

Foreword

I'm honoured today to submit you some further considerations on the early binding structure of Arab-Islamic manuscripts.

This is possible, after my personal interest on this subject, because of my involvement, in the past years, in some conservation projects in Yemen and specifically in the Dar al-Makhtutat of San'a', thanks to Ms Ursula Dreibholz, that all of you certainly know for her master work of conservation on the unique find of early Islamic manuscripts fragments in Yemen.

My work in San'a' allowed me, beside the main tasks, to analyze the bookbinding fragments coming from the same source and because of my archaeological approach to the bindings I had the occasion to analyze and recognize structural evidences of a certain importance about the construction and movement of the so called "box-bindings", the earliest binding structure known so far for Islamic manuscripts.

What I'm going to present today are just suggestions for further deeper investigation, thoughts I've been developing during the last years about this subject and the preliminary results of an ongoing research. I wish to thank here all the people who made this possible¹, and TIMA to have accepted my paper.

Some further considerations on early Islamic book bindings

Definition of early binding

When we talk about "early" Islamic bookbindings we usually refer to the so called *box bindings* (or bindings "type I", as Deroche for the first time classify them in his manual on the Islamic Codicology).

These kind of bindings are not the oldest, they are just the oldest known so far and unfortunately not much has been written about their structure and construction, which have specific features that distinguish them from the later one.

Studies about early bindings

The major work on the subject still remains the one published right after the sensational find of Kairouan, in Tunisia, where many fragments of medieval bookbindings have come to light beside early manuscript fragments in 1948².

Even if the main concern of that work is cover decoration, the attempt of describing structural features from the evidences left on the fragmentary finds is emblematical: beside the detailed description of the decoration, in fact, some important construction details are listed (the edge pin types, the channels for the endband lacing, the type of board attachment), of which some result unworkable (like the sewing) and many other remain unclear because they were difficult to interpret, compare or recognize.

Some more interesting specific features are recorded in the description of each single piece. The great value of this publication remain, in fact, the description of every single binding found and the fact that it was published very soon after the find.

¹ First of all Ursula Dreibholz who made possible my first involvement in a conservation project in San'a' in 2004, then the Yemeni authorities and friends and many, many others who have to bear my interests.

² Marcais, Georges and Louis Poinssot. *Objets Kairouanais IXe au XIIIe Siecle: Reliures, Verreries, Cuivres et Bronzes, Bijoux*. vol. 1 Tunis: Tournier, 1948.

Another important paper is the one which deals with the origin of such particular class of bindings and try to trace its origin from the Coptic bookbindings, at that time recently discovered in Egypt³. In this work an intriguing series of considerations are made around the decoration patterns, their common origin and spreading, but only few mentions are dedicated to structural features.

One is related to the endbands which are supposed to derive from the Coptic ones, but unfortunately, at that time, it was almost impossible to demonstrate such hypothesis because not enough remnants of early Arab-Islamic endbands seems to have been found (or recognized and described, anyway) on the Kairouan fragments.

Jumping to more recent times, we have to remember a few important papers about some single bindings in which more structural details are investigated⁴, and general articles on the Yemeni bindings found, with 15.000 early manuscript fragments, in 1972 in San'a⁵.

The problem is, of course, that still more questions than answers rise about and around the structure and construction of these objects.

I'll list what, on my opinion, still needs to be investigated and clarified about this subject. And also what I noticed during my work and investigations and may be worth to report, which is the core of this paper.

Early Islamic bookbinding known features

We all know that the manuscripts, on vellum, between the IX and XI/XII century A.D. (III-V/VI H.) are of oblong horizontal format and usually enclosed in a binding on wooden boards with a protective leather wall all around the edges, closed with a tanned leather braided strap, fastened in some way onto a metal edge pin (fastened or not).

Starting from the inside of the books and following the ideal construction of a binding, let's discuss some details and check what we still don't know about them.

Sewing

We all know that the Islamic manuscripts have unsupported sewing structures on two or four stations (chainstitch and/or linkstitch). But it would be interesting to know something more about it: kind, dimensions and twist of threads, number of stations, and spacing between them. And what is very important, to understand the mechanic of the object, is the kind of attachment between sewing structure and boards, related to different periods, provenance and binding structure.

³ Peterson, Theodore C. "Early Islamic Bookbindings and Their Coptic Relations." *Ars Orientalis* 1, 1954.

⁴ Deroche, Francois. "Quelques relieures medievals de provenance Damascaine." *Revue des etudes islamiques* 54 (1986) 85-99 ; "Un reliure du Ve/Xie siecle." *Nouvelles des Manuscrits du Moyen-Orient* 4 (1995) 2-8 ; "Un manuscrit coranique du IIIe/IXe siecle." *Revue des etudes islamiques* 60, no. 2 (1992) 585-595.

⁵ Dreibholz, Ursula. "Research on early Islamic book covers and book structures in San'a." *Yemen update: bulletin of the American Institute for Yemeni Studies* 32 (1993) 7-8. ---. "Some aspects of early Islamic bookbindings from the Great Mosque of Sana'a, Yemen." *Scribes et manuscrits du Moyen-Orient*. Francois Deroche and Francis Richard, eds. Paris: Bibliotheque nationale de France, 1997. 15-34.

About the sewing threads used in this bindings we know almost nothing except the use of thick plain threads which is evident to the eye; only further detailed observations and analysis will give us some more information.

Regarding the sewing stations we have to record that not only the usual pair number of stations is used, some textblocks, in fact, are sewn on three unsupported sewing stations. Is it just an occasional feature or does it imply something related to period or provenance of the book?

What seems to be quite common to almost all the arab Islamic sewing structures is the narrow space between the sewing stations, especially if compared to the height of the spine, which is narrower than we would probably use today on that dimension of book.

This choice may be based on the confidence on another structural supporting element about which we know almost nothing for this class of bindings: the endband.

Board attachment

The board attachment is not always and only based upon the sewing, there are also structures in which only a parchment stub, or an entire folio, part of the first and last gatherings, is glued onto the inside of the boards as a joint, under the turn-ins.

More often the proper attachment is made by a real lacing of the sewing thread to the boards: In many of these cases also narrow “V” shaped channels are cut into the wood to accommodate the thickness of the thread.

The different routes and patterns of these lacing still need a deep analysis, to know, for example, if the textblock was always sewn onto the boards and which one was the usual, or most common, direction of sewing.

Early Islamic bookbinding unknown features

Now let me introduce the two main topics of my speech, which are obviously the subsequent steps in the construction of a bookbinding and the other fundamental structural part of it.

Spinelining & endbands

Up to now no one seems to have paid enough attention to these features which imply a lot of consequences on the movement and strength of the book.

We usually regard to the Arab Islamic book binding as a “weak” structure because it has an unsupported sewing, but without considering other structural elements, since the major studies on the

Islamic book structures are mainly devoted to the classical “type II” bindings, which are completely different.

Unlike the greek bookbindings in which a great strengthening role has been recognized and attributed to the elaborate Byzantine endbands, the same important role hasn’t been recognized to the Arab Islamic early endbanding and spinelining techniques, probably because no one had the chance, or the interest, to observe and describe them.

Spinelining

The spinelining on type I bookbindings is, in the surviving examples I’ve recognized, made of a thick strip of leather, pasted onto the spine of the textblock providing a lot of aid and strength to the opening of the book.

The construction of some models demonstrates what is intuitive, confirming the structural function of this element in the book opening and movement.

The fragmentary examples I’ve observed don’t allow us to determine with certainty if and when this full length spinelining also protrudes beyond the joints being attached to the boards. This would be important to determine and understand if the spinelining is also actively involved in the board attachment and in supporting the opening of the cover.

Endbanding

Going further in our ideal construction of an early Islamic box binding we should start to consider the other feature which has been noticed on some bindings or fragments and it’s the second fundamental structural detail we’re going to discuss: the endband.

Since the beginning of the studies remnants of silk coloured threads have been found at head and tail of the books and at the corners of the boards, leading to the conclusion that these were what remained of an endband⁶ that has never been described or reconstructed.

Collecting all the details related to the endbands, which we find in the published descriptions, we realize that an early Islamic endband was sewn with coloured threads, that it sometimes had a rolled leather core and that on the edge of some boards there were correspondent channels. On some other bindings only remains of threads were found still passing throughout a hole on the boards.

Endband “a”

From the endbands remnants in the Yemeni find I’m able to say that one type of endband (we may call it “a”) was actually sewn on a rolled leather core with a primary sewing, in every gathering, and often it had a secondary sewing in coloured threads.

⁶ Marçais, Georges and Louis Poinssot, 1948; Deroche, Francois, Quelques relieures medievales de provenance Damascaine. Revue des etudes islamiques 54 (1986) 85-99.

Another important detail to notice is that the primary structural sewing passes throughout the leather spining, functioning as mechanical connection between textblock, spining and boards.

The spining is glued with the flesh side in contact with the spine of the textblock. This detail may be important when we try to interpret unclear evidences of leather remnants inside or outside the boards.

In all the cases I've examined the endband is quite thick, compared to the dimension of the manuscript, with a proportion rate comparable to the Byzantine endbands. For this reason we can easily understand what determinant role, such an endband, plays in the strength of the binding and in its opening.

Also for the endband I thought to make a model book to analyze the real function of such structural element. I was able to achieve almost the same pattern of the primary sewing found on the Yemeni remnants, working the endband in two slightly different ways. Given the condition of the originals is not yet possible to decide which one of the two ways is the original one.

Unfortunately for the kind of attachment of such type of endbands to the board I was not able, at this stage, to propose any specific solution. The only reference and starting point for further research, remain the drawing of the Objets Kairouanais, in which the authors give the sketch of a slot cut into the thickness of the board, probably to accommodate the endband slips, but no one of the Yemeni boards has such a slot.

However the structural role of such endband is evident in the opening of the binding sample, with two stations unsupported sewing, and provided with leather spining.

Endband "b"

Still the endband "a" doesn't explain all the known evidences, in fact there are other occasions in which, on the box bindings boards, a not very deep channel with an hole at the end is found.

One important board from the Yemeni find, with a piece of endband still intact enough, gives us the explanation: it's obviously the lacing channel for a completely different kind of endband (we may call it "b").

This endband seems not to have any core and it was worked with plain or coloured threads, starting on one board, passing in all the gatherings and ending in the other board, on which the small channels, if present, were used to accommodate the thickness of the threads.

The remnant of this endband is very important because, for the first time, we can demonstrate the Theodore Peterson theory of a relation between Coptic and early Islamic endbands.

Because of the presence of a few remains of coloured threads we should hypothesize also the presence of a secondary sewing on this endband structure. It is impossible at this stage to know what aspect the secondary sewing could have had on both type of endbands. It is neither possible to completely exclude the use of any sort of core, even if it seems to be quite unlikely for this endband structure. No clear evidence is found about the kind of spinelining associated to this endband type.

Once more I decided to test the construction of this endband for a complete understanding and also this simple structure plays a supporting role in the binding structure.

At this stage it's impossible to determine which type of endband is older or whether there are only geographical different traditions which may explain the use of one or another of the two types.

What I can add more is that the same kind of endband is found on another Yemeni manuscript, much later than the previous and belonging to the San'a' Library, a paper manuscript probably of the late XIII/early XIV century A.D.

The manuscript has lost completely its binding, but the sewing was almost intact and the absence of other holes or threads on the spine testified it was the original early XIV century sewing. At the head and tail there are remnants of endbands big enough to state the similarity with the one found attached to the board of the box binding. This discovery lead to the question about the permanence in the use of older techniques on later bindings.

We have no idea of what kind of binding this manuscript could have had, but we find the same endband used in the horizontal box bindings on wooden boards and on a paper manuscript of vertical format.

Conclusions

At the end I'd like to suggest some more investigations to be done about influences and parallels between Coptic, Islamic, Byzantine and Georgian bookbindings. All these bookbinding traditions have different elements in common, which may be just casual, but that it would be worth to be investigated under the aspect of the relation between culture, religion, craftsmanship and also the simple adoption of easy spontaneous and effective solutions for practical problems and aesthetic reasons.

I'm not an art historian so I'll leave the subject of the decorations to experts, but it is also evident to my eye that there is a similarity between the Georgian and Coptic bookbinding decoration patterns as well as the almost identical decoration pattern on the spine of some Byzantine and early Islamic binding.

Going to smaller but structural details an amazing similarity I found between the shape of the iron Islamic edge pins and the Georgian ones. The same parallel may be traced between the braided leather straps of Byzantine and early Islamic bindings. Not to talk about the fastening features of some Coptic and later Islamic bookbindings.

Still a lot of research work needs to be done in the field of the history and archeology of the "oriental" bookbindings.

Most of the information about the construction of the early Islamic bookbindings, I was able to give you today after the simple observation of the objects. It means that what still lacks is the will (interest, time and money) to collect and spread this kind of information. Nowadays we are very far from the times in which the archaeological discoveries were soon published to allow wider access to collected information.

Studies and researches were and are possible also thanks to the Sylloge and the Corpora, because the collection of information gives the possibility to develop hypothesis and theories and to make statistics. A simple collection of detailed information of the San'a' bookbinding fragments, like Kairouan, for example, would enormously widen the knowledge and understanding of the early Islamic bindings and it would possibly open new fields of comparative researches with other binding traditions, may be giving a very small further contribution to the general understanding of the cultural and social history of the mankind.

Without a real knowledge of the objects we cannot have any proper conservation of them.