Les matériaux du livre

**TABLEAU V – Bibles de forme oblongue.**

<table>
<thead>
<tr>
<th>Date</th>
<th>Lieu</th>
<th>Manuscrits</th>
<th>Dim. ext. Rapport H/L</th>
<th>Justif. écrite Rapport H/L</th>
<th>Nbre col.</th>
<th>Nbre lignes</th>
<th>U/R</th>
</tr>
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<tbody>
<tr>
<td>1276-1278</td>
<td>St-Pétersbourg, Bibl. nat., EBIP II 338</td>
<td>100/217=0,467</td>
<td>122/140=0,87</td>
<td>1</td>
<td>11</td>
<td>12,2</td>
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<td>1279-1290</td>
<td>Parme, Bibl. Palat., 1882</td>
<td>142/152=0,93</td>
<td>80/102=0,78</td>
<td>1</td>
<td>9</td>
<td>10</td>
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</tbody>
</table>

Manuscrits datés.

**56**

<table>
<thead>
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<th>Date</th>
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<th>Dim. ext. Rapport H/L</th>
<th>Justif. écrite Rapport H/L</th>
<th>Nbre col.</th>
<th>Nbre lignes</th>
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<tr>
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<td>271/320=0,853</td>
<td>216/235=0,91</td>
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<td>27</td>
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<td>275/284=0,965</td>
<td>220/240=0,92</td>
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<td>285/334=0,855</td>
<td>213/237=0,89</td>
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<td>22</td>
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<td>300/320=0,933</td>
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<td>136/162=0,833</td>
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<td>XIIIe s.</td>
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<td>123/165=0,741</td>
<td>70/112=0,62</td>
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<td>83/102=0,81</td>
<td>1</td>
<td>11</td>
<td>8,3</td>
</tr>
</tbody>
</table>

Quelques exemples de fragments de manuscrits non datés.

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Instructions on the art of bookbinding attributed to the Rasulid ruler of Yemen Al-Malik al-Muẓaffar

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Dans l’état actuel de nos connaissances, il s’agit d’un des cinq textes arabes antérieurs au XIXe siècle sur la reliure qui nous soit parvenu. Dans le cas présent, les enseignements sur cet art sont attribués au souverain nasulide du Yémen, al-Muzaffar Yūsuf al-Ghasanānī (mort en 694 h/1294); ils constituent le septième chapitre de son manuel des arts et des techniques intitulé « al-Mukhtara fi funun min al-qur’ān ».

Pour autant qu’en sache, seuls trois témoins de cet ouvrage extrêmement intéressant ont survécu. Nous avons la chance de disposer de deux copies très anciennes, l’une à Déir al-Katibah, au Caire (datée de 727 h/1327), l’autre à al-Khūzaymīh al-Aṣṣafyah, Hyderabad (datée de 876 h/1471) et la troisième, conservée à la Bibliotheca Ambrosiana, à Milan, qui est datée de 1184 h/1770. Bien qu’il reprenne en partie l’œuvre d’al-Mu’izz ibn Bādīs intitulée « ‘Umdat al-kuttāb », ce texte décrit selon une progression logique toutes les tâches du reliure. L’auteur commence par l’émolument des outils, puis poursuit par le pliage des feuillets, la préparation des gordes, la couture des cahiers, le collage, la mise en pressse, la fabrication des dos, la couture des tranches, la préparation et le tannage du cuir, son montage sur les dos et l’estampage. On notera également un certain nombre de termes techniques très différents de ceux précédemment rencontrés, par exemple sāqī (tabat), ṭabāh (recoeur), ṭasībāh (ais de carton).

In my search for Arabic texts on the art of bookbinding I have been led to a highly interesting manual of arts and crafts entitled al-Mukhtara fi funun min al-qur’ān attributed to the Nasirudin of Yemen al-Mulik al-Muzaffar Yusuf al-Ghasanani (d. 694 h/1294). The Mukhtara can be divided into two major parts: the first part dealing with the arts of the book and the second one treating of martial arts. The first part is similar to the well known work of the Zirid ruler of North Africa al-Mu’izz ibn Bâdîs (d. 454 h/1062), entitled 'Umdat al-kuttāb wa-‘idādat dhawq al-‘alîbâh. Like the ‘Unmudah, it contains chapters on the calamus, ink, dyes, adhesives, tanning leather, binding and paper. Indeed, some paragraphs are directly taken from the ‘Unmudah. The author of the Mukhtara’ quotes on several occasions al-Mu’izz ibn Bâdîs, referred to as Sâhil (ruler of al-Mahdiyyah). It is of significance that these two works should have been composed by Arab rulers, as it underlines the importance which was attached to the arts and crafts in Islamic civilization. The section on bookbinding which forms Chapter Seven of the whole composition is now the fifth text of this kind known to have survived.

The author begins his instructions with a section on tools and implements which for the most part is similar to the text of Ibn Bâdîs. Here we find hīlālī (marble slab), misārin (whetstone), ṭabāh (awl), miqqas (scissors), ibīr (two needles: one for endbanding and the other for the sewing of quires), sānīf (sword), shafrāh (cutter, trimmer), miṣṭar (rulers: misṭarat al-rasām wa-al-hākib, ruler for drawing and designing; misṭarat al-shāqib, heavy duty ruler), nisīb (folder) and ṣanāṭ (compasses), ṣaqqāt (small and large burnisher, polisher; the latter called ṭāst), as well as stamps and tools ṭabālī (ornament; oval or round-shaped tool) and ṭaṣābīh (round points).

However there is no mention of ṭaṣābīh (malet), and whilst Ibn Bâdīs describes two types of presses (miṣyarat), the author gives a description of a screw press (qarrās) consisting of two wooden screws (hulazūn, fīlīkh) and two boards (ḥabilī: the screws and the boards being made of two different types of wood. The bookbinder’s press is usually made of hard wood such as abantis (ebony), ḥīlālī, ṭabālī (myrobolan), ṭībī (another type of ebony) and ṭamīr (tamarind). Its boards should be slightly longer than the length of the book and their width ought to be comparable to the palm of the hand. The thickness of the board in turn should not exceed half of its width.

It is interesting to note here that the Hyderabad copy contains an additional passage on tools and implements where the following are mentioned: ṭaṣābīh (malet for making pastebords), nisīb al-dālik (burnisher, polisher).

1. So far three witnesses of this work have been located: Déir al-Katibah, Cairo (dated 727 h/1327), al-Khūzaymīh al-Aṣṣafyah, Hyderabad (dated 876 h/1471) and Bibliotheca Ambrosiana, Milan (dated 1384 h/1770). The attribution of authorship to al-Mulik al-Muzaffar, although not found in the text proper (preface or colophon), is seen on the title pages of the Cairo and Milan manuscripts. (See also Abd Allâh Muhammad al-Ḫalâl, Mu‘allāt ḥulālī al-Yamani, Wiesbaden, 1979: 54-56.) The Hyderabad manuscript is quite different from the other two. It is divided into fifteen chapters as opposed to ten. It contains among other things a chapter (al-ṭabāh al-hākib) on the making of local paper (al-ḥaqqīd al-ḥulūl). However, Chapters Nine, Ten and Fifteen are wanting. For more information about these manuscripts see my Glossary of the Arabic manuscript book (in press).


3. The chapter on the art of bookbinding has been based on the edition of two manuscripts (Cairo and Ambrosiana) and can be found in my Glossary (see n. 1). In addition to this work and that of Ibn Bâdîs are those of Zirid al-Iṣbīlî (d. 628 h/1231), Abd al-Rahām ibn Abī Hamīd (d. 9 h./158 cent.) and Ahmad ibn Muhammad al-Faṣṣafī (d. 805 h./1401). For more information see my two recent articles “Arabic bookmaking and terminology as portrayed by al-Ḫalal in his ‘Ṭabāh al-ṭayyīr fī funun al-taṣābīh”, Manuscripts of the Middle East, 5 (1990-1991): 106-113 and “Ibn Abī Hamīd’s didactic poem for bookbinders”, Manuscripts of the Middle East, 6 (1992): 41-58.

4. The word ṭaṣābīh appears only in the Hyderabad copy: wa-yūḏīn bi-kull min ṭalīb al-maqqāf nisīb. For illustrations of different screw presses see Gulnar Bosch, John Carrwell and Guy Petherbridge, Islamic bindings and bookmaking (Chicago, 1981): 40, 52.
extension of the lower cover. A sheet of white paper, the length and width of the bitanah, is then cut out and pasted (using asrash) onto it. Subsequently another sheet of paper, larger by the size of the small finger, is cut. It is pasted in such a way that the protruding portion and part of the bitanah are folded round the back of the first quire. This is done in order to ensure that when the quire is sewn the endpaper and the bitanah are sewn with it.

The next procedure is the sewing of quires (khijatih). For this a thin thread is needed. The author recommends a cotton thread made up of 5 to 7 strands (khatl) depending on the size of the book. The sewing begins with the last quire by pulling the needle through the markings on the spine. Here the author describes a typical link-stitch (or chain-stitch) technique using two sewing stations. Having sewn the quire the spine is pounded and the book is then placed in the press (qarras) and subsequently its spine (ka’r) is rounded (tablil, tabar). This is done placing the press with the book in it on the knees and manipulating the fore-edge (ru’s al-karar) with the fingers. The spine should not be too round as this would damage the glosses during shaving, nor too square for this would precipitate the disintegration of the book.

After the rounding of the spine, the spine is pasted with asrash, in such a way that the paste penetrates in between the quires, and pressed. It is important that the spine and the fore edge (ru’s al-khit) are of the same thickness or at least the fore-edge is not much thinner than the spine. A strip of paper of the width and the length of the spine is then taken and passed onto it. Another strip of paper wider than the first one by two fingers is pasted over it in such a way that additional portion of it forms a hinge (jamali). A third strip (of the size of the second one) is then placed in the manner of the second one to form the second hinge. After each operation a folder (nizat) is used in order to achieve a smooth finish.

After this, two pieces of thick cloth (khijat) of the width of the spine and three fingers long (ca. 5 cm) are attached to the ends of the spine. The spine is then pasted evenly using a tracer (mihrab) and drawing a pattern of lines resembling a chessboard. The book is left in the press to dry. When the spine has dried, the book is taken out of the press, the hinges are pasted with ashras onto the inner linings and left to dry.

6. There appears to be some confusion, in this and other texts on bookbinding, between mithl and mithl. This confusion stems from an unpointed text. In the Hyderabad witnesses both words are given as mithl. However, it is clear from the context that these are different words. This confusion finds its reflection in the definition of the word mithl itself which may carry the meaning of the mithl (see Glossary; see also M. Piamenta, Dictionary of post-classical Yemeni Arabic, Leiden, 1990-1991, 2 vols., s.v. mithl - carving tool; Islamic bindings: 81, n. 140).

7. Cf. n. 6.

8. Perhaps more likely a cutter for undoing the sewing (see Glossary, s.v. kharn).

9. Glossary, s.v. mihrab.

10. Piamenta gives the word sijabah (thus) as a "belt" (see his Dictionary). Other terms for this most salient feature of Arabic bookbindings are liwab, ashras, muri, ra’idah and miqal (see Glossary).

11. This description is based on the Hyderabad copy.

Next, the author describes the making of pasteboards (taqīd al-aqaffrzy). For this purpose a sheet of paper of the size of the book is taken and pasted with nashān. Another piece of paper of the same size is then placed over it and smoothed with the palm of the hand. Over this a dry sheet of paper is put and the whole is smoothed with a folder. The dry sheet is then taken away and another sheet pasted over the first two. If a sheet of the same size is wanting, a smaller piece can be used and joined to another piece, taking care, however, that the joints (rasāf) are straight. One can use anything from 6 to 12 sheets (tikāh) depending on the size and thickness of the book. All together three pasteboards (taqīd al-aqaffrzy) are made: two for the upper and lower covers and a third one for fore-edge and envelope flaps.

The pasteboards are left hanging on the wall, away from direct sunlight, to dry. When dried, a line is drawn along both sides of the pasteboard using a ruler (nīsār) or square (zinnāgh) and then three drops of ashrās are placed on the line; one drop in its middle and two drops at its ends. The same is done for the second pasteboard. The pasteboards are then mounted, in such a way that the spine protrudes a little, and placed in the press. If they need shaving (jazz), their corners are first measured with a square (zinnāgh) and a pair of compasses (fīkār). Once their measurements established the pasteboards are cropped, one by one, with a trimmer (shufrah), and the cut sides are smoothed with a file (mīhrad) or thick piece of glass (zajīf) or pumice (mīhakk al-rij, bajjar al-qaṣīf).

Then comes the preparation of the flap (ra'ā). The width of the tablāh becomes the same as the width of the fore-edge (alīth al-raqā'). The pentagonal envelope flap takes up half of the width of the pasteboard. The two equal straight sides of the pentagon are in turn half of the width of the flap, that is one fourth of the width of the pasteboard.

Having finished with the preparation of the pasteboards, the bookbinder returns to the sewing of endbands (taqīd, tashkīz) for this purpose a cotton thread, of the thickness used for sewing quires, and an endband core (farīf) is chosen. The endband core is a strip of leather (saqī) of the width of one half of the little finger and one shib long. It is glued on the inside with nashān, twisted and dried. The primary endband threads are sewn with a needle thicker than the one used for sewing quires. The holes are punched with a thin awl (shīb) and the thread is pulled over the endband core and the top of the spine (ra'ā) of each quire. The final stage of endbanding (decorative sewing), called fākh, is done with a silk thread.

The author then embarks on the selection of leather and its tanning (shībīg), paring (fāsh) and dyeing (shībīg). This section is to a large extent a repetition of the text of Ibn Bādīsī. However, the Hyderabad manuscript at the end of this chapter contains other recipes for dyeing. Here is mentioned, among other things, the dyeing of goat, calf and sheep skins.

Once the leather is prepared and dyed, it is then burnished. The covers (fāshīh) are pasted on the outside and the leather glued onto them. The leather is then smoothed and rubbed with a folder (nīsāf) and thumbs. The fore-edge (tablāh) and envelope flaps (ṣūqī) are mounted and their edges rubbed with a wooden burnisher (al-mīkhāl al-khāshāh). The covers and the envelope flap are subsequently folded and left for an hour under a stone. After that, the borders (bawāṣṭīh al-kīlāb), fore-edge and envelope flaps are marked with a pair of compasses using the width of the burnisher (mīqālah) as a measuring unit. The covers are smeared with wax (shān) and polished with a burnisher along the markings previously established with the fīkār. The mīqālah is heated, cooled down in water and the burnishing is done with the use of the ruler.

If tooling (nasāf) is required, the binder, using a fīkār, draws two lines from the top left hand corner to the bottom right hand corner and vice versa, to mark the centre of the cover with a cross. Here, he may draw a circle or an eight- or six-pointed star (muthamman, musālada) for a centre medallion.

After tooling, the edges of the leather are pared and the turn-ins (bawāṣīn) are cut straight, the covers and the spine are pasted (either with nashān or ashrās) and the whole mounted on the inner linings. A piece of paper is placed between the cover (fāshīh) and the textblock (kīlāb) to prevent moisture from penetrating onto it. The whole is left on a stone to dry. When dried the pieces of paper are removed and the turn-ins (al-bawāṣīt al-maṣīt) are smoothed with a mīkhāl. These, in sum, are the main bookbinding procedures described by al-Malik al-Muṣaffār.

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13. The word taqīd is also used in a more general sense as “bookbinding” (Piaventi, Dictionary).
14. In this type of a pentagonal flap the top of the triangle reaches the middle point of the first leaf or fly leaf and if closed on the outside, this uppermost point corresponds exactly to the middle of the centre medallion.
15. The word taqīdīzī appears only in the Hyderabad copy; al-taqīdīzī gawāmm al-taṣīlīzī. Both these words are used in the sense of a preliminary (primary) endbanding as opposed to endbanding with silk (fākh). Thus the books provided with silk endbands are called al-kāf al-muṣaffār (see the last sentence in the Hyderabad witness).
16. For illustrations depicting endbanding see the Islamic bindings: 54-55.
17. This section in the Hyderabad manuscript is much longer. The burnishing here is done with a musālada.
18. This somewhat lengthy section in the Hyderabad witness also contains instructions on making a register (ṣūqī), scrolls (farīf) and pen boxes (nasāfīm).