Lesser-known features of the Ethiopian codex

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Despite the recent increase of attention to the Ethiopian manuscript culture, our knowledge of the historical features of the Ethiopian codex remains limited. It is confined to the information gathered in a few publications that treat the topic in concise way, or it excludes features that appear non-typical or uncommon, or it sticks to the description of the manuscript culture as it appears today without attempts to obtain a historical picture. The items preserved in the manuscript collections outside Ethiopia are not always helpful in reconstructing the historical appearance of the Ethiopian codex. A substantial number of manuscripts preserved in collections outside Ethiopia were repaired and due to that lost many (or all) remnants of their historical bindings. The catalogues of the collections usually treat the bindings very briefly and do not concentrate on single details. In the 19th and the most part of the 20th centuries, the scholars were interested primarily in texts and philological elaborations.

In the indigenous context of Ethiopian ecclesiastic libraries, it is still possible to find a few original bindings, preserved at least in part or nearly in full. Also here, they are gradually perishing insofar as old manuscripts disappear, or their bindings get repaired and “renovated”.

Here below, after providing some generalities on the topic, I will briefly refer to a few codicological features of the books that I observed during several years of field research in North Ethiopia (East, South, Central Tigray), where I was able to see and check scores of codices. Those features have not been much attended in the scholarly literature; not necessarily spectacular, ancient or unknown, they are reminiscent of the local manuscript-making practices of the past on one hand, and of the history of individual manuscripts on the other hand, and should be taken in consideration for evaluation of each individual codex.

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1 In the recent years (2010-15) also in frames of the project Ethio-SPaRe (the article was completed with a few additional details at the end of 2014).
Common Type of Binding

Boards

The main type of binding of the Ethiopian codex is relatively simple: the quires containing the text are sewn between two wooden boards (fig. 1).

Fig. 1a-b: Typical binding: two wooden boards, two pairs of sewing stations (Tägoga Yohannes, Central Tigray).

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The boards are commonly made of Cordia africana (wanza), Olea africana (wāyra), or cedar, though other kinds of wood are also used. They are cut with an adze (not with axe), and rarely have a perfect (square or rectangular) form. The size of the boards ranges from small, ca. 10 in height, to quite big, more than 40. The boards are usually not more than 3 cm thick. In many codices that I examined one or both boards were broken along the grain and repaired, sometimes very skilfully, with cords or leather strings, or with wire. One has to wonder, though, if such a board is always the product of repair, and whether it is possible that a board for very big or even average codex could be manufactured of two smaller pieces of wood joined. This could be more practical for many areas in Ethiopia where wood is not plentiful. To accommodate the threads of the sewing, sets of holes are made in the boards, close to the edges (s. fig. 2), by means of awl or similar instrument. Re-use of boards through making new sets of holes is quite common.

2 The traditional process of manufacturing the Ethiopian codex has been described several times, in more or less detailed way; e.g., ASÄFFA LIBÂN 1958, SERGEW HABLE SELASSIE 1981, FÄQADÄ SÖLLASE TÄFÄRRA 2002 a.m., BALICKA–WITAKOWSKA 2007: 749a-52a. For a more analytical and comparative approach, see, e.g., SZIRMAI 1999, BOZZACCHI 2001, and AGATI 2009: 356.

3 On the books which I examined in East Tigray it was not possible to ascertain whether the outer sides of the boards received any additional treatment (cp. SERGEW HABLE SELASSIE 1981: 24, who reports that “wax is used to smooth both sides of the boards, but the outside is treated further by rubbing with a piece of cloth”; FÄQADÄ SÖLLASE TÄFÄRRA 2002 A.M.: 205 reports even “exotic” ways of treating the boards).
Sewing

Sewing is carried out on pairs of sewing stations: one pair for a small codex, two pairs is the most wide-spread type (s. fig. 1, above), and big-size codices are sewn on two or three pairs. For each pair of sewing stations, one single thread is used.

It is said that threads were made out of guts and sinews in the past; vegetal threads made out of linen, cotton string or twine were and are still in use. Today strong synthetic threads, very cheap and accessible, are also widely used.

For each pair of sewing stations, one long thread and two needles are needed (fig. 2). A thread is led through the set of holes in the front board. Both ends of the thread are of equal length. Two needles moves in opposite directions: they enter the quires from the spine fold at different holes of the same sewing station; each passes in the centrefold in the direction against the other, and exits at the opposite hole. At this point, a link at the previous stitch is to be made, and the needles enter the holes in the spine fold of the next quire. The sewing of this type is sometimes called (Ethiopian) link-stitch sewing. The result is solid, dense chains of stitches which are visible on the spine of the codex (fig. 3), and two threads are visible in the centrefolds of the quires. The sewing is executed at all quires one by one, and the threads are led through the back board; then they are led one or more quire back, and get knotted in the centrefold. The same pieces of thread are used for both sewing the text-block and attaching the boards.

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4 The existence of other types (four pairs, or three sewing stations) has been reported; cp. SERGEW HABLE SELASIE 1981: 24, BOZZACCHI 2001, PATERSO 2009.

5 Vegetal threads are reported to be impregnated with wax (FÄQADÄ ŠOLLASE TÄFÄRRA 2002 a.m.: 214), but at least in the areas that I was visiting, this practice appears to be uncommon.

6 One of the main features of this type of sewing is that it is carried out as chain stitching only, without the so-called “sewing support” (an additional cord or strip of leather around which the sewing threads can be wrapped). This feature is akin to the way in which the late Coptic codices are sewn (SZIRMAI 1999: 32-34), and is sometime referred to as an indication to the considerable age and conservatism of the Ethiopian manuscript making tradition (cp. SHAILOR 1991: 55).
Covering

The commonly known feature of the Ethiopian codex is that many codices are covered with roughly processed leather, locally produced or sometimes of foreign (Middle East) origin. The leather cover is decorated, sometime very finely, with blind tooled ornaments.\(^7\) Other types of embellishment are rare.\(^8\)

The leather cover is glued to the boards, and the turn-ins are folded and glued upon the inner sides of the boards. The open rectangular spot in the middle is usually covered with textile,\(^9\) and the area between the turn-ins, along the boards’ inner edge, is frequently covered with a separate leather patch. The leather cover is an additional means stabilizing the codex and protecting the sewing. Most of the codices, including those very modest, have full leather cover. Many codices originally bound on two boards could receive a leather cover later.\(^10\) But quite a number of codices have only part-cover, the type of binding which is sometimes called “quarter cover” (fig. 4).\(^11\)

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\(^7\) Cp. PANKHURST 1983-84.

\(^8\) A few codices are decorated with metal (silver) studs or plaques (cp. PANKHURST 1983-84; PANKHURST 1999); or may even have lavish silver covers (cp. BAUST 2010: 1130b-1132a).


\(^10\) I observed a few large-size manuscripts with the cover made out of two separate pieces of leather, sewn together along the middle of the spine.

\(^11\) Cp., e.g., CLEMENS and GRAHAM 2007: 268 (cp. also JUEL-JENSEN 1994). In some cases, the leather cover extends more onto the boards (the so-called half cover).
“Quarter cover” is thought to be a sign of scarcity of leather or the commissioner’s limited financial capacity; but in many cases (esp. when the leather extends a bit more onto the boards) it is difficult to define whether the covering is original or it represents remnants of the former “full cover”. In some cases a few hints may be obtained, for instance, from the traces of adhesives or leather remains visible on the inner sides of the wooden boards.

*Endbands*

Most of the Ethiopian codices covered in leather have two endbands: headband and tailband. An Ethiopian endband is usually slit-braid, made of two narrow strips of leather; in rare cases it is composed of two pieces of leather of different colours (fig. 6). The endbands are sewn to the edges of the leather cover at the top (headband) and bottom (tailband), with the extremities placed between the boards and quires. The sewing of the endbands is sophisticated (fig. 5), with the thread going through the centrefold of the quires (“tiedowns”), endband itself and leather cover on the spine.

![Fig. 5: Ethiopian endband (after Szirmai 1999: 49, fig. 4.3); Fig. 6: Two-colour endband.](image)

Thought to strengthen and stabilize the book, in the indigenous context this part of binding has been particularly vulnerable. Lots of codices have only reminiscence of the endbands: rows of holes in the back cover or in the spine folds of the quires, sometimes with remains of threads.

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Textblock

Textblock is the major part of the codex distinct from the binding, which is composed of quires accommodating the written text (figs. 7, 8). The size of the textblock varies greatly: it can be very thin or it can be very thick, and in many cases embraces more than 20 quires.\(^\text{13}\)

Fig. 7: Textblock of a Four Gospels book, 35 quires (ʿUrā Mäsqāl, East Tigray).

Fig. 8: Textblock of a “Miracles of Mary”, 33 quires (Qärsäbär Mika’el, East Tigray).

The textblock is always sewn as one unity; no case has been observed when the sewing would be carried out, e.g., on halves of a textblock, from two opposite directions. It is commonly said that the Ethiopian codex includes the so-called “protective quires”, or “end-leaf quires”. They include a smaller number of leaves and are placed between the boards and the text quires, to protect written pages from the direct contact with wooden boards.\(^\text{14}\) The boards and the textblock are normally of approximately the same size, or the size difference between them is small. Formerly it was assumed that the textblock was never trimmed, but in some older codices the indications (“cues”) for rubricators, written in the margins in small script (numerals, titles, incipits), are half-cut, showing that the edges of the leaves were processed.

Lesser Common Features and Practices

Leather Boards

Usually the Ethiopian binding is based on two wooden boards, but in some cases a different material, namely thick and stiff roughly processed (ox) leather was used for that purpose. The information on this type of binding is scanty\(^\text{15}\) as such books have

\(^{13}\) It is unclear why SERGEW HABLE SELASSIE (1981: 23) indicates that “...a volume of a book should not exceed fifteen quires, otherwise the book will disintegrate easily and quickly”. It is true that big books are more fragile, but “15 quires” is of course not the limit (cp. also below, fig. 18).

\(^{14}\) These leaves (sometimes un-ruled) could be frequently used for writing marginalia; also they have been an unstable part of the codex (could be frequently cut or taken out). Many codices never had any protective quires.

\(^{15}\) This feature is not mentioned in SZIRMAI 1999 (cp. 48–49 “Boards and covering”), but cp. already D’ABBADIE 1859: xii (“Par économie, les planches sont quelquefois en mas ou peau de vache épaisse, plutôt que tannée, par un long séjour dans le lait caillé”). Cp. SERGEW HABLE SELASSIE 1981: 24, “As a rule the covers of manuscripts in Ethiopia are wooden and rarely leather”; some more information is
not been considered a fine product of the Ethiopian manuscript makers. One may think that leather was considered to be of inferior status than wood; however, in Ethiopia leather is available in great quantities, and in some areas is certainly more affordable and easier to procure than wood. To a certain extent, binding on leather might be a sign of limited financial capability of the manuscript commissioner.

Usually leather covers were used only for small-size, or in a very few cases, for mid-size codices. I observed two types of leather-bound codices (the first being more common, the second one by far less common):

1) Two covers cut out of very thick, stiff leather are laid upon the text block in the way similar to the binding made of regular wooden boards (fig. 9, 10).

Fig. 9a-c: Himnary book (Ḥarənnät Gābāzäyti Maryam, East Tigray).

Leather boards are attached to the textblock by means of sewing threads, through pairs of holes which are made in a simplified way, since leather boards are less thick and solid than the wooden ones:

Fig. 10a-c: Collection of prayers (May Anbäsa Kidanä Maḥrät, South Tigray).

provided by FÄQADÄ ŠOLLASE TÄFÄRRA 2002 a.m.: 205-206 (“yä-qoda gābäta”; he reports that both ox or hippo leather, cleaned and dried, could be used for boards).
2) An oblong piece of thin leather embraces a small textblock (up to 50 folios) consisting of few quires or even of one single quire of bigger size. In this case, the leather is thin and flexible. The long-stitch sewing which seems to have been applied for such a binding (fig. 11) is different from the usual link-stitch sewing.

Sometimes leather boards obviously serve as substitution for the original wooden boards, one or both, if they went lost. Some bindings on leather boards are manufactured in a very rough way; in some other cases the codices show more decent craftsmanship, and can embrace a substantial number of quires (see above, figs. 9-10). However, even though such codices look neat and elegant, they show some problems. For instance, one problem is a greater vulnerability of the sewing on the spine which remains unprotected, because the use of the common leather covering is hardly possible with leather boards. The second is the progressing concavity of the spine (fig. 12), which developed even in thin codices and hampered their normal use.
These features rendered bindings on leather boards lesser practical, even for small-size and thin manuscripts. The practice of using leather boards has not disappeared, but remained quite limited.\textsuperscript{16}

\textit{Spine Treatment}

Some codices bound on wooden boards and covered with leather have an additional rectangular piece of leather on the spine, which is sometimes described with the term “overback”. It embraces the codex over the spine (fig. 13); its lateral parts are glued onto the boards, outside and inside (cp. fig. 13d). The overback is frequently decorated with blind tooling, like the leather cover.

![Fig. 13a-d: Boards covered with leather, blind-tooled overback (Hangoda Mikael, East Tigray).](image)

It was common to repair the codex in such a way, e.g., when its leather cover on the spine was worn or damaged or when it had to be re-sewn (for which purpose the leather on the spine area was to be cut). Since it was done some time after the codex was manufactured, leather of the main cover and that used for the overback are not identical, but show some difference in colour and quality.

\textsuperscript{16} Other problems of such structure are indicated in \textit{Faqadah Sellassie Tafarra 2002 A.M.: 206}: if not thick enough, the leather boards are too feeble for holding the quires; being stiff enough, thick (hippo’s) leather is susceptible to humidity and easily gets deformed.
There are also other, less common ways of protecting the spine area. On some codices recorded, a rectangular piece of thin leather or parchment has been brought upon the spine (fig. 14), embracing the textblock under the boards, and held by the threads of the sewing.

While examples of such a treatment are singular, at least in one collection of North Ethiopia I observed some five codices treated in this way, apparently by the same craftsman. Though not very solid and durable, the thin strip of parchment does provide a certain protection for the spine and is effective enough for codices which are not overstrained and kept in decent conditions.

_Pastedowns_

In today’s practice, “protective quires” or “end-leaf quires”, placed before and after the textblock, are usually composed of some two to six folios. These quires are not intended for receiving the writing, but otherwise they are included into the codex as regular text quires. In some older (pre-17th-cent.?) codices, they show traces of a special treatment. The outer leaves of the protective quires, located next to the boards, were originally used as “pastedowns”: they were glued, or “pasted down” onto the boards, and turn-ins of the leather cover were glued upon them. The pastedowns covered the opening in the middle between the turn-ins (what was later occupied by textile inlays), and also the sets of holes in the boards and threads anchored in them.

17 At May Wäyni (South Tigray). Cp. a sample in Delamarter and Melaku Terefe 2009: 134–135, plate 85 (description in Getatchew Haile et al. 2009: 206–209, Ms. EMIP 78). The authors speak of 5% of the manuscripts having such a device (“spine strap”). I could only record a very few occurrences in the areas which I studied, but the technique may be not as recent and rare as it looks like at the first glance; cp. a large 15th-cent. Manuscript from Yoḥannas Käma (Central Tigray), treated in the same way (fig. 3, Bausi and Uhlig 2007: 742).
Today, this structure has been preserved in its integrity in nearly no case. It appears that the adhesive became ineffective at a certain point, and the parchment pastedowns fell off the boards. In many cases the leaves pasted down to the boards were later severed from their counterparts and remained under turn-ins (figs. 15, 16). But the composition of the protective quires, and especially typical traces of the glue visible on the parchment leaves and boards let us guess what the original structure of the codex might look like. The technique of pastedowns did provide an additional stabilisation for the codex, but seems to have been dropped at least by the 17th cent.

**Guards**

Due to different reasons, some books could be discarded, occasionally dismantled and re-cycled in different ways for repairing other, damaged or worn codices still in use. In particular, narrow strips could be cut out of the dispersed leaves and re-used as the so-called “guards”, for reinforcing quires and leaves along the fold or around sewing stations. A guard is frequently held on the spine fold of the quire by threads of the main sewing only (fig. 17a, b). Otherwise it can be attached to the parchment leaves through “side stitches”, i.e. by means of thin leather strips led through slits, through one or more leaves on each side of the quire (fig. 17 c).
Besides, a short guard can be inserted in the centerfold of a quire (fig. 17d), to reinforce the parchment leaf around the sewing stations. The Ethiopian craftsmen applied guards to repair worn textblocks and hold together disintegrating quires. The use of such a technique has been recorded in the famous Ṣinda Abba Gārima Four Gospels. Also there are cases in which ancient text leaves were cut and re-used as guards. Interventions to introduce guards did not always end with satisfactory results, as we can see, e.g., from the cases when the volume cannot be opened well after repair, or when quires of the codex remain unconnected. But in some cases the craftsmen indeed carried out a good job with guards, saving the quires from dispersion and giving the codex a good chance to survive (fig. 18).

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Fastenings

It was tacitly assumed that fastenings, i.e. devices to keep the book constantly closed, are very rare or nearly non-existent on Ethiopian codices.\(^\text{19}\) However, a few of them do show remains of what might have been fastenings. In one of the cases, the manuscript (the same as depicted on figs. 7 and 16, above) has symmetrical pairs of holes in the front board, and metal pegs inserted in the outer edge of the back board (fig. 19a-b). The holes might have been used for fixing (leather?) straps which were somehow pinned on the metal pegs in the opposite boards.\(^\text{20}\)

\[\text{Fig. 19a-b: Remains of fastenings? Pairs of holes in the front board, pegs in the edge of the back board (see arrows) (ʿUra Mäsqil, East Tigray)}\]

\[\text{Fig. 20: Remains of fastenings? Sets of holes in the front and back boards (Tänsahe Kidanä Mshrät, Central Tigray)}\]

\[\text{Fig. 21: Book with fastenings and cross in the hand of a saint (exterior side of a triptych), after ANNEQUIN 1975:83.}\]

\(^{19}\) Instead, the codex was secured by means of the traditional slip-case (the so-called mäḥdär) or textile wrappings.

\(^{20}\) The holes and pegs might not necessarily be original, but the example doesn’t seem to be a single, unique case. One more codex was discovered in the same collection, with the back board equipped with pegs (the front board is missing).
In another case, a late 14th- or 15th-cent. Four Gospels book has sets of four holes in the front and back boards, made at different levels (fig. 20). They could be used for long leather straps or bands wrapping the volume.\(^{21}\) More indications, this time from the Gondärine period, are provided by murals and icons of the famous church of Ṙābran Ṣāfrəʾel, where several representations of the codices with fastenings have been attested (fig. 21).\(^{22}\)

On the whole, the feature was apparently more common than one might think.\(^{23}\) However, being fragile, the fastenings got lost very quickly in the course of the “life” of the book. Scholars dealing with manuscripts should pay attention to possible traces and remains of the fastenings and record them, for getting more comprehensive picture of the history of the Ethiopian codex.

**Conclusion**

The short communication is not aimed at reaching a comprehensive conclusion, but rather highlights a few selected features of the Ethiopian codex, to be considered by those who work with this type of material.

However, at least two considerations can be raised from what is reported above. One concerns the dating of the manuscripts. A notion of the “composite manuscript” has already been widely accepted in the manuscript studies, which takes into account a possibility that a codex (texblock) can be composed of different parts produced at different points of time (called “production units”), and united into one codex in several stages. The same idea can be easily extended upon the binding. The features and practices described above implicate that nearly each binding was exposed to modifications and interventions, and a quick look at a certain number of historical codices is enough to see that only very few bindings could preserve their original condition. That means: 1) many bindings are composite structures and contain elements introduced (sometimes in more than one stage) after the codex was manufactured; 2) in many cases, the dating of the binding is by far not the same as that of the textblock. This fact will not always drastically change the conclusions concerning the manuscript and its text, but rather should be taken into consideration, as a contribution for a better understanding of each manuscript’s history.

Another consideration concerns the people in Ethiopia who deal with manuscripts in real life, mostly church servants, in particular keepers of the books and other liturgical items in individual churches and monasteries. In the recent years, the Orthodox community has come to better understanding of the value of the manuscript

\(^{21}\) It cannot be excluded that the holes were used for fixing metal decorations, now lost.

\(^{22}\) A few of them have been printed in ANNEQUIN 1975 (figs. on pp. 83, 84, 114). On Ṙābran, s. BОСC-TIESSE 2007.

\(^{23}\) More information should be collected for any conclusion, but the structure on fig. 21, above, looks like a simplified and modified variant of the “peg and strap” fastenings of the Byzantine codex, s. AGATI 2009:358, SЗIRMAI 1999:81–83.
heritage it possesses; we wish to hope the consciousness will reach a point when those responsible will exercise utmost care and will not rush ahead with dismantling “shabby and worn” historical binding to renovate them, even if this is meant for saving the text.

Bibliography

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