane (Bookbindings, p. 11) and Bouché et al. (Chezaco 1981, p. 33, p. 87, no. 2, p. 126, no. 30 and 31, etc.) draw attention to a number of similar items. Names of bookbinders are known through literary sources from Ibn al-Nashir down to the nineteenth century CE. As in a number of other cases, the problem is to connect them to one (or a number) of surviving pieces. 12 An inventory of 211 reproductions of signatures figures at the end of N. D. Khallili, B. W. Robinson and T. Stanley, Lacquer of the Islamic Lands, vol. I (London, 1996), pp. 262-268 (in every signed object is a book binding). 13 ‘The outer covering of a book placed on the text block to protect it both in use and storage’; M. T. Roberts and D. Etherington, Bookbinding and the conservation of books: a dictionary of descriptive terminology (Washington, D.C., 1982), p. 67, n.s. 'covering'; see also Muserelle, Vocabulaire, p. 183, n.s. 'couverture'.

The other components of a Type III binding are substantially the same in all cases and include the 'inner cover', that is to say that section of the cover lying next to the book block, and the 'boards', the rigid element of the cover that can be made of wood, paper or even papyrus pastebord or cartonnage. Most often, the boards are designed to be covered or wrapped with some other material, the covering. Where the totality of the (outside of the) boards and spine is covered, the term used is 'full binding'; if, on the other hand, the covering is applied only to the spine and adjacent parts of the sides (i.e. without corner pieces), the expression is 'quarter-binding'; if the corners are also covered, the term is 'half-binding'. The inner covers may also be covered or lined: this 'doublure' may be made of leather, parchment, paper (a 'pastedown'), or fabric. Finally, there exist bookbindings, often known as 'limp' bindings, distinguished by a total absence of boards: ancient examples in leather as well as in parchment have been recorded.

Type III, however, represents only a fraction of Eastern bindings, including in the first place Christian Arabic manuscripts bound in conformity with Byzantine techniques, as well as manuscripts produced in Central Asia – in the broad sense – in later times. For codicologists, technical dissimilarities, particularly in the way cohesion is ensured between the block of gatherings and the covers, distinguish them clearly from the type of bindings made by Western binders and extensively encountered in major Western collections (illus. 77). In fact, the predominant form of bookbinding in most of the Muslim world is Type II (illus. 78). From a technical point of view, it is

14 'The material, such as leather, vellum, cloth, paper or combinations thereof, which cover the spine and usually the sides of a book'. Roberts and Etherington, op. cit., p. 69, s.v. 'covering'; see also Mucurri, Voila dalmon, p. 185, s.v. 'covers'.

77. Classic seventeenth century Western binding, Bnf persan 297.
close to the modern ‘pasted down to ends’ style in case-binding[15] in which the block is attached directly to the endpapers.[16] Once the gatherings are sewn, the back is lined ‘(backed)’ with a strip of cloth (the ‘spine lining’) wider than the thickness of the volume so that there is enough space to paste the edges down to the boards. Depending on the taste and style of an individual bookbinder, the pastedown[17] consists of the initial (or final) bifolium,[18] or else of a genuine doublure whose extremities are stuck to the first or last leaf, thereby ensuring the coherence of the whole.[19]

![Image 70. Type II binding.](image)

The most salient feature of Type II is the presence of the fore-edge flap and the envelope (or ‘tongue’) flap, two elements connected by flexible hinges, which extend from the long side of the lower cover. Rectangular in shape, the ‘fore-edge flap’ is that part of the covering which lies over the fore-edge to protect it when the volume is closed. As broad as the book is thick, the fore-edge flap continues over a second hinge into the pentagonal ‘envelope flap’, tapering to a point in line with the central axis of the manuscript. (For ease of reference, Type II (bookbindings) may here be designated by their traditional name of ‘flap bindings’.) A further characteristic of this type of bookbinding is the absence of a shoulder.[20] Arabic treatises on bookbinding are adamant that any ‘swell’ at the jointing must be ‘knocked out’ with a maul or reduced in the press.[21] Finally, the edges of the assembled sections are practically flush with those of the bookcovers.

Intriguingly, however, the oldest surviving examples of Islamic bookbinding known today belong to another group, Type I (illus. 79). They are as a general rule oblong in format with wooden boards. The chief distinguishing feature is a continuous leather protective wall or strip of the same thickness as the text block glued to three rims of the lower bookcover to form a box or case whose spine constitutes the fourth side.[22] When the book is shut the pages’ edges lie snugly within the leather surround. Such a binding-cum-case (or ‘box-book’) is customarily fitted with some kind of fastening.

Divers types of cases and boxes were produced as book protectors, from the crudest cloth bags[23] to actual rigid boxes.[24] In the Ottoman world, manuscripts, especially small-format Qur’ans, were often provided with a close-fitting envelope made from two pieces of paper pasteboard lined with leather and held together on three sides by a cloth corduroy gusset; a fore-edge flap reminiscent of those in bookbindings proper allowed the box to be sealed shut once the manuscript was replaced, and a cloth pull was fixed inside the case so that it could be slid out easily.[25] The leather panels were for the most part decorated in a style close to that observed in normal bindings. Customarily used for Qur’ans, this species of case was in addition utilised for copies of other

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15 A [...] method of bookbinding [...] in which the case (covers) of the book is made separately [...] from the book (the text block and endpapers) and later attached to it by gluing the board papers of the text block to the inside of the boards of the case?: Roberts and Etherington, op. cit., p. 66, s.v. ‘case-binding’; see Munzirji, Vocabulaire, p. 185, s.v. ‘carnetage’ (the same term is occasionally met with in English). 16 [...] two or more leaves placed in front and back of a book between its covers and text block?: Roberts and Etherington, op. cit., p. 86, s.v. ‘endpaper’; see Munzirji, Vocabulaire, p. 96, s.v. ‘garde’. 17 The [...] paper attached to the inside of the board of a book after it has been covered [...] The pastedown serves several purposes [...] (including acting as) the hinge between the text block and the board or case?: Roberts and Etherington, op. cit., p. 186, s.v. ‘pastedown’. 18 In parchment manuscripts, pieces of variable size are also used to the same effect. 19 Such techniques reappear in Oriental bindings of Type II.
The Materials

The boards

Wood

Bookboards were made out of wood, particularly for 'bindings-cum-cases', the earliest type of binding for Qur'ans (see below). The pieces of wood utilized in these cases are of variable thickness, ranging from 4 to 11 mm. There are

26 In their standard form, manuscripts from that region consist of an uneven group of leaves or of unawn bifolia (see pp. 88-89); the box provides added security as regards the order of the leaves. Some good examples are reproduced in James, Q. and R., p. 138, no. 115; MSS. Dublin, CHI, 1599 (see A. J. Ashbery, op. cit., p. 76, no. 241; MSS. 1597, 1598 and 1600 of the same collection appear in the same way); and in A. Brockett, 'Aspects of the physical transmission of the Qur'an in nineteenth-century Sadar: script, decoration, binding and paper', AMMF 2, 1987, pp. 47-48 and fig. 1 (MUS. Leeds University Library Arabic MS. 301). See also MS. Munich ESB Cod. arab. 2641 (Mouson, 1982, p. 146, fig. 24). 27 As has been remarked above, certain bindings do not possess boards. 28 See Marçais and Poinssot, Objets I, p. 15.

29 No account is taken here of the Berlin pseudo-binding (see below and note 76).
30 Marçais and Poinssot, Objets I, p. 139, no. 62; p. 149, no. 66; p. 190, no. 95; p. 202, no. 101, and p. 207, no. 104; Drebboldt, op. cit., p. 27 and fig. 31. 31 Marçais and Poinssot have compiled a list of the bindings concerned (Objets, vol. II, p. 599). 32 Gisik, op. cit. (AMMF 5), p. 107. 33 This is the case in particular of two Qur'anic manuscripts, MSS. Milan Biblioteca Ambrosiana H 144 and 145; they are protected by a quarter-binding whose wooden boards are only partially covered in the leather on the spine (E. Graffini, 'Das isländische ambrosianische Sammlung arabischer Handschriften', 2ZAH 69 (1915), p. 69). 34 J. David-Weill in Le Phénix d'Abu al-Walid, vol. I I PFA, Textes arabes, XI, (Cairo, 1939) gives no further details of the appearance of the binding: Cairo Dar al-Kühnb-Haddith 2123. Griesbach (in Arnold and Griesbach, op. cit., p. 112, note 202) compares it to a probably earlier Coptic binding, which is slightly less briefly described – see V. Scheil, 'Dix traités de Phihon', Mémoires publiés par les membres de la mission archéologique française au Caire, no 3 (Paris, 1893), p. 1 – whose covers are reportedly formed from 'several fragments of leaves [of papyrus] stuck together'. Haldane notes that the Coptic bindings in the Victoria & Albert Museum have papyrus boards, and adds, without however supporting his thesis with a precise reference, that 'many other [Islamic] bindings were made of papyrus pasteboards with leather covers attached' (Haldane, Bookbindings, p. 11).
were employed for Arabic manuscripts back in the time when papyrus was still commonly available.

Paper
Undoubtedly the most common material employed by bookbinders in forwarding was paper pasteboard. As described in bookbinding treatises, the manufacture of such boarding was a very simple process and had the advantage of being relatively inexpensive.\textsuperscript{37} Paper waste was pasted together to an adequate thickness to make the boarding sufficiently solid.\textsuperscript{38} In the Ottoman world and more generally wherever the Ottoman binders’ methods predominated, makers of fine bindings occasionally used differences in layer among the various components of a decoration to create pronounced relief effects during the preparation of the pasteboard: the craftsman cut the outline of the ornament he intended to stamp out of a sheet of cardboard and stuck the sheet onto the pasteboard support.\textsuperscript{39} Lacquer binding boards, a topic to be addressed below, are traditionally dubbed paper mâché: this term in fact disguises the familiar pasteboard made out of layers of sheets of sized paper.\textsuperscript{40}

Other materials
To finish, mention should briefly be made of a few of the more unusual materials used in the making of special bindings and cases: metal as a support for tortoiseshell panels,\textsuperscript{41} inlaid plaques of jade, jewels,\textsuperscript{42} etc.

Covering materials
Not all the materials listed above were invariably decorated. Depending on the materials concerned, however, decoration might be executed either before the paper was applied (as with marbled papers, for instance) or else after it had been laid over the bookboards (as in the case of leather). In the following account, it has not always proved feasible to separate discussion of the raw materials from that of the processes employed in the decoration.

Leather
Leatherworking was widely practiced throughout the Islamic world. Many texts lavish praise on the quality of hides prepared in the Yemen and the Maghrib, while others vaunt the advantages of such and such a method for treating

made of sharkskin. If the binding is contemporary with the manuscript itself (c. 1550), its use here would preclude not only the production of the material in the West during the eighteenth century, but also its use there. 

Imports to France from the Middle East did apparently begin at least during the seventeenth century and provided binders with this material. 

Parchment

In the West, it is not so very unusual to meet with manuscripts (such as MS. Paris BNF pers. 327) that a bookbinder has covered with purpose-made parchment. In the Islamic world, on the contrary, the few examples in which this material was utilised in binding entailed recycling old leaves taken from dismembered manuscripts. The collection of the Museum of Turkish and Islamic Arts in Istanbul contains a small binding stretched with a parchment covering; perhaps an analogous situation is to be envisaged for manuscripts described in the mediaeval catalogue of the Library at Kairouan. MSS. Paris, BNF suppl. ture 983, 984 and 986 contain ajza’ (fascicles) composed of a single quire protected by a bifolium made from pre-used parchment: it seems plausible that the latter served the purpose if not exactly of a binding, at least of a protective layer at a time when ajza’ were independent and not bound as a single ad hoc collection as they are today. In his treatise on bookbinding, al-Ishbili explains how to make a material usable for book-covering out of layering and pasting parchment and paper, which he calls shidaq.

Paper

For outer coverings, bookbinders seem to have preferred paper already decorated, tinted, or otherwise enhanced (illus. 80). Nonetheless, there exist examples of bindings made out of paper that may have been recycled to that end: MS. Munich Bayerische Staatsbibliothek, cod. turc. 229, for instance, is protected by a page covered with pen trials or doodles. In the Ottoman world, marbled paper began to be used in covers and wrappers during the seventeenth century and frequently appears in quarter-bindings with leather-drawn spines. The introduction of marbled paper more or less coincided with the onset of the economic difficulties that the Ottoman Empire was to increasingly experience in the final phase of its history; the inference is that leather had become too costly and thus was gradually ousted by marbled paper, though

Textile

Fabric too was put to use as a book covering (illus. 52); indeed, it would seem that material was employed at a very early stage, since a text dating from 1174 CE mentions that Saladin sent several copies of the Qur’ān opaquely bound in satin to Sultan Nūr al-Dīn Mahīmūd. A binding in the Kairouan collection that Georges Marçais and Louis Poinsot assign to the fourth/tenth century preserves a green silk covering over wooden boards, their edges rounded smooth to avoid tearing the fabric. This specimen does not quite match the
lavishness of Ayyubid Qur'ans, but this does not reduce its historical importance since -- if the date can be substantiated -- it represents the earliest instance of the use of textile on a full binding in the entire Islamic domain.

Textile coverings became popular in the Ottoman world during the reign of Mehmed II, perhaps to satisfy a demand for bindings that would otherwise have outstripped production in stamped leather decoration.65 A later manuscript in Istanbul (TKS H. 1365, written in 992/1584) is a well-known example of a gold-embroidered silk bookcover,66 for which parallels existed in the Safavid world.67 Embroidery, which was occasionally stitched directly into the leather in decorative compositions, will be returned to below. When cloth is used to wrap the boards, there is normally a thin border strip of leather around the edges.

The combined use of leather and fabric is a better documented phenomenon, attested by bookbindings from the eighth/fourteenth to the ninetieth centuries, often produced in Egypt. Leather bookcoverings are decorated in cut filigree laid on a silk ground. One juzi of a Qur'an (MS. Paris BNF arabe 3845, late eighth/fourteenth century) belonging to a well-documented series68 is protected by a bookbinding whose central ornament and corner-pieces are executed in cut leather stand out against a green silk ground. The same technique is to be found on a contemporary Qur'an (MS. Paris BNF Smith-Leesouf 220), though there the ground is turquoise blue.68

Fabric slipcovers were made for various precious volumes, including manuscripts owned by the disciples of the famous Baghdad mystic al-Hallâj, as well as the Qur'ans attributed to the Caliph 'Uthmân, one conserved at Damascus, and the other at Marrakesh after passing through Cordoba.66

Metal, enamel, gemstones and other precious materials.

The use of precious metals for bookcovers also seems to have begun at a very early period in the Muslim domain. This is not the place to address the topic of the fasteners or bosses occasionally met with on cases for books -- which can be made of silver69 -- since they are fittings or 'furniture', and the subject here is covering materials in the strict sense. According to one literary source, al-Jahshâbî's Khid Khit al-muzara', a secretary to the Umayyad Caliph Mu'awiyah ibn Abi Sufyan (reigned 661-680 CE), is supposed to have owned a Qur'an with a silver bookbinding that he was forced to sell when he fell on hard times.70 Another text of a later date has it that the mughal attributed to the Caliph 'Uthmân preserved at Cordoba had a binding adorned with splendid decorations in gold embossed with pearls and rubies. After being transferred to Marrakesh in the reign of the Almohad sovereign 'Abd al-Mu'n'im in ca. 553/1158, this same Qur'an was rebound in gold and silver ornamented in 'Byzantine vitreous colours', -- a phrase denoting enamel.71 As can readily be appreciated, works of this ilk owe more to the talents of the silversmiths than to those of the bookbinder in the classic sense.

To the present writer's knowledge, no early examples of this type have survived. Documentation is relatively plentiful from the Ottoman period, however, and many bindings in precious metals have been preserved from this era; an even greater number must have disappeared in the intervening period, however, if the record reported by Arménag Sakissian that one hundred and thirty Qur'ans with bindings set with gemstones formed part of the estate of 'Rûstem Pâsha can be accepted.72 The Topkapâ Sarayî Museum contains a series of bookbindings of this type set with precious or semi-precious stones.73 The use of unusual materials presented a still wider range of possibilities, as attested by bindings on manuscripts in Istanbul (Université Kâğıthane F. 1426: tortoiseshell mounted on metal plaques)74 and in Dublin (CBL 1578: dated 1261/1845, which combines silver with enamel and ivory).75

Wood.

The last-mentioned example brings to mind the case of marquetry or inlay as decoration techniques on bindings. Certain fragments conserved in Berlin have been described by Friedrich Sarre and by other scholars subsequently as remnants from a large, inlay decorated bookbinding.76 In fact, however, these are pieces of a wooden coper: they are far too heavy to have been used as binding, all the more so since, as will be seen below, Arab-Islamic bookbinding techniques had yet to evolve a method of durably affixing a text block to the bookboards. Reference has already been made to two manuscripts now in


Milan (Biblioteca Ambrosiana H 144 and 145) whose timber bookboards had no covering; closer study might allow one to determine whether at this early period wooden boards were indeed left bare. 77

Laquer

The most widely used technique consisted in executing the decoration on bookboards made of pasteboard (illus. 51), although this had not been always the case. The earliest known examples, such as the binding of MS. Istanbul TKS A. 1672, copied in 873/1468, 78 demonstrate that craftsmen applied laquer decoration to leather-drawn boards. 79 This method did not endure long, perhaps because of the many attendant difficulties. The oldest laquer-painted bookbindings of classical manufacture (illus. 51) date from the ninth/tenth century and were made at the court of Husayn Mirdz at Herat (reigned 873-911/1469-1506). 80 In terms of decoration, they are closer to illumination or miniature painting than to bookbinding proper. Their ornamentation relies on a process similar to painting; ledging experiments consisted in combining gliding with a black ground – occasionally in conjunction with mother-of-pearl inlay 81 – though such a solution never proved as popular as genuine polychrome decoration. 82 The latter made its appearance at the beginning of the tenth/sixteenth century and has continued in favour up to the present day.

The doublure

Covering the inner surface of a bookboard fulfilled the purpose not only of enhancing the binding’s appearance, but also of strengthening the cohesion between binding and book block; doublures were in fact often set across the ‘hinge’ 83 that served to reinforce the binding as a whole. It is common to find restoration work in these areas, evidence of the high level of wear to which they were sometimes subjected.

77 Haldane, Bookbindings, p. 189, no. 175) reproduces a binding for a photographic album produced in Kashmir in 1900 (London Victoria & Albert Museum 1976-1951); the carved wooden boards were decorated with birds on a ground of vegetal ornamentation. Parallels may well be found in other traditions; for example in that of the Tibetans books; nonetheless, to the present writer’s knowledge there are no bindings of this type among manuscripts in Arabic script. 78 Baby and Tanoudi, op. cit., pp. 154-155, no. 18. 79 This technique, which appeared shortly before the examples produced at Herat, seems to be Ottoman see Khalili, Robinson and Stanley, op. cit., p. 232. 80 See Khalili, Robinson and Stanley, op. cit., pp. 16-17, with reference to MSS. Dublin CH, 155 (dating from 1478), Istanbul TKS H 676 (dated 902/1496-1497) and EI 1636 (dated 897/1492). 81 MS. Istanbul TKS H 676, dated 902/1496-1497 (see O. Ashmouni, ‘The art of bookbinding in B. Gray (ed.), The arts of the book in Central Asia (London/Paris, 1979), pl. XVIII). Notwithstanding the information given in the text, the illustration shows the lower board with covering. 82 gilt decoration over a black ground, inscribed by the three bindings noted above, seems to have dropped out of fashion around the mid-sixteenth century; but the technique continued to be employed in Iran until the nineteenth, though only sporadically. Khalili, Robinson and Stanley (op. cit., p. 18) accept that it enjoyed more durable success in the Ottoman Empire in connection with the non-figurative repertoire. 83 Mussetello, Usabiliare, p. 184.

78 80 81 82 83 84 85 86 87 88 89 90 91
81. Doubtful with the edge, over f. 1, cut in aaggag.

Paris, BNF suppl. persan 278 A, f. 1 and flap.

82. Doubtful of embroidered leather. MS. copied at Bouk, Afghanistan, in 505/1112.

Paris, BNF arabe 6041 (back cover).
Paper
The methods by which books were forwarded, and more particularly the importance of the endpapers in ensuring that the final product remained robust, inevitably led to paper being favoured as the lining material for inner covers. Be it the same paper utilised for the gatherings or some special material, paper attained a level of popularity that never waned. In the Ottoman world, for example, marbled paper met with enduring success as doublure, while coloured papers with gold decoration also enjoyed a certain vogue. Sometimes, the use of paper was limited to a specific portion of the doublure: a case in point are filigree decorations executed in paper, glued on to a leaf of tinted paper and set in a space cut out of the leather for that purpose (illus. 83).

Textile
The earliest known examples of silk – green in colour93 – for binding doublures appear in the collection at Kairouan; in the fifth/eleventh century, fabric was stretched across the parchment and wrapped around the entire inner cover.94 This practice does not appear to have remained in fashion for long, and fabric seems to have been confined to a subsidiary role, as a ground for filigree work, for instance. Around the end of the ninth/tenth century, it reportedly gained renewed favour in the Ottoman Empire. Occasionally it was limited to the inner cover, but in several manuscripts both outer covering and inner lining are in textile – either one and the same fabric (as in MS. Istanbul TKS A 329695) or two different materials (MS. Istanbul TKS A 343896). An intriguing case is MS. Istanbul TKS R 88e, dated 885/1480-1481, where the doublures are of silk with text headings.97

Lacquer
Like covers (see above), inner boards may also be decorated using this technique.

Stitching
It should be observed at the outset that research on stitching remains at an early stage. The relevant texts, however, seem to be at one in describing a type of link-stitch sewing in which a single length of thread serves to secure the entire volume. The gutter (or spinefold) of each gathering contains two sewing stations: each time the thread passing from one to the other within a gathering emerges, the bookbinder loops it over as it enters the preceding gathering, before inserting it into the corresponding sewing holes of the gathering immediately beneath it. As Bosch and Petherbridge have observed, this

93 Marçais and Poisson, Objet 1, p. 142, no. 63 b; the pink silk appears on the inner cover lining. 94 Marçais and Poisson, Objet 1, pp. 181, 183, 185, 186, etc. 95 Ruby and Tanudi, op. cit., p. 150, no. 34, illus. p. 152. 96 Ruby and Tanudi, op. cit., pp. 176-177, no. 28. 97 Ruby and Tanudi, op. cit., pp. 180-183, no. 30.
technique was practised regardless of the format and weight of the book concerned.\(^9\) From that point of view, sewing at the headband was doubtless a welcome aid to solidity. Notwithstanding, one Persian text does mention sewing with two lengths of thread.\(^9\)

Treatises recommend using a fine thread for sewing so as to minimise swell as it passes through the gatherings. This precaution was designed to reduce the effort required to level out the difference in thickness of the gatherings and eliminate all traces of shoulder at the joint. The obvious disadvantage lies in the fact that the thread is thus less tensile and frequently snaps.

**The headband**

In Western bookbinding, the headband is defined as ‘a functional and/or ornamental band at the head and tail of a book between the sections and the spine covering [...]’.\(^9\) Of course, in the present case there can be no tapes or slips to be taken into account since such elements were unknown in Oriental work (illus. 84); instead, the headband was built over a fine strip of leather or parchment laid flat along the head of the volume and not connected to the boards.\(^10\) This strip was anchored primarily by threads of the same colour as that serving to sew the gathering, the bookbinder embroidering a chevron design in two colours of thread over a core.\(^10\) This component is not purely decorative, however; the headband also improved the cohesion of the volume.

**Cover decoration**

**Stamping**

Stamping is far and away the most common decorative technique in bookbinding. For this procedure, the craftsman utilises tools on which whole or partial decorative designs are engraved in relief or intaglio and which are impressed on the surface of the leather either by blows with a mallet or else by means of a hand press.\(^10\)

When no gilding is applied with the strike such work

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98 *Chicago* 1981, p. 46. 99 Cited by Y. Porret, *Peinture et arts du livre* (Paris/Teheran, 1992), p. 119. The text is not very clear; it might also be a form of link stitch for two gatherings (see for example Muzelle, *Vocabulaire*, p. 180). 100 Coloured threads embroidered around a core and sewn through the sections to make up the difference between the top edge of the sections and the edges of the boards (op. cit., p. 120, s.v. ‘headband’). See also Muzelle, *Vocabulaire*, p. 181, as well as the description given by al-Sufiyyah, op. cit., pp. 17-18 (Dr. Levy, op. cit., pp. 53-54). 101 The process followed in making certain early Qur’anic bindings of Type I proves to have been slightly different (see above). 102 *Les Tranchettes brodées* (Paris, 1989), pp. 86-89. See also *Chicago* 1981, pp. 53-54. 103 A finishing tool, cut in brass, bearing figures or patterns in relief. Stamps range in design from a simple dot to the most intricate [...] designs [...] (op. cit., p. 245, s.v. ‘stamp’; see also ‘block-stamping’, ibid.; Muzelle, *Vocabulaire*, p. 196).

In the Muslim world, tools utilised for stamping leather left imprints of variable dimensions, from small motifs\(^104\) to large-format panels\(^105\) (illus. 85 and 86). In the former case, the binder would use a combination of tools in the decoration, while the latter allowed him to decorate a large surface in one fell swoop. The use of small iron (‘*petit fer*’) or panel stamps has implications as regards chronology and will be returned to below. According to Sakisian, the
blocks used in Iran were initially made of a specially hardned leather, only being replaced much later by the metal blocks that can be seen in various collections.\textsuperscript{107}

Once the use of larger stamps became widespread – by the second half of the ninth/tenth century – block-stamping was occasionally used in conjunction with preparations designed to improve the end result. Ottoman bookbinders increased the relief effects obtained with panel stamps on boards by

\textsuperscript{107} A. Sakisian, 'La reliure persane au XIe siècle sous les Timourides', Revue de l'art ancien et moderne 66 (1934), p. 148; besides the few specimens of tools conserved in European museums (for example at the Victoria & Albert Museum, London, see Haldane, Bookbinding, pp. 12-13, fig. 9-17, or at the Linden Museum, Stuttgart), the conservation department of the Sûleymanezye Library – and must probably others – possess sets of old tools that it would be instructive to examine more closely. See also Chicago 1981, p. 70, fig. 11 and p. 72, fig. 13.
recessing the zone assigned to the motif (see above); the bookbinder laid down a generous coating of paste before stamping the leather on the cover, thereby accentuating the relief. Another process was to obtain contrast effects by applying to the spine of the decoration a thin piece of leather or paper cut to the size and shape of the block but of a different hue from the rest of the binding.

Though the title or number of the volume — when the work comprised more than one — may appear on the binding, it is more customarily to be found on the edge. On particularly well-finished codices, these elements are sometimes stamped. The various parts of three multi-volume Maghribi Qur’āns, one published some time ago by Prosper Ricard, the second now in Paris (BNF arabe 389-392), and the third in Jerusalem (al-Haram al-Sharif Islamic Museum Rab’a no. 3) possess a cartouche on the fore-edge flap bearing the volume number spelled out (al-amr al-thānī, etc.). Similarly, Qur’āns are very often inscribed with a quotation from Sūra lrv: 79, together with lengthier texts to which further reference will be made below.

Cut-work and filigree

The technique of filigree has long been known. It involves creating a decoration by cutting leather into a pattern; the resulting lattice can be set off against a coloured fabric or paper insert (illus. 87). Numerous Mamluk bookbindings illustrate refinements of this process: on one Qur’ānic binding (Paris BNF arabe 5845), the central motif and corner-pieces on the covers were executed in this manner, the decoration emerging from a green silk ground. Paper was also employed in cut-out filigree especially for decorating inner covers, these being less exposed to rubbing and hence more suitable for fragile materials (illus. 83).  

80 Sahabit, op. cit. (54, 1927), p. 278, note 5; Rabby and Tamir, op. cit., p. 216. 89 ‘Reliures marocaines du xme siècle: notes sur des spécimens d’époque et de tradition almohades’, Revue de l 17 (1933), pp. 109-126 to the volumes noted at Marrakesh by Ricard, one should add vol. VI at the Royal Library in Rabat (Auction sale, M Le Blanc, Paris, Feb. 26 1990; lot no. 80), vol. VII, M. London III, Chr. 1392 (Loewen 1976, p. 89, no. 158) and vol. VIII, Genoa Collection Bruzzecetti (Auction sale, M. Couratier et Nicolas, Paris, June 27 1975, lot no. 156). 110 Kh. Salameh, The Qur’ānic manuscripts in the al-Haram al-Sharif Islamic Museum, Jerusalem (Beirut, 2001), p. 66-73. 111 See Czappes 1988, p. 207, no. 82 for an old example. 112 Limiting discussion to the domain of the book, the oldest example appears to be a fragment from a binding found in Central Asia, at Qocho; the fragment, published by A. von Le Coq, dates from the eighth or ninth century C.E. It is reproduced in H. J. Ehmke, Mamluk art and architecture (Iconography of religions, 20) (Leiden, 1982), p. 50 fig. 56. A Coptic origin is frequently suggested (see e.g. Czappes 1981, p. 69). 113 Haldane, Bookbindings, pp. 111-113, no. 107. The illustration reproduces examination, as it displays the various constituents of a late eighteenth or nineteenth century Iranian bindings stripped down and photographed during a program of restoration. 114 Diecher, Cat. II, pp. 54-55, no. 546 and XI A. 115 This is still trace in the Persian and Ottoman worlds, where the leather employed for covers was finer. As Sakizian observed long ago — op. cit. (1934), p. 150 — this meant that filigree work was (with rare exceptions, such as MS. Istanbul TSM 3282, copied in 1433 at Shiraz) confined for the most part to the inner covers.
Mosaic ("onlay") binding is another technique involving cut-work decoration: as far as the present writer knows, only one Islamic specimen has been recorded.116

Other decorative techniques

Incising

In the past, the question of whether Islamic craftsmen were acquainted with the technique of incising (or engraving) bindings118 aroused lively debate: in a passage on the issue, Sakarian recounts that L. Gruel had "asserted categorically that incised Muslim bookbindings simply did not exist."119 Artisans in the Islamic world were, however, aware of the technique of incising a leather surface with a sharp point. This method, attested in bookbindings from the third/ninth and fourth/tenth centuries, seems to have been used solely for scoring fine parallel lines built up into a ground or infilling an element of the composition.120 In a few examples, two incised network patterns overlap and create a design of small lozenge shapes. The technique might perhaps be compared to a later method in which the ground of the ornament was densely dot-punched, and then either gilded or left blind.121

116 A method of decorating a leather binding by means of thin, variously colored pieces of leather, usually of a different color than the covering leather, which are attached by means of paste [...] to the surface of the covering leather, thus giving it a kind of mosaic effect: Roberts and Etherington, p. 156, s.v. "onlay"; see also "inlay," see Muxerolle, Vocabulaire, p. 198, s.v. "ciseaux mosaiquistes". 117 Arts d'Orient, F. de Rocquels, auction sales, April 14-15 1997, lot 665. The binding, which the author has not been able to examine, belongs to a manuscript described as Ottoman and from the first half of the eighteenth century.


119 Sakarian, op. cit. (1934), p. 149. 120 This has been noted at Kairouan (Marçais and Polineet, Objets I, p. 81, note 1), as well as in connection with bindings probably originally from Damascus (Déroche, op. cit. [1934], p. 91. MS. Istanbul TEBM 1177). The technique persisted for some time; see e.g. MS. Paris BNF arab. 7263 (Richard, Pass 1997, p. 57, no. 13 and pl. 19) and another in a private collection (F. Déroche, "Une reliure du v° s. C.HIRO IV1 [1993], p. 4 and pl. IV a). Jean Vezein has remarked on a possible parallel with the lower cover of the binding to a St John's Gospel from the tomb of St Gabriel. In this instance, the scoring is filled with pigment; see T. J. Brown, ed., The St Albans Gospel of St John (London: Oxford, 1969), p. 14. Other medieval European examples include MSS. Přední Hornické Obecní Archiv, Cod. 12, eighth century; and Munich HBV c.l. 6294, dating from the second half of the tenth century; see J. Vezein, "Les plus anciennes reliures du carême entamé dans le domaine latin", in S. Reimann and M. Bernhaupt (eds.), Scritti in memoria di Francesco Ricci (Fribourg, 1997), pp. 113 and 116 (the ground of the avoid on the upper cover and in the envelope flap decoration of MS. Istanbul TEBM R. 1726, dated 838/1435) and p. 189 (dotted gift ground on the lower cover of MS. Istanbul TEBM 2160, dated 881/1477).

Nevertheless, there are Yemeni bookbindings with all-over decoration that present analogies with what specialists in Western bookbinding define as 'incising'.122 Future research on this topic, particularly as regards techniques, will help clarify the question.

Relief decoration using cord

The following highly individual technique of applying ornamentation in relief is attested in a number of early bindings. Designs were applied to the covers by setting (or perhaps pasting) cords on the wooden boards123 along lightly scored lines in the desired pattern. With the strings in place, the binder would then stretch a piece of damp leather over the boards. As it dried out, the leather shrank and absorbed the design formed by the cords beneath it. The ornamentation could probably be made to stand out by using a tool to emphasise the relief and flatten the remainder of the surface,124 during burningish, for example. First known to scholars from the early Kairouan bookbindings, this technique seems to have spread quite widely through the lands of Islam, and was also employed by Christian binders.125

Embroidery work

Two bindings in London (Victoria & Albert Museum 1945 & 1945A-1981) and also that of MS. Istanbul Universität Kütüphanesi A. 6570 represent surviving examples of a technique in which the leather served as a support for embroidered designs,126 as distinct from the needlework-on-fabric method described above.

Gilding and burnishing

Gilding

Gilt was widely used to embellish bookbinding decorations (illus. 85 to 87). A series of Maghribi bindings may well provide a benchmark for the date when it

122 See e.g. Weitzel, Bucheinband, fig. 19 (MS. Berlin SL Gesam 195, copied in 999/1893); Duda, ib. id. 20, p. 27 and fig. 147 (MS. Vienna ONB Cod. Gl. 65, copied in 1043/1634); and U. Drehof, "Unusual and not-usual decorations on Yemeni bindings", Manuscript Studies, 5 (2003), p. 33-39.

123 Binding no. 126 at Kairouan is the sole evidence that this technique was also used on pasteboards: see Marçais and Polineet, Objets 1, pp. 243 and pl. XXVI b.

124 Marçais and Polineet, Objets 1, p. 21.

125 See the binding of a Syriac MS., Dublin CBL 2, dated to the eighth or ninth century (R. Van Regemorter, Some Oriental bookbindings in the Chester Beatty Library in Dublin, 1961, pp. 7-8 and pl. 3 b). Note the comparison Van Regemorter makes between Kairouan bindings and that of St Caithbhe; Le Codex édié depuis son origine jusqu'au haut Moyen Âge, Le Moyen Âge 61 (1953), p. 23-36, for a recent account of the binding, see Brown (ed.), op. cit., p. 15-23. 126 Halsall, Bookbindings, pp. 170-171, no. 159 (for the example in London) and Brown 1988, p. 102, no. 29. A further instance is MS. London N. D. Khwals Collection QUR 271 (see Ghersini 1995, pp. 66-67, no. 28).
first appeared, though more extensive research is necessary to prove that the technique indeed first entered the Islamic world in the seventh/eighth century. Many of the operations undertaken by Muslim binders remain shrouded in mystery. For instance, a recent series of tests performed on the materials concerned has revealed the presence of mercury in the gilding on the binding of a Qur’ān in Paris (BNF arabe 5844). This is likely to be a gold amalgam whose use in leather gilding was unknown before this specimen.128

Blue was also employed by binders to enhance decorations, though in smaller areas than gold, being set in fillets outlining the motifs.129 Analysis shows that in the binding of the manuscript just referred to (BNF arabe 5844), the blue colour was obtained from a mixture of lapis lazuli and azurite, a composition analogous to that observed in the illuminations of the same manuscript.130

Burnishing

Sakasian accords considerable importance to this finishing operation.131 A deep, brilliant sheen was imparted to objects by rubbing them with a burnishing tool of agate or metal, which eliminated surface irregularities.

Lacquer

Lacquer was used on various kinds of objects, including bookbindings; the decoration, for which various techniques were available, was painted on and then coated with a thick, shiny varnish (illus. 51).132

Paint

The decoration was sometimes directly painted on the leather; this technique is different from lacquer and easier to apply (illus. 88).133

127 Ricard, op. cit., the author notes the presence of silver in the decoration of certain bindings. Shelfmarks for the various volumes are indicated above. Vezin observes, nevertheless, that Western bindings from the early Middle Ages were sometimes gilded. Examples are MSS. Noflia, Hessische Landeshätschr. Cod. Bonn. fol. 1, bound prior to 854 ce, where the scoring is charged with gold and silver powder, and MS. Munich BSB c.l.m. 6294, perhaps bound at Tours in the second half of the tenth century ce, in which the tooling is gilded with liquid gold. 128 See Chapter ‘Instruments and preparations used in book production’. 129 Weissgerber notes this usage on bindings which in his view date from the eighth/ninth century; see Bookbinders, p. 171, no. 329, MS. Istanbul Silikumajjep, Sihit Ali 1740, f. 68r/6287. 130 See Chapter ‘Instruments and preparations used in book production’. 131 Sakasian, op. cit. (1934), p. 149; also the same author, op. cit. (1927), p. 278, note 5. See also Chapter ‘Instruments and preparations used in book production’. 132 The problems arising from the use of the term ‘lacquer’ are discussed in the opening pages of the catalogue of lacquered objects in the Khalili Collection of Islamic Art (Khalili, Robinson and Stanley, op. cit., pp. 10-12). 133 L. le feu du liser dans, du moment au livre d’artiste (Paris, 2000), p. 160, n. 122 (Ms Paris, BNF’arabe 7219). P. Ricard (op. cit., p. 110, n. 3) mentions a binding decorated with this technique which might be dated to the seventh/eighth/ninth centuries; it was then kept in the Burdi Museum in Fez.
tools used by craftsmen. The ornamentation of items of more restricted use (textiles, precious materials, lacquer, etc.) cannot be treated in detail in this discussion. Moreover, very localised traditions, such as those which evolved in Sub-Saharan Africa and South Asia, will only be touched on briefly in the paragraphs below.\(^{134}\)

Type I

Structure

This first Type encompasses the oldest surviving examples of Islamic bookbinding. Their format, more commonly oblong than vertical and their box-like structure, are characteristic (illus. 79). In the closed position, these bookbindings look like a casket or box— a resemblance accentuated by the fastening system by which they are secured, comprising a thin leather strap fixed to the lower board and twisted round a peg set into the upper cover.

These were probably rather different from more everyday contemporary bookbindings.\(^{135}\) As far as can be judged,\(^{136}\) they were designed for Qur’anic manuscripts; this would explain the peculiar form that bespeaks above all else a desire to protect the text within.

Spines were highly susceptible to accidental damage: indeed, the weight of the wooden boards alone would have warranted some secure means of fixing text block to binding, though this was practically never provided. At Kairouan and Damascus alike, cohesion between these two elements seems often to have been maintained by simply pasting a piece of parchment forming part of the gatherings to the inner boards: this might be either a conjugate of the outermost bifolium of the first or last gathering or a piece (variable in size) ending in a stub sewn to the outside of one of the terminal or initial gatherings,\(^{137}\) or else pasted to the inner side of the first or last leaf.\(^{138}\) In many cases at Kairouan, Georges Marçais and Louis Poinssot observed holes in the midpoint of the boards, near the spine, in which strands of thread could still be seen. They interpreted these holes as evidence of a technique designed to fix the bookblock to the binding by securing the boards with the sewing thread.\(^{139}\)

Once bound, the gatherings were sewn onto a parchment lining or cloth scrim concealed behind the spine. Though it had the advantage of being easy to make, the system had the drawback of being inherently fragile, and the stresses and strains applied to the poorly reinforced spine of a manuscript soon had the better of it. This fragility explains the large number of spines that required re-backing, even at an early date.\(^{140}\)

The headband was sewn with coloured thread;\(^{141}\) a rolled-up piece of leather or parchment embroidered with a fishbone or chevron pattern was secured by a length of thread passing through the gutter of the gathering in a hole near the edge of the leaves. In Kairouan, two distinct methods of fixing the ends of the headband were in use. The first depended on a groove cut into the edge of the board; the threads securing the headband were apparently slipped through a "hole pierced in the corner [of the latter], though the diagram as published is not particularly helpful.\(^{142}\) In the second case, the groove was sawn across the outer face of the board in axis with a line bisecting the corner and terminating in a hole running into the board itself, into which the bookbinder would insert the end of the headband, passing it through to the other side and gluing it to the inside of the board.\(^{143}\) According to traditional oriental practice, manuscripts were normally stocked flat. Occasionally, bosses were set on to the boards to protect them from the effects of rubbing to which this method of storage inevitably exposed them.\(^{144}\)

Decoration

The boards of surviving bindings-cum-boxes seem always to have been covered: in cases where the leather covering has vanished, the wood preserves traces of the stamped decoration that it once bore. It is true that the leather could be left free of all adornment: it is not inconceivable, therefore, that some day bare boards might be discovered which bear no trace of decoration and in that case it may prove impossible to tell whether they were originally dressed with leather or not.\(^{145}\)

At this period, the bookbinder had at his disposal the two decorative techniques outlined above. The less common, but undoubtedly more original, option was that of relief decoration "on cords" (see above). Using this method— attested by specimens in the collection at Kairouan,\(^{146}\) as well as by others originating in Syria on bindings created plain linear ornaments. Nonetheless,

\(^{134}\) For the former group, see the bibliographical information in note 26 above.

\(^{135}\) Surviving evidence from this period is extremely rare: the binding of the papyrus codex of the Texte Webh has been referred to above (see note 33). As was noted above, the initial wooden plaque in the Museum für Ismaelitische Kunst in Berlin cannot have been a bookbinding.

\(^{136}\) A substantial proportion of these bookbindings are no longer affixed to the manuscripts they once protected. For this reason firm conclusions are impossible.\(^{137}\) Arslan and Grousman, op. cit., p. 46; Marçais and Poinssot, Objet 1, pp. 16-20; Dronke, op. cit. (REF 54), p. 93. \(^{138}\) The latter method is recorded by Marçais and Poinssot, Objet 1, p. 19.

\(^{139}\) Marçais and Poinssot, Objet 1, pp. 16-19 and figs. 3 a, b, and c.

\(^{140}\) E.g. MSS. Istanbul TIEF 23 and 2936 (Dronke, op. cit. (REF 54), pp. 86 and 89). Marçais and Poinssot (Objet 1, p. 16) appear to be of the opinion that occasionally three pieces of leather were used for bindings at the outset, in our view these are in fact the result of restoration work at an early stage.\(^{141}\) This seems to be the rule, stitching with ordinary thread being limited to clumsy restorations (Marçais and Poinssot, Objet 1, p. 20).

\(^{142}\) Ibid., also figs. 3 d and e. \(^{143}\) Ibid. \(^{144}\) Dronke, op. cit. (REF 54), pp. 88-89. \(^{145}\) Two bindings recorded in the Bibliothèque Ambrosiana in Milan may in fact be isolated examples of work with unadorned boards (see E. Grafoni, loc. cit.). It has unfortunately not proved possible to examine these manuscripts to determine whether they really represent original plain board bindings or, less interestingly, the disappearance of a covering followed by \(^{146}\) Marçais and Poinssot, Objet 1, pp. 21-22 and 228-243, pls. XXVI to XXVIII. \(^{147}\) Dronke, op. cit. (REF 54), p. 87 and fig. 3. This discovery is to be seen in conjunction with the binding of a Syriac MS., at Cairo, Bibl. 2, published by B. Van Regemorter, op. cit. (1981), pp. 7-8 and 11, pl. 3 b.
one cover found in Kairouan demonstrates that craftsmen could occasionally produce more complex compositions that covered the entire surface of the sides in a satisfactory manner.\(^{148}\)

The majority of bookbindings, however, were decorated by stamping. It
was not unknown for a bookbinder to use no more than three or four tools
to compose a complete decoration; it may well have been that these were the only
ones available. In the third/ninth and fourteenth centuries, the tools employed
are characteristically limited in number and lack sophistication. The inventory
drawn up by Marçais and Poinssot shows that they came in a series of basic
shapes\(^{149}\) and that it was in combination – particularly with the use of special
types of unit tools – that complex effects might be obtained.

Certain bookbindings are of remarkably modest appearance, with no
decorations at all or simply a few fillets that the bookbinder traced out with a
folder. The same tool was also used sporadically to lightly lay in the main
outlines of the decoration of a central panel before stamping it with the irons.\(^{150}\)

However, correctly executed bindings suggest that there was a preference
for ornamenting the whole board. This ambition was only partly fulfilled by one
approach found in some bindings from Kairouan\(^{151}\) and San‘a\(^{152}\) where pious
invocations cover the area somewhat irregularly. In contrast, two other methods
successfully fill an entire cover. The first involves extending a pattern across
an area bounded by a generally substantial border design\(^{153}\); in the second, the
bookbinder stamps a central ornament onto a field of modest size.\(^{154}\)

As well as the boards, the protective walls of cases might also be
embellished. In the majority of preserved examples, the narrow surface limited
decoration to a sequence of fillets lying perpendicular to the boards, at times
grouped in thens or threes.\(^{155}\) On the leather rim protecting the short side of a
manuscript in Cairo (Dār al-Kutub Mila‘īf 888), the volume number has been
embroidered with a silk thread,\(^{156}\) though it is hard to determine with certainty
whether the inscription is actually contemporary with the binding. With thicker
manuscripts, the decoration of the side walls might become more complex; for
instance, three bookbindings or fragments thereof discovered at Kairouan\(^{157}\)

San‘a\(^{158}\) and Damascus\(^{159}\) – the two latter examples being later in date –
demonstrate that the flexible surface could be embellished in accordance with
principles similar to those governing decoration on boards.

The decorative principles applying to Type I bindings did not vanish at
the same time as the type; early examples of Type II (fifteenth century)
show that decoration with repeated strikes of a hand tool\(^{160}\) persisted and that,
more generally, bookbinders continued decorating stamper the entire surface
of covers.\(^{161}\)

Type II

The second type of binding is undeniably the most widespread and best-known
in the Islamic world, to such an extent that it has become the archetype. As
explained above, it incorporates two characteristic elements traditionally
designated globally as the ‘fore-edge flap’ – a continuation of the lower cover,
comprising the fore-edge flap properly speaking together with the ‘envelope flap’
(or ‘tongue-flap’), ordinarily an irregular pentagon in shape (Illus. 78). When the volume is closed, the fore-edge flap conceals the fore-edge gutter
while the envelope flap folds either over or under the upper cover. Book covers of
this kind are commonly known as ‘fore-edge flap bindings’. Research
shows that the hinges between the various components allowing their mobility
are subjected to considerable wear and tear, to the point that one or more of
them may have given way: depending on the circumstances, one or other of
the covers, and a part of or even the whole fore-edge flap, may have been
repaired more or less skillfully in the past, or may have simply been lost. No
less than the spine, the fore-edge and envelope flaps should be meticulously
examined for traces of splitting or repair.

**Particular features**

The early date of Type II is amply demonstrated by the numerous Coptic
bindings closely associated with it, which can be attributed to a period before
the appearance of Islam.\(^{162}\) These latter bookbindings differ from Type II in

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148 Marçais and Poinssot, Objet 1, pp. 230-233 and pl. XXVI. In fact this specimen proves to consist of a cover and two fragments. The Tunisian collection includes other less accomplished examples, though these too demonstrate a desire to cover the entire field. 149 Marçais and Poinssot, Objet 1, pp. 332-362 and pls. XLVIII-XLI. This inventory encompasses more recent tools as well as historic specimens. 150 This observation is also valid for an earlier period (Marçais and Poinssot, Objet 1, p. 26) as well as for more recent bindings (e.g. London Victoria & Albert Museum 366/29-1988, dating from the fourteenth or fifteenth century ce, in Falkande, Bookbindings, p. 29, no. 5). 151 Marçais and Poinssot, Objet 3, pp. 62-69 and pl. XV. 152 Dublin, ob. cit., pp. 22-28, fig. 6-7. 153 Marçais and Poinssot, Objet 1, pls. XLV and XLIV, and XVI-XXV. 154 Marçais and Poinssot, Objet 3, pl. XXIX. 155 Marçais and Poinssot, Objet 1, p. 125, no. 54, pl. XIV (see also no. 40 and 75 A, pls. VIII and XI). 156 Marçais and Poinssot, Objet 1, p. 46 and fig. 14. The binding is described by Grohmann though he did not record this detail; Arnold and Grohmann, op. cit., pp. 45-46. 157 Marçais and Poinssot, Objet 1, pp. 125-126 (no. 54) and pl. XIV.

the classic form, however, in that the envelope-flap is unquestionably intended to fold over the upper cover. In fact, a strap running from the tip of the flap and wound several times over the manuscript keeps it shut. This option was by no means totally unfamiliar to the Islamic world; a few survivors from the fourth/fifteenth and fifth/sixteenth centuries still bear, on the pointed end of the envelope-flap, traces of a strap that has long since vanished but whose purpose is unmistakable. Sudanese bookbindings, for their part, incorporate a tongue flap of ogival form whose large overall dimensions mean that it covers the whole volume (illus. 69 and 90).

The oldest known binding of an Arabic literary manuscript would seem to be that belonging to a volume in Cairo (Dīr al-Kurrah, Hadīth 2122) which has not yet been the object of thorough, still less of a published, study. Grohmann, who was supplied with a photograph, states that it showed 'on one side the remains of an additional three-cornered piece'. He refrained from further comment on the position this element might have adopted when the volume was closed.

In the majority of cases, the two flat covers of a binding both display the same decoration, but it is not unusual at an early period to find upper covers decorated very differently from the lower ones. Weisweiler maintains that several manuscripts, for example Berlin SB or. quart. 1706 (dated 993/1197) and SB or. fol. 4182 (from 787/1385), whose bindings he feels are contemporary with the copy, featured this very difference. That this tendency is by no means confined to volumes of mediocre craftsmanship is demonstrated by the covers of MS. Istanbul TKS R 1726, executed for the library of Sultan Murad II in 838/1435. 171

Principles of decoration
Stamping the covers, in keeping with the principles elaborated for bindings of Type I, persisted for a time in those of Type II. New styles gradually arose, however, though from a technical point of view bookbinders continued to work with iron of small size employed in combination, laying in complex designs just as they had done in the past. These decorations are quite different from subsequent ones produced by the use of stamps of various dimensions.

Be that as it may, two general tendencies as to composition have been discerned: on the one hand, there are decorations that cover the entire available space, while others rely on a contrast between an element stamped in the centre

163 Moreover, the form of the flap is sometimes triangular and sometimes rectangular. 164 (Dienche, op. cit. (AHMOS), p. 4 and pl. IV a); a striking similarity exists between this binding and those described by Van Regemorter (see note above) in the way the thing is held in place by passing through a series of little notches. 165 See MS. Paris BNF arabe 5035 (Dienche, Cat. II, pp. 50-51, no. 340). 166 See David-Weill, loc. cit. 167 Arnold and Grohmann, op. cit., p. 312, n. 202. 168 On this question, see below. 169 Weisweiler, Bucheinband, p. 87 and fig. 30. 170 Op. cit., p. 83. 171 Raby and Tanudi, op. cit., pp. 114-115.

of the board and a field left plain. In this second category, furthermore, the composition may be completed by other ornaments around the perimeter (pendants, corner-pieces, and edgings of variable thickness); such auxiliaries will not be addressed in the following survey.
extremely involved, it is more difficult to identify and classify them, and in this account preference has been given to a more detailed discussion of the more common types of decoration.

Weisweiler suggested dividing these types into five categories: circular decorations, decorations based on the circle, almond shapes or flattened ovoids, stars, and decorations composed from repeated impression with a tool, in turn, the four first categories can be split into four subdivisions (ills. 91, 92, 93).

Circular decorations

The first subdivision of 'circular decorations' (ills. 91 and 92) includes those with neither lobed edge nor pendants (a). It is unquestionably the broadest category, incorporating Types W 17 to W 43, and can serve as a starting-point for the presentation of the main lines of the whole system. A first set comprises decorations in which the circle is filled either by interface (W 17-20) or by the juxtaposed use of isolated forms (W 21). Then come compositions based on five pentagons arranged amid the branches of a five-pointed star (W 22). The following two Types are rather close: W 23 is constituted by three elongated, intersecting hexagons and W 24 by three decagons (ills. 94). A second set comprises various star polygons inscribed within a circle: stars with six (W 25-27), eight (W 28-35), nine (W 36), ten (W 37-38) or twelve points (W 39-42) (ills. 95). A last set of decorations (W 43) consists of lozenges arranged in checkerboard fashion.

The three remaining subdivisions of Category I ('circular decorations') differ in the manner in which the perimeter of the circle is decorated: ornamentation may consist of lobes (b), pendants (c), or a combination of both (d) (ills. 96). In the circle itself the same motifs described for the first subdivision resurface, except for one previously untested type that emerges in subdivision (b), namely an infill of divers geometrical forms (W 49).
(a) (b) (c) (d)

17-21 44-47 57-60 64-66

(a) (b) (c) (d)

25-27 50 61 71-72

22

28-35 51-53 62-63 73

23

37-38 54 74

24 48 67 69-70

39-42 55-56 75

43

91. Simplified versions of central medallions as described by Weisweiler. The numbers refer to distinct types.

92. Simplified versions of central medallions as described by Weisweiler. The numbers refer to distinct types.
93. Simplified versions of central medallions as described by Welwelder. The numbers refer to distinct types; oval forms are not included here.
Decorations relating to the circle
Category II comprises lobed circular figures in which the lobes or cusps are not separated from the central disk by a band as was the case in subdivisions (b) and (d) of the 'circular decorations'. As with the preceding category, these types split into four further subdivisions corresponding in part to those listed above: (a) not enclosed by an interface band or pendants; (b) without interface band but with pendants; (c) with interface band but without pendants; and finally (d) with both these decorative motifs (illus. 93). Weissweiler details figures with four (W 76), six (W 77), eight (W 78) and ten lobes (W 79) (illus. 97), as well as a polylobed type (W 80-83). Types with six and eight lobes may evolve into figures with pendants (W 82 and 83). Subdivision (c) is constituted by exemplars in which instead of being made up of a single line the outline features a network of intertwining loops with the same number of lobes. This subdivision includes figures made up of twice three (W 84), twice two (W 86-87) and twice four loops (W 85). The final subdivision comprises a single type derived from W 86: W 88.

Almond shapes, stars and other decorations made with repeated strikes
Weissweiler discusses nine Types (W 89-97) (illus. 98 and 99) of almond shapes (or 'mandorlas') (Category III): these then split into two main groups, depending on whether they are filled with an interface pattern (W 89-95) or with arabesque designs (W 96-97); the form of the fleurons extending from the upper and lower extremities of the figure plays an important role in classification. Category IV (illus. 93) is composed of stars with six (W 96-97) and eight branches (W 99-101). The last subgroup, Category V, encompasses central decorations built up by repeated use of the tool (W 102-110). Readers are also referred to Weissweiler's typology of book envelope flaps, which follows similar lines.

Toward a classification of panel stamps

Toward the end of the nineteenth century, technical advances were having a profound impact on the art of bookbinding. Irons had grown larger over the course of the preceding decades, particularly those employed for framing covers; all that remained was to marginally increase their size and it would become possible to apply a whole unit, or even an entire decorative scheme, in a single strike. The two major categories described above (central motifs on the one hand, and ornamentation of an entire cover on the other) remain pertinent to these cases. Although executing large-scale decorations with a single panel stamp had now become feasible, craftsmen never completely abandoned unit tools for laying in borders with plain fillets or interlocking S’s.

Panel stamps were initially made out of leather, though metal soon became the rule. Gold was frequently used and may have been brushed on after blind-stamping.

It would be premature to present an account of the types of blocks used in the course of a period extending over several centuries and in widely separated regions. Evidence from various authorities argues for the existence of regional differences: tools with the name of the bookbinder and a date have already been mentioned, but it would not be hard to locate other, similar cases. By way of example, there follows an outline classification of central panels in almond shapes utilized in the Ottoman world—excluding scenes with animals.

Central almond-shaped panels

From the tenth/sixteenth century on, Ottoman production played an increasingly important role: its models were widely propagated, prompting local imitations that entail a certain uniformity in binding decoration. The compositions seem to adhere to a limited number of principles and rely on a relatively narrow repertoire. As an initial step in classifying panels at a basic level, it seems preferable to take into account only the structure of the decoration, leaving aside those auxiliary elements, such as leaves and flowers, which were more regularly subjected to variation.

In order to draw up a system of classification of central panels in almond or ovoid form on this basis, an initial arbitrary distinction can be established between panels and plaques that incorporate ichi clouds (group N, see illus. 100, 101 and 102, 103), and those in which such features are absent (Q; illus. 104 and 105, 106, 107). Within each of these two large groups, a distinction can be

204 See above. 205 Weisske for example draws attention to the Yemeni origin of the tools utilized in the framing containing a blessing on the cover of the book (Buchbinden, p. 89, for reproductions see op. cit., Ill. 19 and 66, and Diebs, bl. Hr. 2, pl. 233). 206 Derache, Cat. 32, pp. 15-26. 207 There also exist almond-shaped panels adorned with short poetical texts. See M. Özer, "Ritsik cilâ straçinmen iicili-ikleri—Features of the classical bookbinding art," Anapa 25 (1967), p. 10, although this may well constitute an exceptional case.
101. Typology of central panels (based on Déroche, Catalogue 1/2, fig. p. 18).

102. Ottoman panel, to be compared with composition NSd 7.
Paris, BNF Supplément türk 838, detail of upper board.

103. Ottoman panel, to be compared with composition NA 5.
Paris, BNF Supplément türk 311, detail of upper board.

104. Typology of central panels (based on Déroche, Catalogue 1/2, fig. p. 20).
made between symmetrical (S; illus. 100, 104 and 102, 105, 106, 107) and
asymmetrical decorations (A; illus. 101, 108, 111 and 103, 109, 112). In the first
case (S), there exist three possibilities: symmetry along the vertical axis of the
almond shape (v; illus. 105), along its horizontal axis (h; illus. 106), and finally
along both axes (d; illus. 107). Craftsmen enjoyed far greater latitude in the
case of asymmetrical decorations since they permitted more original
compositions. In the latter instance, only two categories can be proposed:
decorations that spring from one of the apexes of the mandorla (s; illus. 108,
109, 110) and those that emerge from one of its lateral sides (l; illus. 111, 112).
Blind-stamping appears in conjunction with other methods: gilding of the
whole-void (and its attendant decorations), or inlay of a thin piece of paper or
leather differing in colour from the ground, stamped and subsequently gilded
to emphasise the relief elements.

106. Ottoman panel, to be compared
with composition OS61.
Paris, BNF Supplément turc 1043, detail of lower board.

107. Ottoman panel, to be compared
with composition OS1a.1.
Paris, BNF Turc 183, detail of lower board.

Additional motifs are to be found in binding decoration from other
regions, particularly the Iranian and Indian worlds. Though groups of similar
inspiration (a reflection perhaps of local tendencies) can be identified here too,
they were the subject of so many variations that it has proved impossible to
develop a classification scheme analogous to that put forward in illustrations 100,
101, 104, 108 and 111.

Large panel stamps
Larger panels, which made it possible to lay in decorations covering the whole
of the board, have not yet been adequately classified: they usually associate
arabesque with geometrical motifs (illus. 85) or else, though this is less usual,
borrow their decorative stock-in-trade from miniatures (illus. 86). Once
stamped, the decoration was normally then totally gilded. Thanks to this
process, it became feasible to apply in a single operation both figurative and
non-figurative decoration to the entire cover of a small format volume
(excluding the frame if desired). In other cases, the binder had to apply the
decoration in two, four, or even eight stages with the same stamp,

206 See Haldane, Bookbindings, p. 87, no. 90 as well as p. 104, no. 102. 209 See Haldane,
Bookbindings, pp. 160-161, no. 149.
108. Typology of central panels (based on Droche, Catalogue I/2, fig. pp. 22-4).

109. Ottoman panel, to be compared with composition DAI 2.
   Paris, BNF Supplément turc 192, detail of upper board.

110. Ottoman panel, to be compared with composition DAI 6.
   Paris, BNF Arabe 488, detail of upper board.
corresponding to half (or quarter, etc.) of the surface to be decorated. Such marks the point of contact between two successive stampings can be readily discerned. Such tools presupposed a measure of consistency in the formats available; occasionally, the binder had to stamp in a band to make up for empty space left between the panel and the edge of the cover.

210 F. Déroche and A. von Glahn, *Bookbinding and Bible Art: the Parchment of Manuscripts in Islam* (Richter, Museum für Islamische Kunst, 3) (Berlin, 1999), pp. 74, 78, 82. 211 See e.g. Haldane, *Bookbindings*, p. 118, n. 113. 212 Haldane, *Bookbindings*, p. 79, n. 82; Dada, *ils Hors* 1, pp. 73-74 and pl. 97; Déroche, Cat. 1/2, pp. 132-133, no. 541, pl. XII B.

Type III

Type III consists of bookbindings which originally comprised solely a front and back cover together with a spine (ill. 76). These were often made in the West and therefore incorporate technical features or other elements, such as raised
bands and clasps, omitted from the foregoing account. The bindings of early Christian Arabic manuscripts long adhered to a model that was closely akin to Greek bindings. A detailed exposition of their features can be found in specialised manuals.

On the other hand, there exist bookbindings from certain parts of the Muslim world that possess neither fore-edge nor envelope flap. They seem to have enjoyed a considerable vogue in Central Asia and Afghanistan up to relatively recent times (eleventh-thirteenth/eighteenth-nineteenth centuries). Bookbinders have kept to the techniques of their traditional craft, particularly as regards the manner of attaching text block to covers. Their decorative schemes, too, seem to have been rather idiosyncratic. Several are covered in paper, while the decoration of the boards – sometimes incorporating the bookbinder’s signature217 (illus. 75) – also presents special features in respect of both overall form and ornamental motifs.218

Evidence for the History of a Manuscript

Throughout this handbook, readers have been presented with various methods for assessing the age of a manuscript: analysis of the writing surface, the script employed, the way quires are collated, and so on. Sometimes these techniques provide the only clues – apart from any possible linguistic evidence – as to the date at which the copy under scrutiny was written. But a manuscript may also contain more precise clues to dating, such as a colophon, statement of patronage, or other mark of ownership.

Title page

In manuscripts written in Arabic script, the title of the work, sometimes accompanied by the name of the author and various notes that can guide the scholar in reconstructing their history, often appears on the recto of the first folio (see illus. 113a, 113b, 114a and 114b). Because this leaf is in a particularly vulnerable position, in many manuscripts it is no longer extant (or may have been replaced at a later date). Thus whenever a manuscript with a title page is being examined, special care must be taken to study the condition of this leaf, bearing in mind that the information found there, beginning with the title of the work, may be erroneous or falsified.


1 As in the Chapter ‘Books and their ornamentation’, the ‘first’ folio refers here to the first ‘useful’ leaf of the manuscript, even if foliation or pagination sometimes designates it by another number. As a general rule, the first useful folio will be labelled ‘fol. 1’ or ‘fol. 1 v’ in this chapter, except when a specific manuscript is involved. 2 The title may also appear in other places: the top edge or lower edge of the book (visible when the manuscript is stored flat, in accordance with Oriental practice), or the fore-edge flap of the binding, or even on a label glued to the upper board.