Pricking and Ruling in Ethiopic Manuscripts: an Aid for Dating?

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Summary

The essay explores the pricking and ruling in Ethiopic manuscripts. A few variations exist in the relative arrangement of the constituent elements defining the page layout: pricks, ruled lines, upper and bottom written lines. Four arrangement patterns of these elements have been established. A chronology of the patterns may be suggested and used as an additional aid for dating manuscripts.

Until recently, only cursory attention has been paid to the exact absolute and relative position of the main elements defining the layout of Ethiopic manuscripts. These elements are five: 1) the so-called vertical pricks (serving for impressing the vertical bounding lines which delimit the text columns), 2) text pricks (serving for impressing the horizontal [text] lines), 3) vertical bounding ruled lines, 4) top (/bottom) horizontal ruled (text) line, 5) top (/bottom) written line.¹ The first four elements reflect the procedures aimed at the preparation of the page for writing,² being the initial stage of the realization of the selected layout. The fifth element refers to a different stage in the manuscript production, that is writing as filling the written area with text, which is the final stage of the realization of the layout.³

These elements are not always easily observable. When we study digital images, microfilms, or reproductions of manuscripts, they often lack the quality required for showing the details clearly. In ancient manuscripts, or those extensively used, the parchment surface may be too worn and dirty to distinguish these features even when one inspects the physical objects; or some of the features—for instance, text pricks—may be just gone, together with parts of parchment leaves being broken, torn off, or trimmed.

The Ethiopian bookmaking tradition is frequently described as quite conservative and not characterized by a great variety of forms and features. However, the systematic observations conducted on a significant number of codices in the framework of the project Ethio-SPaRe⁴ revealed that the distri-

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¹ The definition follows Balicka-Witakowska et al. 2015, 160.
⁴ C.1,050 manuscripts, mainly from the northeastern Tǝgray, have been described for the project database. Of the manuscripts mentioned below, the descriptions
bution of the said five elements on the page of an Ethiopic codex is not as uniform as one could expect. The current essay explores the properties of these elements on the examples from the manuscripts recorded by Ethio-SPaRe and some additional material.

The layout patterns
Varying positions and distribution of the five aforementioned features have allowed identifying four distinct patterns. In the following, I shall discuss each of these patterns in some detail.

Pattern I
The most common distribution of pricks, ruled lines, and text lines on the page of an Ethiopic manuscript looks as follows: the vertical pricks are located quite deep in the top and bottom margins, and the text pricks are located in the outer margins; the top written line is placed above the top horizontal ruled line, the bottom written line is placed above the bottom ruled line (cp. Scheme 1). This pattern is sometimes taken as the point of reference in a general discourse about Ethiopic manuscripts. It is indeed attested in the overwhelming majority of manuscripts from around the beginning/middle of the sixteenth century onward. This group encompasses the biggest part of the Ethiopic manuscripts which have survived to our time.
Establishing the earliest time limits of pattern I is difficult. Among the books exhibiting pattern I recorded by the Ethio-SPaRe project team, there are a few for which one would not exclude, on palaeographical grounds, the production date somewhat prior to the beginning/middle of the sixteenth century. The earliest dated or well datable examples of pattern I are MS Ḥarennät Gäbäzyi Ṭayr Mariyam, MHG-004, Four Gospels, datable to 1523, or MS ‘Addiqaḥarsi Ṭāraqliṭos, AP-046, dated to 1528 in the colophon. An early example of pattern I outside the material collected by the project team is, for example, MS Paris, Bibliothèque nationale de France, Éthiopien 32, the Four Gospels book donated by King Säyfä Arʿad (r. 1344–1371) to the Ethiopian community residing in Egypt, the monastery of Qusqām.

Pattern II

The position of the top horizontal ruled line and the top written line is somewhat different in many of the manuscripts datable to the time prior to the beginning/middle of the sixteenth century. The top written line is placed below the top horizontal ruled line (i.e. at the second horizontal line, s. fig. 1a); thus the written lines are one less than ruled lines. The bottom ruled and written lines are arranged as in Pattern I. The written area is thus fully framed by the vertical and horizontal ruled lines (cp. Scheme 2). The vertical pricks and the text pricks are located in the margins as in pattern I (fig. 1b).

These manuscripts are, for instance, Säbäya Maryam, SM-010, ‘Miracles of Mary’, ‘Ura Qirqos, UM-032, ‘Homily of the Sabbath’, Maryam Mäkan, MM-011, Apocryphal Acts of the Apostles, Siʾet Maryam, GMS-002, Four Gospels, or Däbrä Dämmo, DD-038, Psalter, etc., but in neither case the exact dating is possible.

Nosnitsin 2013b.

Nosnitsin 2015.

Zotenberg 1877, 24–29. The full set of images of this manuscript is accessible through the web-site ‘Gallica’ (<http://gallica.bnf.fr>, last accessed 15 October 2015), the relevant features are fortunately visible on the most of the images.

In pattern I, these numbers are equal.
On examples of a few manuscripts (in the first line the biblical ones or homiliaries) one can see that the scribes sometimes tried to use the top ruled line and the vertical bounding lines for accurately placing paratextual elements, in particular the titles of the text sections (figs. 2 and 3).

Basing on the material observed until now, we can assume that pattern II occurs quite frequently in the fifteenth-century manuscripts, but not in the manuscripts datable to the time after the beginning/middle of the sixteenth century. If such cases are found, they will probably represent nothing but casual deviations from the standard (pattern I).

As in the case of pattern I, establishing the *terminus post quem* for pattern II is for the moment hardly possible. The earliest reliably datable book of this type recorded and described by the project team is MS Ṭāgarḥəs’ Abunā Mamas, AQM-010, Book of the Funeral Ritual and Monastic Ritual, produced during the tenure of the Metropolitan Sälama II (c.1348–1390) and laid out in one column. Among the early examples outside of the project’s material, one might recall the so-called Four Gospels book of Krəstos Təsfnä from Däbrä Ḥayq ’ISTAvised, now MS Addis Abäba, National Archives and Library of

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12 See Marrassini 2010.
Ethiopia, no. 28, thought to be datable to the early fourteenth century,\(^{13}\) which does show the distribution of the features according to pattern II.

\(^{13}\) See Macomber 1979, 73–74; "Pawlos Saddwa" 1952, 28. The ruled lines and pricks are well visible not in all frames of the microfilm which I consulted. The horizontal ruled lines regularly terminate at the text pricks (see below). On the most of some 80 folia in the beginning, the text pricks are double.
Pattern III

A few old manuscripts (all laid out in two columns) have the top written line placed below the top horizontal ruled line as in pattern II, but the location of the vertical pricks is different and suggests a different pattern. Two cases of variations in the position of the vertical pricks have recently been presented elsewhere. Several more examples of what can be called pattern III have been recently identified. These include MS 'Urä Mäsqäl, UM-050, a ‘registration unit’ which contains, among fragments of various old manuscripts, also a part of an ancient, obviously pre-mid-fourteenth-century homiliary. On these folia, the top written and top horizontal ruled lines are located according to pattern II. The vertical pricks are located in a way different from pattern II. The vertical pricks are placed very close to/ at the top and bottom horizontal ruled lines, sometimes even a little inside the written area; the text pricks are located remarkably close to the vertical.

Fig. 4 'Urä Mäsqäl, UM-050, Collection of homilies, first half of the 14th century (?), f. 189r

14 See Balicka-Witakowska et al. 2015, 161, and below. At the time of the preparation of that publication, only two manuscripts with divergent position of the vertical pricks were known: MS EMML no. 6907 Four Gospels of Lalibäla Mädhane ‘Aläm; and MS ‘Urä Qirqos, UM-039, the so-called ‘Aksumite Collection’ (see Bausi 2009; see also below).
Another possible example is MS 'Ǝmба Tāḵula Mika’el, TGM-003, ‘Undoing of Charms’. It is a nineteenth-century manuscript, but the four initial leaves inserted in the codex originate from an old Four Gospels book (fourteenth-century?). On these folia, the top written and top horizontal ruled lines are located according to pattern II; in addition to that, the primary pricks are lo-

15 The same pattern is discernible on some of the microfilm frames of EMML no. 6907

Four Gospels of Lalibāla Māḏḥāne ‘Alām, datable to the thirteenth century (for example ff. 169v–178r, 187v–188r, 193v–194r etc.).
cated very close to/at the top and bottom ruled lines (fig. 5). The text pricks are not visible; probably they were in the margins which crumbled.\textsuperscript{16} One more manuscript in this group may be MS ‘Urä Mäsqäl, UM-040, Octateuch, datable at least to the first half of the fourteenth century. In the same way as on the added old leaves of TGM-003, here the vertical pricks are located very close to/at the top and bottom horizontal ruled lines (see fig. 6a–b); the text pricks are not visible (trimmed off?). Another peculiarity of UM-040 is that the horizontal ruled lines do not transgress the inner vertical bounding ruled line, i.e. they discontinue in the gutter (inner) margin.\textsuperscript{17}

**Pattern IV**

Quite similar to pattern III, but with somewhat different position and distribution of vertical and text pricks, is finally pattern IV. Here, the top written line and top horizontal ruled line are placed according to pattern II. The vertical pricks are located at/close to the top and bottom ruled lines (as in pattern III), but the text pricks are located at the vertical bounding lines, not in the margins. In this pattern, the outer vertical pricks, above and below, have become unnecessary, and they are ‘merged’ with the top and the bottom text pricks, respectively (Scheme 4). Therefore each page with the text laid out in two columns has two vertical pricks less (one above and one below) in comparison to the other patterns. All

\textsuperscript{16} On the analysis of the inks of TGM-003, see the ETHIO-SPaRe report of the seventh and eighth field missions, part 2 at \texttt{<http://www1.uni-hamburg.de/ethiostudies/ETHIOSPARE/Report\%202014-Pt2.pdf>}, last accessed 15 October 2015.

\textsuperscript{17} This is indicated on Scheme 3 (and 4) by dashed lines. The horizontal ruled lines of UM-040 are thus of ‘type J’ according to the system in Muzerelle 1999. Normally, they are of ‘type C’: the text ruled lines continue through the entire bifolium and stop at the outer bounding lines (Muzerelle 1999, 138, fig. 3), or sometimes slightly transgress them. The vertical bounding ruled lines normally cross the page from the top to the bottom vertical pricks, in many cases continuing in the margins towards the edge (‘type A’, ibid.; see schemes 1, 2).
the pricks are located, more or less, at the ruled lines delimiting the borders of the written area.

In addition to MS ‘Urä Mäsqäł, UM-039 recorded before,\textsuperscript{18} two more witnesses of that pattern have been recently identified. One is MS ‘Urä Mäsqäł, UM-058, obviously pre-mid-fourteenth century, containing 2 Samuel and 1–2 Kings (fig. 7a–b), with the pricks distributed exactly as described above for pattern IV.

Another witness is MS Däbrä Zäyt Maryam, DZ-001, Four Gospels, an old Gospel book datable to the late fourteenth – first half of the fifteenth century. A few badly preserved leaves, loosely inserted into the codex, originate from another, older Gospel book, and are datable to the time prior to the mid-fourteenth century (c. mid-thirteenth–mid-fourteenth century?).\textsuperscript{19} The main text block shows the location of the features after pattern II. On the added old leaves, the top written line is located below the top ruled line, according to pattern II; the vertical pricks above and below are located very close to the top and bottom horizontal ruled lines, though not quite symmetrically and partly a little inside the written area. As in MS UM-58, there are only three pairs of the vertical pricks above and below, respectively. The outer vertical pricks (the fourth pair) are missing, their function is carried out by the top and bottom text pricks (cp. Scheme 4). At least on one page the location of the text

\textsuperscript{18} See footnote 14 above, and Balicka-Witakowska et al. 2015, 161, Fig. 1.6.4.
\textsuperscript{19} See Nosnitsin 2011.
pricks at the outer vertical bounding ruled line is clearly visible, attesting pattern IV (fig. 8).

ʾĔnda ʾAbba Gärima evidence

At this point, the evidence of the celebrated (ʾĔnda) ʾAbba Gärima Gospels, as presumably the oldest known Ethiopian manuscript(s), can be considered.\(^{20}\) I was able to consult only a set of images (incomplete), showing the condition of the book(s) before the recent restoration.\(^{21}\) Due to limitations of the photographic material, the analysis could not be exhaustive. However, it was possible to notice that various parts of the codices show various patterns. Here below are three examples, the reference folia being identified after the catalogue Macomber 1979:\(^{22}\)

1) ʾAbba Gärima I:
The top written line is located clearly below the top ruled line, according to pattern II. The vertical pricks are located very close to/ at the top and bottom horizontal ruled lines and are well visible, the features looking like pattern III, but the text pricks could not be detected with certainty, including on the few leaves which seem to have preserved their margins (fig. 9a–b).\(^{23}\)

\(^{20}\) On the manuscript, see Bausi 2011; the peculiarity of its pricking was briefly indicated in Balicka-Witakowska et al. 2015, 160.

\(^{21}\) I thank M. Gervers and E. Balicka-Witakowska for sharing with me the pictures.

\(^{22}\) Below, I refer to the three incomplete Four Gospels manuscripts ʾAbba Gärima I, II, and III, which are bound in two volumes (I and II+III, respectively, see e.g. Heldman and Munro-Hay 1993, 129–130, no. 52). For the moment, I skip the complex question of the dating of these manuscripts possibly originating from as early as the Aksumite time (proposed following the results of the radiocarbon analysis of the samples, see Mercier 2000) and limit myself to the common-knowledge statement that ʾAbba Gärima II is most probably of a later date than ʾAbba Gärima I and III (cp. Zuurmond 1988, II, 44–52).

\(^{23}\) The portion of the text on fig. 9a–b starts from Mt. 12:36 on verso-side, col. a, and
2) ’Abba Gärıma II:
The top written line is located below the top ruled line, according to pattern II. The vertical pricks are located very close to/at the top and bottom horizontal ruled lines and are well-visible, looking like pattern III (fig. 10). The text pricks could not be identified with certainty; they are unlikely placed at the

extends to Mt. 13:49, on recto-side, col. b; it corresponds to Macomber 1979, 1, the portion ‘F. 38a–46b (Mt. 10,12–14,19)’ more exactly, probably, ff. 43v–44r, frame 42 in the microform by D. Davies, ‘Reel 1’). On ’Abba Gärıma I, cp. Zuurmond 1989, II, 44–47.

24 This is another example of ‘type J’ horizontal ruled lines (see above, footnote 17). The project team recorded a small number of manuscripts, originating from different periods, with the text ruling of ‘type J’. However, there are indications that applying ‘type J’ lines was an old practice, spread over a larger territory. In 2008, I visited the church of Däbrä Saḥǝl in Gär’alta (Sauter 1976, 166, no. 1206; see the recent project supported by SIDA, led by E. Balicka-Witakowska and M. Gervers, <http://www2.lingfil.uu.se/projects/Dabra_SahelQ/> and inspected a number of old fragments. Some of them had the features located after pattern IV, and the horizontal ruled lines of ‘type J’ (see fig. 12, the text corresponds to Chaîne 1909, 43, ll. 33–35 [side vb] and ibid. 44, ll. 6–8 [side ra]; see Chaîne 1909, 38 for the translation).

outer vertical bounding ruled line. The continuation of the furrows beyond the vertical bounding lines into the margins as well as their termination in the margins are well-visible on many photos.

3) ’Abba Gärima III:
The top written line is located below the top ruled line, after pattern II. The vertical pricks are located mostly at the top and bottom ruled lines, with the

26 The text pricks might have been trimmed off. Besides, it cannot be completely ruled out that, in order to impress the horizontal (text) ruled lines, the craftsman just imprinted slight marks on the surface pressing his instrument into the parchment leaf, without piercing it.
text pricks located at the vertical bounding lines (the furrows continuing, not uniformly, into the outer margins). The outer vertical pricks were meant also as the top and bottom text pricks (fig. 11). The placement of the features corresponds to pattern IV.

**Mixed patterns**

A certain number of manuscripts exhibit more than one pattern, usually two of them. One example is the massive MS ‘Ura Qirqos, UM-018, ‘Acts of Martyrs’ where the top written line and top horizontal rule line are placed, in different parts of the book, according to both pattern I or pattern II, the latter prevailing.

Another witness of mixed patterns I and II (the latter prevailing) is MS ‘Addi Qolqwal Giyorgis, AQG-005, ‘Acts of Martyrs’, to be dated probably to the second half of the fifteenth century (but before 1492). Outside the material recorded by Ethio-SPaRe, MS Gundä Gunde 177, definitely a pre-fifteenth-century book and one of the oldest in the collection of the monastery of Gundä Gunde, shows both pattern I and pattern II, the former prevailing.

In the pre-mid-fourteenth-century MS Paris, Bibliothèque nationale de France, Éthiopien 7, patterns III and IV are attested, the latter prevailing.

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28 On this manuscript see Brita 2015.

29 On some folia, it appears that the pair of upper text pricks was pierced, but the corresponding top horizontal ruled line was not impressed.


31 The numeration after the HMML digitization project (another number that the volume bears is C3–IV–182); the manuscript obviously corresponds to no. 96 in Mordini 1953, 48 (it contains mainly, though not only, the Book of Daniel and the Apocalypse of Ezra [4 Ezra]; see also Macomber 1979, 42 and 44–45).

32 There are more irregularities about the vertical pricks. They are located partly in the margins after patterns I and II, but partly their positions are asymmetrical, e.g. on some folia, the top vertical pricks are placed according to pattern III, but the bottom vertical pricks according to pattern I and II; on some folia vice versa. The ruled text lines reach at the text pricks.

33 Zotenberg 1877, 11–12, the manuscript contains the Book of Job.

34 The images are accessible on the *Gallica* website (see above). On most of the folia with pattern III, the top and bottom text pricks are located precisely on the same level (the top and bottom ruled lines) as the top and bottom vertical pricks, respectively. Pattern IV begins on f. 39.
**Tentative conclusions**

For the moment, it is possible to state that pattern I dominated starting from approximately mid-sixteenth century. We can also assume, tentatively, that pattern IV is the earliest among those attested, and that it was dropped pretty early. Starting from the late fourteenth century until the beginning/middle of the sixteenth century, pattern II occurs frequently. Of course, the study of the features and distribution of pattern I, II, and III in the old manuscripts requires more examples. We cannot exclude that other patterns emerge if more old witnesses are examined. However, even at this initial stage it seems possible to point to the three major developments: 1) gradual shift of the position of vertical pricks from the borders of the written area, delimited by the horizontal ruling, into the margins; 2) a similar shift of the text pricks from the outer vertical bounding lines (pattern IV) into the margins (the other patterns); 3) redistribution of the pricks and their functions after two vertical pricks were added (cp. patterns IV and I–III); 4) change in the position of the top written line from the top ruled line to the second ruled line.

All patterns reflect varying technological procedures (still to be reconstructed); they possibly coexisted over centuries, and a higher stage of ‘technological unification’ was achieved, according to the material surveyed for the study, only by the beginning/mid-sixteenth century. The features and patterns

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35 Among the manuscripts studied for the essay, there is none with text pricks inside the written area (elsewhere known as the oldest pattern, see Jones 1944, mainly on Latin manuscripts; pp. 75–77, ‘inside-text’ arrangement/method, attested since the fourth century, also in such MSS as the *Codex Sinaiticus* and the *Codex Vaticanus*).

36 As to the text pricks of Pattern IV, one can recall the old (yet sparsely attested) practice of placing the text pricks at or close to the outer bounding line as described in Jones 1944, 75 and notes 14, 77, and 78; the positioning of the text pricks in the outer margin seems to correspond to the quite old ‘outer-marginal system’ (fifth century) which gradually came to dominate centuries later (Jones 1944, 76ff.).

37 Cp. the change in the position of the pricks as presented in Jones 1944; cp. also Maniaci 2002, 84–85, on the gradual ‘movement’ of the pricks from the inside of the text area (fourth century) towards the margins which was largely completed in the tenth century; and Agati 2009, 182–184, for a more detailed exposition.

38 On the change in the location of the top written line in relation to the top horizontal ruled line see Maniaci 2002, 109, and Agati 2009, 196–197. This historical transformation is indicated as important for the modern codicology in Gumbert 2004, 515. It was observed that in the thirteenth century English scribes gradually changed their practice from placing the top written line above the top ruled line to placing it under the top ruled line, i.e. from the ‘above the top ruled line’ to ‘below the top ruled line’ (Ker 1960). It is remarkable that in the case of Ethiopic manuscripts the change went in the opposite direction and was completed much later, even though both contexts are hardly comparable and the technical reasons behind the changes are most probably completely different.
can be possibly used as auxiliary for establishing the production date of a manuscript; they can reveal fine differences within the Ethiopian book making tradition and also discontinuities within one single codex.39

References


Jones, L.W. 1944. ‘Where are the Prickings?’, *Transactions and Proceedings of the American Philological Association*, 75 (1944), 71–86.


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