

The Aksumite Collection or Codex Σ
**(*Sinodos of Qəfrəyā*, MS C₃-IV-71/C₃-IV-73, Ethio-
SPaRe UM-039):**

Codicological and Palaeographical Observations.
With a Note on Material Analysis of Inks

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The manuscript known as the *Aksumite Collection* (*Sinodos of Qəfrəyā*, MS C₃-IV-71/C₃-IV-73, Ethio-SPaRe UM-039) is one of the most important—if not the most important—Gəʿəz manuscripts which have come to scholarly attention in the last twenty years. While its textual content—primarily the complex canonical-liturgical collection, closely depending on late antique models, which it attests—has already been the subject of several contributions, a description of physical and material features of the manuscript has not yet been published. The present note takes advantage of the work and competence of scholars, conservators, and scientists in order to fill this gap, offering a comprehensive material, codicological, and palaeographical description of the codex.

§ 1. Introduction

The *Aksumite Collection* is a term introduced to define a specific canonical-liturgical collection of the late antique and early medieval Ethiopian Church and the so far *codex unicus* that attests it. The *Aksumite Collection* contains a set of translations from Greek to Gəʿəz (Ethiopic) that on linguistic and philological evidence are datable to the Aksumite period, to a time range between the fifth and the sixth or at the latest the seventh century CE, while the codex is not precisely dated, but datable to the thirteenth century or earlier. Amongst the pearls of this collection are a portion of a *History of the Episcopate of Alexandria*, an archaic version of the *Apostolic Tradition*, a *Baptismal Order*, an *Euchologion*, the *Canons of Chalcedon*, letters of Timotheus Aelurus, and a treatise *Concerning the Only Judge*.¹ Yet, all the texts of the collection, also

* The main author of §§ 1–7 is Alessandro Bausi, in cooperation with Antonella Brita and Denis Nosnitsin (all Universität Hamburg) for the general aspects and the documentation, and with Marco Di Bella (Palermo) and Nikolas Sarris (National Library of Greece) for some points of codicology. § 8 is a note on analysis of inks, by Denis Nosnitsin and Ira Rabin (Universität Hamburg and Bundesanstalt für Materialforschung). For the history of research with details of the acknowledgements, by Alessandro Bausi, see § 9.

1 The first three texts already published, like other texts of the collection, and the latter four in course of publication. The comprehensive overview on the collection

those already known from other manuscripts, which can be now understood in a completely new light, are of the highest interest.

The label *Aksumite Collection* does not generically and simply refer to a collection of texts, but intends to reflect the use in place to indicate canonical-liturgical works, according to the model used for the most ancient collection of this kind, namely, the tripartite *Veronese collection*, but others as well, as established in the field of canon law studies.² Single texts attested in the *Aksumite Collection* have found their way in the later *Sinodos*, and in other kinds of canon-law collections (multiple-text works) as well, but in its specific arrangement, there is so far only one codex that attests the *Aksumite Collection*.³ Therefore, by extension, the term was also used to indicate this *codex unicus*.

The codicological, palaeographic, and linguistic features of the *Aksumite Collection* are of extreme interest, and they were the subject of several papers presented in the course of time. The objectively enormous interest raised by the textual contents of the *Aksumite Collection*—which has substantially contributed to provide a new image of the Aksumite culture, literature, and language, within the broader late antique context—had priority over the study of its physical and material features. As soon as awareness of the importance

and details on the single texts remains Bausi 2006a, to which I refer for all texts for which no other reference is given, with only a few updates; for the single texts published so far see § 4 below; for a list of contributions on the *Aksumite Collection*, see Bausi and Camplani 2016, 255–265; and now also Camplani 2020a, 2020b; for some forthcoming texts, see Bausi 2020a. References are also given to the *Clavis aethiopica* (*CAe*) developed by the *Beta maṣāḥaft* project (where the entire collection has received the no. 1047).

- 2 See *CPG* nos 1731 (*Collectio Veronensis*, from MS Verona, Biblioteca Capitolare, Codex LV (53) (= Lowe 1947, no. 507), composed of the *Didascalia apostolorum*, the *Canones ecclesiastici*, and the *Traditio apostolica*) and 1732 (*Sinodos Alexandrina*); for other collections, see Gaudemet 1985, 181–182, with references to the *Collectio Antiochena*, *Collectio Avellana*, *Collectio Hispana*, *Collectio Teatina*, and others; for important updates see Lizzi Testa 2014 and Marconi and Margutti 2014; see Steimer 1992, 106–148, for the earliest collections; for the later developments, see the essays collected in Hartmann and Pennington 2012, and Kaufhold 2012 in particular for the eastern churches canon law; Orlandi 2016, for an up-to-date fresh overview of Coptic canon law sources; for the collection in MS Verona, Biblioteca Capitolare, Codex LX (58) (= Lowe 1947, no. 510), see Camplani 2020a.
- 3 A fragment in a collection recently studied by Nosnitsin (Archäologisches Landesmuseum Schloss Gottorf, collection Dettenberg) which Bausi identified as belonging to the *Canons of the council of Antioch* (for which see § 4 below) is the only one known so far that could belong to a second manuscript of the entire *Aksumite Collection*.

of the manuscript became widespread, researchers exerted a continuous pressure for at least the most prominent texts to be put at disposal in a reliable edition as soon as possible. The progressive access to a more refined documentation of the manuscript, as it became possible only in the course of several years from its discovery up to the present, with the possibility, finally, of taking effective conservation measures on the manuscript and carrying out reliable scientific analysis, dictated the agenda of the work. The aim of this synthetic note is that of filling this gap and offering essential elements concerning the codicology and palaeography of the *codex unicus* of the *Aksumite Collection*, and the results of the scientific analysis of its inks, while the linguistic features will be the subject of a separate contribution.

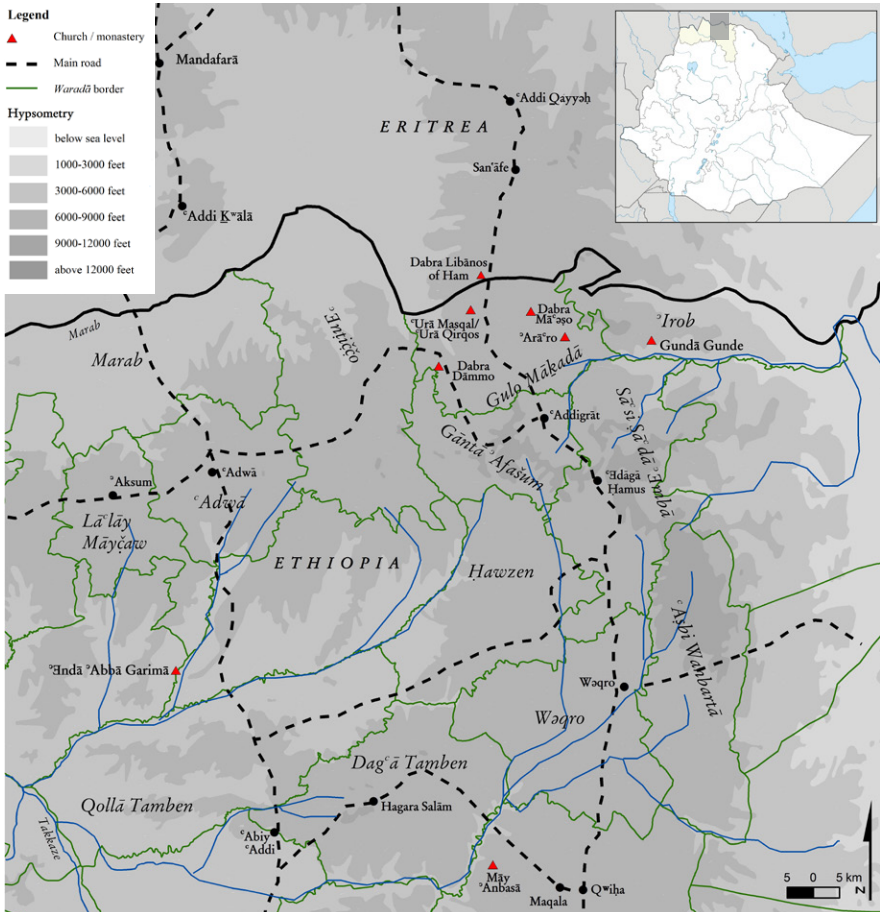


Fig. 01. Map of northern Ethiopia showing the site of 'Urā, with the distinct churches of 'Urā Masqal and 'Urā Qirqos © Luisa Sernicola.

§ 2. *The site of Qəfrəyā*

The manuscript of the *Aksumite Collection* (hereafter, Σ , for both the collection and the manuscript) was preserved until 1999 in the church of 'Urā Masqal, located at the northern border with Eritrea of the north-eastern-Təgrāy district ('East Tigray Zone') of Gulo Maḳadā (Figs. 01–02). From 'Urā Masqal the manuscript, along with the whole manuscript collection of the church, was moved in the course of 1999 to the church of 'Urā Qirqos, where it is still preserved (Fig. 03). Both churches of 'Urā Masqal and 'Urā Qirqos are associated with the place name of Qəfrəyā (also transcribed at times Qəfryā, Qəfəryā, or Qəfəryā), which occurs in several written documents: some of documentary character, particularly those preserved in the church of 'Urā Masqal, and others of literary character. The only note by a recent hand preserved in codex Σ (f. 162va) is a note of *explicit*, the syntax of which is not perfectly clear, but where the place name of Qəfəryā appears. The note follows a previous *explicit* at the end of the whole collection, by the first hand: *tafaṣma* (sic) *sinodos*, 'It is completed the *Sinodos*'; a second hand continues below: *tafaṣsama zabeta masqal zaqəfrəyā wəludu kəfla māryām qasis*, 'It is completed (the book) of Qəfrəyā, his sons, the priest Kəfla Māryām'.⁴ By the way, this note of *explicit* appears after the last text of the collection, that is, *The canonical answers of Peter of Alexandria*, a text which also occurs in a few manuscripts of the *Sinodos*, where it does not hold the final position. We can exclude, however, for precise philological reasons that codex Σ is the archetype of the whole manuscript tradition; the *explicit* note at the end probably reflects the state of a previous ancestor common to all witnesses, including codex Σ .⁵

The site of Qəfrəyā has been described in detail in a book on the manuscript collections from Təgrāy, authored in 2013 by Denis Nosnitsin based on the research of the 'Ethio-SPaRe' project. Here is what Nosnitsin writes on Qəfrəyā:⁶

Situated quite close to the Eritrean border, the site of 'Ura Qirqos / 'Ura Mäsqäl can be reached via the main 'Addigrat – Zäla 'Ambäsa road and a side road, after some forty-fifty minute drive. [...] It accommodates two churches. The first, 'Ura Qirqos, more recent, is built in the traditional Təgrayan style, standing on the edge of the plateau [...]. The second, 'Ura Mäsqäl, is difficult to access. It is located on the top of a rocky outcrop and can be seen from the edge of the plateau [...]. It appears to be of the same type as 'Ura Qirqos, built perhaps in the late nineteenth or early twentieth century at the latest. To reach the church, one has to pass along the crest of a rocky outcrop, with breath-taking drops on both sides. Regular church service had taken place there until the beginning of the Ethiopian-Eritrean border

4 See Bausi 2016a, 240 and 257, Pl. 2.

5 See Bausi 2006b, 56, apparatus ad XIV, 12.

6 See Nosnitsin 2013, 4–8.



Fig. 02. The outcrop with the church of 'Urā Masqal. Photo 2006 Antonella Brita © Project 'Linguistic and cultural traditional chains in the Christian Orient and text-critical philology'.



Fig. 03. The church of 'Urā Qirqos. Photo 2006 Antonella Brita © Project 'Linguistic and cultural traditional chains in the Christian Orient and text-critical philology'.

conflict in 1999. Later, because of its proximity to the border, ‘Ura Mäsqäl had to be abandoned, and the entire property of the church was transferred to ‘Ura Qirqos [...] Local tradition does not preserve much information about the history of the site, commonly referring to foundation of ‘Ura Mäsqäl in the time of “*haṣäy Gäbrä Mäsqäl*”, and assigning foundation of ‘Ura Qirqos to the time of King Yoḥannēs IV (r. 1872–89). The churches preserve a number of ancient manuscripts. Most of the old manuscripts belonged to ‘Ura Mäsqäl. Both churches are historically linked, and seem to have had under their administration a few other churches in the surrounding area. There is no clear indication that a monastic community was ever established there; however, a centre of scribal activities has been found not far from ‘Ura, with a few active scribes living in the village called Ləgat. ‘Ura Mäsqäl seems to have existed well prior to the fourteenth century, possibly under the rulers of the dynasty referred to as “Zagwe” [...]. As follows from the marginalia in the manuscripts, the old name of the site is Qəfrəya which indeed appears in a few medieval sources. [...] The ancient collections of ‘Ura Mäsqäl/‘Ura Qirqos survived.

As Nosnitsin states, the name occurs in a series of texts—it also occurs in the *Liber Axumae*⁷—, yet,

Remarkably, local people do not seem to be familiar with the name “Qəfrəya”. Besides, as some other churches in Gulo Mäkäda, Qəfrəya was used as a confinement place for the Stephanites [...]. Today, local people do not use the name “Qəfrəya”.⁸

The most important occurrence of the name, however, is that in a documentary collection known as the ‘Donation of King Ṭantawədäm to the church of Qəfrəyā’. It is a collection of feudal deeds (*gʷəlt*), preserved in a small-size manuscript that is probably later by centuries than the time when the documents were first issued (possibly, the twelfth century), but well characterized by archaic formulas, with some of them hanging in the Golden Gospel of Dabra Libānos, that provide strong clues to its textual authenticity.⁹

7 See Conti Rossini 1909–1910, doc. I.5, p. 11.5–8 (text), መምበርታ፡ ደመት፡ ፲፱፡ ዕፁ፡ ጽሕጽ፡ ቀጢን፡ ሠርዌ፡ ወ፻፡ ሠርዌ፡ ዘአብ፡ ዓቢይ፡ ወያብጽሑ፡ ወሰነ፡ ምድርሙ፡ ወበህየ፡ ደትቁበሎሙ፡ ሰብአ፡ ጎልፍ፤ ዳሞ፤ እገላ፤ ግሎ ማክዳ፤ ቅርርያ።, and p. 11.17–21 (transl.), ‘Le Mambartā couperà 1,000 cèdres de petite taille et 100 tiges de grosse épaisseur; il les portera jusqu’aux frontières de son pays, où ils seront reçus 20 par les habitants des pays qui se trouvent sur le passage *jusqu’ à Aksoum, Dāmo, l’Eggalā, le Gelo Mākedā, Qeferyā*’.

8 See Nosnitsin 2013, 7, n. 10.

9 See Derat 2018, with discussion of the ‘Donation’ on pp. 30–38, and edition, translation, and commentary on pp. 261–271, ‘Annexe’ (‘Donation du roi Ṭantawedem à l’église de la Croix de Qefereyā (Urā Masqal)’); see also Bausi 2018, 444–446 for a few remarks on this important document. Digital images of the manuscript are freely available on the internet from the *Māzgābā Səəlat*, <<http://ethiopia.deeds.utoronto.ca>>, MG-2005.092:012–023. The manuscript was later digitized also by the ‘Ethio-SPaRe’ project, which assigned to it the shelf mark UM-035 and a date to the eighteenth century, see Nosnitsin 2020, 282, n. 1, and 294, n. 54.

Moreover, the name also occurs in one of the recensions (*GL3*) of the *Gadla Libānos*, the Life of Saint Libānos, also known as Maṭā', who is traditionally credited with preaching the Gospel in Eritrea and in northern Ethiopia in the period of the legendary King Gabra Masqal, where the placename 'Fəṭrəyā'—edited as such from a no more available *codex unicus* by Carlo Conti Rossini—has definitely to be emended to 'Qəfrəyā', as supported by the new manuscript evidence of *Gadla Libānos* collected, again, by the project 'Ethio-SPaRe'.¹⁰

But the place name also occurs in the *Gadla Baṣalota Mikā'el*, the hagiography of a fourteenth-century saint, in a peculiar passage where the saint is eagerly looking for books:

First he arrived at Makāna Dāmmo and remained there reading the books of the New and of the Old (Testament); he also studied their interpretation with intellectual eagerness: so that the skin of his tongue fell off, like the sheath of a knife; but he did not abandon his reading because of this. Then he departed and arrived at the house of 'Abbā Maṭā': he received the benediction of the blessed Libānos and remained a few days being vigilant in the reading of books. Then he left and arrived at Makāna Qəfrəyā, and from there he left to Makāna Q^wa'at, from Makāna Q^wa'at to Makāna Ba'altabeḥat, from Makāna Ba'altabeḥat to Makāna Maqale, from Makāna Maqale to Makāna Gefe by Gabra Nāzrāwi, his beloved. And wherever he arrived, he built a cell for himself and stayed up day and night reading the Scriptures: he supplicated the Lord in fasts and in prayer so that He might reveal the secret of their mystery.¹¹

If we consider that Qəfrəyā is a site located quite opposite to Dabra Libānos of Ham in Eritrea (Fig. 01), one of the most ancient site of Christianity in the region and definitely also a Zāg^we bulwark in the area, as is attested by one

10 See Nonsnitsin 2013, 7, n. 10, who noted this. For the texts, see Conti Rossini 1903, 32, *wawalduni beta masqal zafətrəyā*, 'and his (spiritual) son Beta Masqal of Fəṭrəyā'; Bausi 2003, § 154. See now MS Ethio-SPaRe AKM-004 (Ethiopia, Təgrāy, Gulo Maḳadā, Kidāna Mehṛat 'Ambasat), f. 50rb.12–13, *wawalduni beta masqal zaqəfrəyā*, 'and his (spiritual) son Beta Masqal of Qəfrəyā'; and MS MGM-012 (Ethiopia, Təgrāy, Gāntā 'Afašum, Mikā'el Mə'əsār G^wəḥilā), f. 44ra.6–9, *wawalduni ḥanaḍa beta masqal zaqəfrəyā*, 'and his (spiritual) son built Beta Masqal of Qəfrəyā'. On an important variant reading of these manuscripts, see already Bausi 2014a. As expected, the recent Gə'əz-Amharic edition of the *Gadla Libānos* published by the community of Dabra Libānos of Šawā has the passage, but has completely altered it omitting any reference to the local Təgrāy toponymy, *wawalduni ḥanaḍa 5ta 'adbārāta*, 'and his (spiritual) son built five monasteries', see Yadabra Libānos 'Abuna Taklahaymānot 'Andənnat Gadām 2014–2015, 103a.10.

11 See Conti Rossini 1905, 19.22–20.3 (text), 17.26–18.5 (Latin transl.), with English translation by Bausi here; for the passage and the *tópos* see also Bausi 2014b, 44–45. For a possible connection between the *Aksumite Collection*, the library of Baṣalota Mikā'el at Gasəçça, and Giyorgis of Saglā, who definitely knew at least some texts of the *Aksumite Collection*, see Bausi 2020a, 240–250.

of the most important collections of Ethiopic documentary texts preserved to us in the Golden Gospel of Dabra Libānos, everything seems to indicate that Qəfrəyā, despite being not a place of general relevance, must have played an important cultural role until and during the so-called Zāg^we period.¹²

The site of Qəfrəyā where codex Σ has been preserved presents the typical case, well known in historical linguistics as well as in philology, of a lateral or isolated area that, being detached from metropolitan areas or areas more exposed to cultural changes, tends to preserve archaic features which have gone lost in other areas that are more exposed to cultural movements, institutional control, and new influences.¹³ The manuscript of the *Aksumite Collection* has probably remained for several centuries in the same place, thus escaping the attention of the metropolitan Ethiopian clergy and of foreign visitors as well. Nonetheless, as is proved by philological evidence for the texts attested by multiple witnesses, codex Σ is not the archetype of the extant tradition and other witnesses of the same collection must have existed.¹⁴

§ 3. *The material and quire structure of codex Σ*

We remind here that the leaves of the manuscript, when it was first documented, were totally disarrayed and that the sequence of the microfilmed and digitised sets vary from the earliest set taken in 1999 to the latest digitisation in 2012, being however impossible in this synthetic note to provide all details of the various sets. The sequence followed in this description reflects the present sequence, which is based on the reconstruction advanced on philological basis that was confirmed by the codicological evidence collected during the conservation of the manuscript carried out in 2012.¹⁵ Each folium of the codex

12 See Derat 2018, 46–59, with further references.

13 For this well-known principle, see Pasquali 1952, xvii–xviii, 7–8, 159–160, 175–178, 181, 224; Cavallo 1995; Trovato 2020, 120. For the application to the *Aksumite Collection*, see Bausi 2015a.

14 One should stress that the chronological phase represented by codex Σ precedes that of the emergence of archaic homiliaries dating to the thirteenth/fourteenth centuries, some of which are extant and distributed in a vast area of the Christian Ethiopian kingdom, from ʿUrā Masqal to Lake Tānā. On this essential point see Bausi 2020b.

15 As already said, see § 9 for the details of the research on the manuscript. For the conservation, see Di Bella and Sarris 2014; rich photographic documentation on the conservation of codex Σ is available in Nosnitsin 2019, 39–58. For the conservation of another manuscript from ʿUrā, see Brita 2015. The manuscript had no binding at the time of its microfilming and digitisation. Two wooden fragments, albeit found with the book and now preserved in the archival box where the manuscript was placed after conservation, have never been associated with the manuscript, at least in the form of a proper binding, since there is no correspondence between the sewing holes on the quires and the lacing holes on the boards. They might have been

thus bears a twofold pagination, going back to the two digitisation campaigns undertaken by the ‘Ethio-SPaRe’ project, the first in 2010, and the second one after conservation, which is followed here, in 2012.

The manuscript consists of twenty-one quires in 162 parchment folia plus a bifolium serving as endleaves at the end, for a total of 164 folia. The codicological and textual analysis suggests that the material loss in the manuscript is minimal: for sure there is one up to three missing folia at the beginning, before f. 1; one folium is certainly missing between ff. 5 and 6; and one folium is also missing between ff. 114 and 115. Substantial material losses due to damage in the preserved folia occur (f. 1 has lost part of the outer column and of the bottom margin and text), more often with loss of one or a few lines, and minor losses in the margins are frequent as well (for example, on ff. 2–4 part of the bottom margin and text; on ff. 5–13 part of the upper inner margin and text; ff. 22–27 part of the outer top margin and text; ff. 38 and 70 the inner bottom margin and text; ff. 71–73 the inner top margin and text; f. 114 the inner margin and text). There are several repairs on the parchment executed by careful and precise hand stitching, all belonging in the time of the production (smaller and larger repairs are visible on ff. 52, 58, 65, 67, 68, 73 (the hole is smaller, but remains), 143, 157, 161); a few holes in the parchment remain (ff. 45, 48, 54, 56 (two holes), 67, 73 (partially sewn), 103, 116, 121, 152 (twice)).

The codicological and textual sequence allows a relatively precise reconstruction of distinct codicological blocks, here indicated with alphabetic letters from A to C plus the final bifolium, which are distinguished by material and textual caesurae, for which the first hypothesis is that they all belong to one and the same production unit written by one and the same hand. In consideration of the arrangement of comparable collections, where the *Ecclesiastical canons* hold the first position, and due to the ideological importance of the texts contained in block A (like the *History of the Episcopate of Alexandria*, which immediately follows the *Ecclesiastical canons*), it is likely that block A holds the first position.¹⁶ Block B ends with a partially empty column, which

placed with the manuscript at a later date, maybe because of the matching size, but were never bound to it. The 2010 and 2012 digitisation sets also include two final single folia, here indicated as A and B, which belong to different codicological production units and came to be included in the bundles of codex Σ : f. A is a fragment from the *Acts of Theodore the Oriental*, corresponding to Pereira 1907, 132.3–33 (text); and f. B is a fragment from the biblical 2 Kings 22:10–23:2; this fragment belongs to ms UM-058; it was discovered by chance and photographed within the last hours of the last day of the field trip.

16 See the references in Bausi 2006a, 54–55 for the corresponding canon-law collections (Coptic, Arabic, Ethiopic, and Latin) where the *Ecclesiastical canons* hold the

clearly marks a caesura and an average of 30 written lines, against 29 written lines of blocks A and C. Block C ends with a column tapering in the shape of an inverted trapezoid, followed by a framed note of *explicit*, and in all likelihood is the final one. Block A has quires originally beginning with the flesh side; block B is characterised by quires beginning with hair side; and block C has nine quires beginning with the hair side and four beginning with the flesh side.

The quires are four ternions (II, IV, IX, XVII), eleven quaternions (VI–VIII, XI–XV, XIX–XXI), three quinions (I, III, V), one irregular quire of seven folia (X), two irregular quires of nine folia (XVI, XVIII), plus one bifolium as endleaves (XXII).¹⁷ All in all, the hypothesis of irregular quires (X, XVI, XVIII) designed as such is the most economic, but there is obviously a degree of uncertainty in this reconstruction. There are no quire marks. The prevalence of quaternions, as is well known, is typical of the early phase of Ethiopic manuscript culture.¹⁸ Gregory’s rule (‘hair on hair and flesh on flesh’) is observed in the majority of the quires, but not consistently: it is perfectly observed in twelve quires (I–IV, VI, VIII, XI, XIII, XV, XVI, XIX, XXI).¹⁹

§ 4. Codicological blocks and textual content

Block A

The textual content

Ff. 1–38 (Figs. 04–05): this block is acephalous and one folium is missing between ff. 5 and 6. It contains the following texts:

- (1) the *Ecclesiastical canons*, acephalous (ff. 1r–5r);²⁰
- (2) the *History of the Episcopate of Alexandria*, with one folium lost between ff. 5 and 6 (ff. 5r–13v);²¹
- (3) the *Epistle 70 of Cyprian of Carthage* (ff. 13v–16v);²²

first position; they correspond to CPG no. 1739; see also CPG no. 1732.

17 For a more precise description, see the formular description in § 4 below.

18 See for this as well as for other codicological features Balicka-Witakowska et al. 2015; and now Nosnitsin 2020, with further abundant references.

19 Gregory’s rule is not observed in six quires, in one bifolium each, meaning that if one bifolium were reversed the rule would be observed (V, IX, X, XII, XVII, XX), and in three quires in two bifolia each (VII, XIV, XVIII). Nine quires start with flesh side (I–V, IX, X, XVII, XX) and twelve quires start with hair side (VI–VIII, XI–XVI, XVIII, XIX, XXI); the final bifolium (XXII) starts with the flesh side.

20 See Bausi 2006a, 54–55; CPG no. 1739; CAe no. 6239,

21 See Bausi and Camplani 2016; Camplani 2020a; CAe no. 5064.

22 See Bausi 1998, still from manuscripts of the *Sinodos*, whereas the *Aksumite Collection* provides also the preface to the letter; see also Bausi 2006a, 56; and now Camplani 2021; CAe no. 1348.



Fig 04. MS 'Urā Qirqos, C₃-IV-71/C₃-IV-73, Ethio-SPaRe UM-039 (Codex Σ), f. 1r. Photo 2012 Denis Nosnitsin © Project 'Ethio-SPaRe'.

- (4) the *Apostolic Tradition* (ff. 16v–29v);²³
- (5) the *Parallel section to Apostolic Constitutions VIII* (ff. 29v–35r);²⁴
- (6) the treatise *On the charisms* (ff. 35r–38v).²⁵

The quire structure

There are five quires, four or probably all of which originally beginning with the flesh side:

I¹⁰⁽⁻⁴⁾: extant ff. 1–6 (ivH001F, vF002H, viH003F, viiF004H, viiiH005F, xH006F = G = Gregory law respected; all folia are disjoined except the bifolium vF002H–viH003F): this first quire is difficult to reconstruct, because at least one initial folium is lost, but probably two or even three folia are missing; moreover, one folium is lost between ff. 5 and 6. A possible reconstruction would be: I^{10(-4: i, ii, iii, ix)}, that is a quinion with loss of folia in the first, second, third, and ninth positions. It is clear that extant ff. 2–3 are the central bifolium of the quire and ff. 1–4 are also one bifolium.

23 See Bausi 2011; Meßner 2016–2017; CPG no. 1737; CAe no. 6240.

24 See Bausi 2006a, 56; on the interesting occurrence in this text of the term *gabgāb* corresponding to Greek *πάρεργον* see Bausi et al. 2020, 43–44; CPG no. 1730; CAe no. 1355.

25 See Bausi 2006a, 59; Bausi 2009; CPG no. 1730; CAe no. 2114.



Fig 05. Codex Σ, ff. 38v-39r. Photo 2012 Denis Nosnitsin © Project ‘Ethio-SPaRe’

The missing portion of the first text, the *Ecclesiastical canons*, would probably need only one folium, which means that the first two folia were occupied by a further text that is lost. One could surmise that an introductory text or a table of content of the collection occupied this place.

- II⁶: ff. 7–12 (i¹F007H, ii¹H008F, iii¹F009H, iv¹H010F, v¹F011H, vi¹H012F = G; folia i¹F007H and vi¹H012F are disjoined).
- III¹⁰: ff. 13–22 (i¹F013H, ii¹H014F, iii¹F015H, iv¹H016F, v¹F017H, vi¹H018F, vii¹F019H, viii¹H020F, ix¹F021H, x¹H022F = G; folia i¹F013H and x¹H022F, and ii¹H014F and ix¹F021H are disjoined).
- IV⁶: ff. 23–28 (i¹F023H, ii¹H024F, iii¹F025H, iv¹H026F, v¹F027H, vi¹H028F = G).
- V¹⁰: ff. 29–38 (i¹F029H, ii¹H030F, iii¹F031H, iv¹F032H, v¹F033H, vi¹H034F, vii¹H035F, viii¹H036F, ix¹F037H, x¹H038F = no G; folia i¹F029H and x¹H038F, and ii¹H030F and ix¹F037H are disjoined).

Block B

The textual content

Ff. 39–62 (Figs. 05–06): this block does not exhibit any material loss. It contains the following texts:

- (7) a *List of Apostles and disciples* (ff. 39r–40v);²⁶

26 See Bausi 2012; *CAe* no. 6241.



Fig 06. Codex Σ, ff. 62v-63r. Photo 2012 Denis Nosnitsin © Project 'Ethio-SPaRe'

- (8) the names of the months (f. 40v);²⁷
 (9) a *Baptismal ritual* (ff. 41r–46r);²⁸
 (10) a *Euchologion* (ff. 46r–62v).²⁹

The quire structure

There are three quires, all beginning with the hair side:

- VI⁸: ff. 39–46 (i⁸H039F, ii⁸F040H, iii⁸H041F, iv⁸F042H, v⁸H043F, vi⁸F044H, vii⁸H045F, viii⁸F046H = G; folia i⁸H039F and viii⁸F046H are disjoined).
 VII⁸: ff. 47–54 (i⁸H047F, ii⁸H048F, iii⁸F049H, iv⁸F050H, v⁸H051F, vi⁸H052F, vii⁸F053H, viii⁸F054H = no G).
 VIII⁸: ff. 55–62 (i⁸H055F, ii⁸F056H, iii⁸H057F, iv⁸F058H, v⁸H059F, vi⁸F060H, vii⁸H061F, viii⁸F062H = G).

Block C

The textual content

Ff. 63–162 (Figs. 06–07): this block is the longest. It contains the following texts:

- 27 See Bausi 2006a, 60; *CAe* no. 6251.
 28 See Bausi 2020c; Brakmann 2020, 104–114; *CAe* no. 6254.
 29 See Bausi 2006a, 60–61; Bausi 2020c, 40–48; Fritsch and Habtemichael Kidane 2020, 165–169; *CAe* no. 6255.

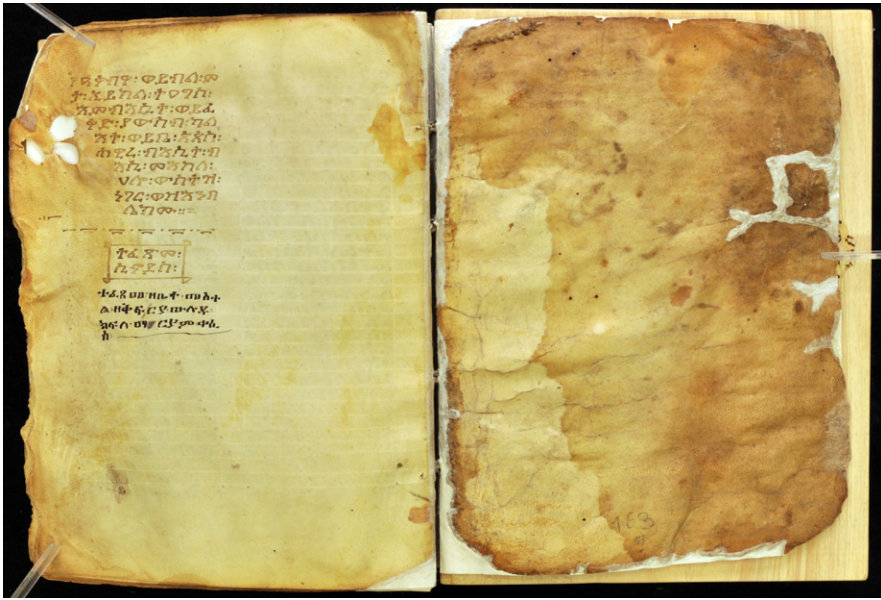


Fig 07. Codex Σ , ff. 162v-163r. Photo 2012 Denis Nosnitsin © Project ‘Ethio-SPaRe’

- (11) the *81 Apostolic canons* (ff. 63r–69v);³⁰
- (12) the *Council and the names of the fathers of Nicaea* (ff. 69v–73v);³¹
- (13) the *Canons of the council of Nicaea* (ff. 73v–78v);³²
- (14) the *Epistle of Constantine to the Alexandrinians* (ff. 78v–79v);³³
- (15) the *Epistle of Constantine on Arius* (ff. 79v–80r);³⁴

30 See Bausi 2006a, 61–62; *CPG* no. 1740; Bausi 1995, 148–179 (text), 62–72 (transl.), still from manuscripts of the *Sinodos*; for the biblical canon, see Bausi 2019; *CAe* no. 2675.

31 See Bausi 2013 and the valuable commentary by Voicu 2015; *CPG* no. 8516; *CAe* no. 6256.

32 See Bausi 2006a, 62; cf. *CPG* no. 8524; *CAe* no. 6257. One missing folium (now f. 74) was discovered in 2010, see the Acknowledgements. This set of canons does not appear to strictly correspond to other sets of the *Canons of Nicaea* known so far; a comparison with Alberigo 2006, 20–30 provides the following correspondence: Greek and Latin canons 1–10 = Σ 1–10; 11–13 = 11; 12–19 = 12–17; 20 = absent in Σ ; at the end, Σ has a short additional text concerning the date of Easter (*CPG* no. 8514, for which see Benešević 1937, 156), followed by the titles of the 17 canons.

33 See Bausi 2016b, 310–313; *CPG* no. 8517; *CAe* no. 6258.

34 See Bausi 2016b, 314–317; *CPG* no. 2041 = 8519; *CAe* no. 6259.

- (16) the *Epistle of Athanasius to Epictetus* (ff. 80ra–88r);³⁵
 (17) the treatise *On the Only Judge* (ff. 88r–100r);³⁶
 (18) the *Council and the names of the fathers of Serdica* (ff. 100r–102v);³⁷
 (19) the *Canons of the council of Serdica* (ff. 102v–109v);³⁸
 (20–27) the *Antiochean collection of the canons of the councils*, composed of:³⁹
 (20) the *Canons of the council of Neocaesarea* (15 canons, numbered 1–15) (ff. 109v–111r);⁴⁰
 (21) the *Canons of the council of Ancyra* (25 canons, numbered 21–45) (ff. 111r–114v);⁴¹
 (22) the *Canons of the council of Neocaesarea*, mutilous (3 canons preserved, numbered 46–48) (f. 114v);⁴²
 (23) the *Council of Gangra*, acephalous (ff. 115r–116r);⁴³
 (24) the *Canons of the council of Gangra* (20 canons, numbered 60–79) (ff. 116r–118r);⁴⁴
 (25) the *Council of Antioch* (f. 118r–v);⁴⁵
 (26) the *Canons of the council of Antioch* (25 canons, numbered 80–104) (ff. 118v–124r);⁴⁶
 (27) the *Council and canons of Laodicea* (59 canons, numbered 105–163) (ff. 124r–128v);⁴⁷
 (28) the *Canons of the council of Chalcedon* (ff. 128v–133v);⁴⁸

35 See Savvidis 2016, 634–635, 703–735, with considerations of the Gə‘əz version in the *Aksumite Collection*; CPG no. 2095; CAe no. 1780.

36 See Bausi 2006a, 63; Bausi 2020a, 240–250; CAe no. 6260.

37 See Bausi 2006a, 63; CPG no. 8571; CAe no. 6249.

38 See Bausi 2006a, 63; CPG no. 8570; CAe no. 6250.

39 See Bausi 2006a, 64; CAe no. 6238.

40 See Bausi 2006a, 63–64; CPG no. 8504; CAe no. 6242.

41 See Bausi 2006a, 64–65; CPG no. 8501; CAe no. 6243.

42 See Bausi 2006a, 63–64; CPG no. 8504; CAe no. 6242.

43 See Bausi 2006a, 65–66; CPG no. 8553; CAe no. 6244.

44 See Bausi 2006a, 66; CPG no. 8554; CAe no. 6245.

45 See Bausi 2006a, 66; CPG no. 8535; CAe no. 6246.

46 See Bausi 2006a, 66; CPG no. 8536; CAe no. 6247. A fragment from a collection under study (Archäologisches Landesmuseum Schloss Gottorf, collection Dettenberg) contains canons 91–93 (that is, 12–14) of the 25 canons of the council (numbered 80–104). The fragment has some palaeographical and linguistic archaic features, but it is certainly later than codex Σ.

47 See Bausi 2006a, 66 (but correct ‘in 25 canoni numerati 105–163’ to ‘in 59 canoni numerati 105–163’); CPG no. 8536; CAe no. 6248.

48 See Bausi 2006a, 66; CPG no. 9008; CAe no. 6261.

- (29) the *Canons of the council of Constantinople* (ff. 133v–134v);⁴⁹
 (30) the *Council of Ephesus* (ff. 134v–135v);⁵⁰
 (31–35) *Sylloge of Timotheus Aelurus* (ff. 135v–160v),⁵¹ composed of:
 (31) the *Epistle to the Alexandrinians* (ff. 135v–145v);⁵²
 (32) the *Epistle to the Constantinopolitans* (ff. 145v–150v);⁵³
 (33) the *Twelve chapters of Cyril of Alexandria* (ff. 150v–152r);⁵⁴
 (34) the *Refutation of the council of Chalcedon* (ff. 152r–157v);⁵⁵
 (35) the *Treatises of Gregory of Nazianzus* (ff. 157v–160v);⁵⁶
 (36) the *Canonical answers of Peter of Alexandria* (ff. 160v–162v).⁵⁷

The quire structure

There are thirteen quires, nine beginning with the hair side and four beginning with the flesh side:

- IX⁶: ff. 63–68 (i¹F063H, ii¹F064H, iii¹F065H, iv¹H066F, v¹H067F, vi¹H068F = no G).
- XI⁷: ff. 69–75 (i¹F069H, ii¹H070F, iii¹H071F, iv¹F072H, v¹H073F, vi¹F074H, vii¹F075H = no G; all folia are disjoined except the bifolium iv¹F072H–v¹H073F): this quire appears to be composed of a singleton in position I (f. 69) plus a ternion in positions II–VII (ff. 70–75). Since there is neither textual loss nor lacuna or caesura, it appears that the quire was designed with this structure.
- XI⁸: ff. 76–83 (i¹H076F, ii¹F077H, iii¹H078F, iv¹F079H, v¹H080F, vi¹F081H, vii¹H082F, viii¹F083H = G).
- XII⁸: ff. 84–91 (i¹H084F, ii¹F085H, iii¹F086H, iv¹F087H, v¹H088F, vi¹H089F, vii¹H090F, viii¹F091H = no G).
- XIII⁸: ff. 92–99 (i¹H092F, ii¹F093H, iii¹H094F, iv¹F095H, v¹H096F, vi¹F097H, vii¹H098F, viii¹F099H = G).
- XIV⁸: ff. 100–107 (i¹H100F, ii¹H101F, iii¹F102H, iv¹F103H, v¹H104F, vi¹H105F, vii¹F106H, viii¹F107H = no G).
- XV⁸⁽⁻¹⁾: ff. 108–114 (i¹H108F, ii¹F109H, iii¹H110F, iv¹F111H, v¹H112F, vi¹F113H, vii¹H114F = G; all folia are disjoined except the bifolia iii¹H110F–vi¹F113H and iv¹F111H–v¹H112F): this quire has lost the last folium, between ff. 114 and 115, as appears from the textual analysis: on f. 114v

49 See Bausi 2006a, 66; *CPG* no. 8600; *CAe* no. 6262.

50 See Bausi 2006a, 67; *CPG* no. 8744; *CAe* no. 6263.

51 See Bausi 2006a, 67–68; *CAe* no. 2372.

52 See Bausi 2006a, 68; *CAe* no. 1785.

53 See Bausi 2006a, 68–69; *CPG* no. 5476; *CAe* no. 1786.

54 See Bausi 2006a, 69; cf. *CPG* nos 5221, 5222, 5223; *CAe* no. 6252.

55 See Bausi 2006a, 69; *CPG* no. 5482; *CAe* no. 2220.

56 See Bausi 2006a, 69; *CAe* no. 6253.

57 See Bausi 2006b, 70; *CPG* no. 2520; *CAe* no. 2693.

only three of the *Canons of the council of Neocaesarea* are present (numbered 46–48 in the continuous series of the conciliar canons), of the 15 that there should be; on f. 115r the list of names at the beginning of the *Council of Gangra* contains only eight of the fifteen names counted in the text. It must be reconstructed as: XV^{8(-1: viii)}, that is a quaternion with loss of a folium in the eighth position.

- XVI⁹: ff. 115–123 (i^H115F, ii^F116H, iii^H117F, iv^H118F, v^F119H, vi^F120H, vii^H121F, viii^F122H, ix^F123H = G): this quire appears to be composed of a singleton in the first position (f. 115) plus a quaternion in the second to ninth positions (ff. 116–123). Since there is neither textual loss nor lacuna nor caesura, it appears that the quire was designed with this structure.
- XVII⁶: ff. 124–129 (i^F124H, ii^F125H, iii^F126H, iv^H127F, v^H128F, vi^H129F = no G).
- XVIII⁹: ff. 130–138 (i^H130F, ii^F131H, iii^F132H, iv^F133H, v^F134H, vi^H135F, vii^H136F, viii^H137F, ix^H138F = no G): this quire appears to be composed of a singleton in the first position (f. 130) plus a quaternion in the second to ninth positions (ff. 131–138). Since there is neither textual loss nor lacuna nor caesura, it appears that the quire was designed with this structure.
- XIX⁸: ff. 139–146 (i^H139F, ii^F140H, iii^H141F, iv^F142H, v^H143F, vi^F144H, vii^H145F, viii^F146H = G);
- XX⁸: ff. 147–154 (i^F147H, ii^F148H, iii^H149F, iv^F150H, v^H151F, vi^F152H, vii^H153F, viii^H154F = no G);
- XXI⁸: ff. 155–162 (i^H155F, ii^H156F, iii^F157H, iv^H158F, v^F159H, vi^H160F, vii^F161H, viii^F162H = G);
- XXII²: ff. 163–164 (i^F163H, ii^H164F): one bifolium serving as endleaves.

§ 5. *The layout of codex Σ*

The dimensions of the text block are: *c.*310/330 × *c.*210/245 × *c.*75 mm (height × width × thickness); the text is arranged in two columns. Sample folios: f. 8r (327 × 237 mm): vertical (from the top) 25:245:57 mm; horizontal (from the inner edge): 21:86:13:86:31 mm; f. 72r (328 × 243 mm): vertical: 30:240:58 mm; horizontal: 22:86:16:86:33 mm; f. 40v (314 × 232 mm): vertical (from the top) 30:236:48 mm; horizontal (from the inner edge): 16:84:14:82:36 mm; f. 56v (310 × 210 mm, with margins probably damaged): vertical (from the top) 28:236:46 mm; horizontal (from the inner edge): 16:86:12:80:16 mm; f. 80r (328 × 235 mm): vertical: 31:241:56 mm; horizontal: 17:85:15:84:34 mm. The resulting average interlinear space has a height of *c.*8.35 mm; each written line of each column has an average width

of *c.* 85.50 mm. Since each line of each column allocates from eight to eleven syllabographs (hereafter ‘letters’, for the sake of simplicity, whereas the word dividers are not counted), in a few cases up to twelve (f. 155va.13 due to correction), the average width of each letter is *c.* 7.77 to *c.* 10.68 mm.

All 162 folia which are written are ruled with a hard point (the final bifolium is blank and not ruled), even though on a few of them ruling is not well visible.⁵⁸ As usual, the codex exhibits vertical pricks, for bounding lines (placed on the top and bottom margins, at *c.* 20/30 mm from the inner edge and *c.* 30/35 from the outer edge); and text pricks, for horizontal text lines. The same top and bottom vertical pricks are used to guide the bounding lines as well as the top and bottom text lines, while all the other text pricks are located on the outer vertical bounding lines, suggesting that the scribe first carried out the vertical pricks and impressed the vertical bounding lines, then executed the text pricks on them, and finally ruled the horizontal text lines. The inter-column and inner margins are ruled, as usual, whereas top, bottom, and outer margins are not. The ruled lines are invariably impressed on the flesh side, even though it is difficult to say if the lines were impressed on each bifolium or on more bifolia at once or even on an entire quire. The different degree of markedness of the lines points to the possibility that pricking was carried out also on more superimposed bifolia.⁵⁹

Most of the 162 folia are ruled with 30 lines with an average of 29 or 30 written lines. The predominant pattern is below top line, that is, top written line 1 is written under ruled line 1, that is, on ruled line 2, and in not a few cases, written line 30 is written under ruled line 30. There is no case of above top line (that is, top line 1 written on ruled line 1). The writing is always placed upon the base line (*scrittura appoggiata*), not hanging on the line (*scrittura appesa*). The ruling is carefully observed in writing and deviation are generally motivated with justification, that is, when the remaining letters of a paragraph are accommodated in the same column in one or more extra-lines, or, more rarely, when a new paragraph starts on a new column and not in the last line, or due to interlinear correction, with addition of one or more interlinear lines. The final bifolium serving as endleaves is not ruled.

58 It is important to remind that this description is mainly based on the digital evidence. The conservators had to dedicate all the time available to verify the data for a correct execution of their work; the conditions to carry out an ideally perfect codicological study were not in place.

59 On the issues, still particularly understudied in Ethiopic manuscripts, see Balicka-Witakowska et al. 2015, 160–162; Nosnitsin 2015, 99, 101–103, and 107, who proposed a nomenclature according to which codex Σ corresponds to ‘pattern IV’, which is probably the earliest attested; see also Nosnitsin 2020, 305–306.

Ff. 1–38 (block A) have 30 ruled lines with 29 written lines. Exceptions: 30 written lines (due to justification, ff. 23ra and 38vb; due to correction, f. 30va).

Ff. 39–62 (block B) has 30 ruled lines with 30 written lines. Exceptions: 31 written lines (due to correction, with written line 31 under ruled line 30, f. 48vb; due to justification, ff. 53rb, 55va); 30 ruled lines with 29 written lines (ff. 39va, 40va, 50rb, 54vb); 30 ruled lines with 28 written lines (f. 40vb); 30 ruled lines with 18 written lines (due to justification, f. 62vb); ruled lines are not visible (f. 49r); 34 written lines (f. 49ra); 31 written lines (f. 49rb). It has to be noted that this section is clearly marked by a prevailing different pattern (30 ruled lines with 30 written lines; written line 1 on ruled line 2 and written line 30 under line 30), which appears at the end of the previous block (f. 38vb). One should not exclude that the last column of block A was taken as a model in writing for the following text in block B. The end of the block is also clearly marked by a peculiar layout, with only 18 written lines on f. 62vb and no continuation of text, whereas continuation of the text in the same column is the rule in all other cases of textual boundaries within the manuscript. This results in 11 empty lines on f. 62vb.

Ff. 63–162 (block C) have 30 ruled lines with 29 written lines. Exceptions: 30 ruled lines with 32 written lines (due to justification, f. 70rb); 30 ruled lines with 30 written lines (ff. 70va, 109r, 110v, 111rv, 112v, 114vb, 148ra, 161rv, 162r; due to justification, 100rb, 109va; due to correction, f. 106va, 115ra, 134va); 30 ruled lines with 28 written lines (f. 71rv; due to justification, ff. 73va, 78rb, 118vb, 123ra); 29 ruled lines with 28 written lines (ff. 123v, 130rv, 160r); 29 ruled lines with 29 written lines (f. 160v). F. 78v has 30 ruled lines with 30 written lines, but ruled lines 1–15 are written full page in one column and ruled lines 16–30 are written in two columns, with one empty line due to the layout required for hosting a list of canons: this is the only case in the manuscript of a single-column layout. On f. 145va lines 11–14 were erased, probably due to correction. F. 162va has 30 ruled lines with 12 written lines plus 4 lines by a second hand, due to a note of explicit. F. 162vb is blank.

§ 6. *The punctuation and navigating system of codex Σ*

Codex Σ has a relatively simple, but consistent system of punctuation and graphic marks for structuring the text. There is a limited set of punctuation marks, which is again a sign of archaism: the four dots (••) and the four dots followed by two strokes with serifs (••=) are the most frequently used; double four dots (••••, f. 23ra, if not a two four-dot sign followed by two less marked strokes) or even two vertical dots (••) followed by two strokes (f. 40vb) also occur; two vertical dots with short strokes above and below (⋮) are very rare

(ff. 39va and 136va); three vertical dots (⋮) are exceptional (f. 95ra). Also used is the dotted line, composed of a sequence of simple dots only (ff. 29va, 39ra, 41ra (at the beginning of a column), 73vb, 79vb, 102va, 102vb, 109va) and a double line composed of two rows of chevrons (f. 16vb). Peculiar is a double line composed of couples of strokes with serifs, with the larger stroke of each pair placed above the smaller one (f. 78rb on a single column and f. 78va on the width of two columns, since f. 78v has a single-column layout until line 15, then the double line on line 17, and the double-column layout starting from line 17). Dotted lines composed of alternating dots and strokes, similar to a sequence of paragraph marks, also occur (ff. 5ra and 118vb). The note of *explicit* (on f. 162va) mentioned above is framed in a sort of small elegant looped rectangular cartouche; above the frame there is a column-wide double line composed of couples of strokes with serifs, with the larger stroke of each pair placed above the smaller one; the strokes of the upper lines are separated by dots (Fig. 07).

Titles are written in the column and are rubricated. There is only one case of alternated rubricated lines at the beginning of a text, with three rubricated lines of title, followed by three non-rubricated lines, followed again by three rubricated lines (see f. 69vb.7–10 in red, 11–13 in black, 14–16 in red).

The left margins, to the left of the bounding vertical lines of each column, are regularly used to host several elements, namely, numbers, paragraph marks, and other signs.

Numbers frequently occur in the margins, in a collection of normative and liturgical texts arranged in canons and sections. These numbers are predominantly, but not always, written in red, in correspondence, when occurring, of rubricated titles; the numbers are apparently accompanied below, but not always, by horizontal strokes with serifs; the strokes are more regularly present on ff. 1–62 (corresponding to quire blocks A and B) and less regularly present on ff. 63–162 (quire block C).

Paragraph marks are extremely frequent and very carefully applied in the margins. They are composed of three elements, from the left to the right: a larger dot, followed by a colon (composed by two smaller vertical dots), and a horizontal stroke with serifs at the ends, all justified to the right.⁶⁰ They are invariably placed at the end or at the beginning of the paragraph, in the interlinear space after its end or in the interlinear space before its beginning, usually in correspondence with the presence of punctuation marks within the text written in the column or other signs marking the beginning of a new paragraph. In not a few cases, the change of paragraph within the column is

60 This is the sign which is called ‘Obelos’ by Uhlig 1988, 92 and *passim*, and ‘paragraphus’ by Zuurmond 1989, I part, 33.

simply marked by the beginning of a new line, to which normally corresponds a marginal paragraph mark as well. The paragraph mark can also occur at the beginning of the column, above the top written line (f. 49ra). In the very frequent case of marginal numbers occurring after a title, the marginal paragraph mark at the end of the title can be substituted by a simple stroke with serifs placed above the number, so that the number results to have strokes above and below, even if the above one should be better interpreted as a paragraph mark. This confirms the observance of the archaic palaeographic feature that numbers, which are frequently but not always rubricated (see for example f. 40v), when written within the column without any navigating function have no stroke, either above or below.

Among the other marginal signs, the most complex is the *crux ansata*, which occurs a few times in correspondence of the beginning of texts (ff. 5ra, 13va, 41ra, and 46rb) or sections within texts (ff. 14ra and 61va). Its occurrence is therefore limited to the blocks A and B. Of even rarer occurrence is a sign in the shape of a small St Andrew Cross, red with four dots between each arm (f. 76va) or black without any dot (ff. 114va, 137ra and 137va). Of rare occurrence is also the *zaya* (ዝያ ፣) sign, literally, ‘here’, used as a reference sign (ff. 96vb, 130ra, 144ra; 131v in the intercolumnar space; and 132r in the upper margin); and the *kómma* sign, *qʷəm* (ቀጥ ፣, on f. 8ra, possibly by a later hand, with *qʷəm* linked to *m* by a vertical stroke).⁶¹

There are a few scribbles, that could be interpreted as short *probationes calami* (ff. 38ra, upper margin; f. 112va, outer margin; f. 114v, upper margin; f. 117v, upper margin; f. 136r, lower margin; f. 137r, outer margin; f. 138r, outer margin; f. 143r, in the intercolumnar space; f. 144rb, outer margin; f. 144va, outer margin; f. 146r, outer margin; f. 147r, in the intercolumnar space; f. 156r, inner margin; f. 157v, inner margin).

§ 7. The palaeography of codex Σ

After the appearance of contributions to palaeography and manuscript studies from the 1980s which remain reference works, particularly the last decade has seen a flourishing of new studies which have increased our knowledge and set new benchmarks for the study of palaeography and scribal tradition of the earliest Ethiopic manuscripts.⁶² Although we know that there is not one set

61 For this particular sign, see Zuurmond 1989, I part, 32–36, who considers it a relic of the Greek word κόμμα.

62 See at least Uhlig 1988; Zuurmond 1989, II part, 44–47, 48–50, 56–58 (description of mss 'Ēndā 'Abbā Garimā I and III, and Città del Vaticano, Biblioteca Apostolica Vaticana, etiop. 25, which share most of the features listed here); Uhlig 1990; and for the more recent studies on the palaeography of archaic manuscripts see Nosnitsin and Bulakh 2014, 557–561; Nosnitsin and Rabin 2014, 65–74; Bausi and

only of archaic palaeographic features and that graphic systems must be considered in their entirety and structural functionality and that different systems can have coexisted, it is apparent that codex Σ has a marked archaic palaeographic profile, as emerges by comparison with the oldest dated and datable Ethiopic manuscripts. Some observations on punctuation are also relevant to the palaeography of the manuscript and are not repeated here.

The palaeographic features listed below are consistent throughout the manuscript: if they obviously witness to the scribal tradition of the copyist who wrote them, the result must be viewed as the compromise that always takes place in the manuscript and textual tradition of copied texts—particularly in texts like those of the *Aksumite Collection*, which have a centuries-long transmission—between the palaeographic, orthographic and linguistic features of the model (the antigraph) and the system in use at the time when the copyist worked. One can anticipate here that linguistic and orthographic phenomena—which due to their scope are not the subject of this note and which will be discussed in a separate contribution—are not all consistent: for example, the well-known occurrence of archaic *-e* endings instead of usual *-a* endings in prepositions and conjunctions in the absolute state (*sobe* for *soba*, *habe* for *haba*, and so on), and in the plural relative pronoun as well (*'alle* instead of *'alla*), are not a scribal feature of the copyist. In one single text (the mystagogical treatise *On the Only Judge*, ff. 88r–100r) they never occur and there is no reason to attribute their presence or not to the copyist, who is one and the same and must have written what he found in his exemplar(s).⁶³

Here follow some concise observations on the palaeography of the numerals and letters.

All the numerals and letters have a marked angular appearance. Well-known distinctive oppositions are present in the numerals: as mentioned

Nosnitsin 2015; Maximous el-Antony et al. 2016, 37–45; Nosnitsin 2016, 89–92; Nosnitsin 2018, 290–292; Villa 2019, 187–208 (implicitly); Erho and Henry 2019, 178–180; Erho 2020, 246–248; Nosnitsin 2020, 286–290; Nosnitsin 2021. A note of its own would deserve the developing research on palimpsests, for which see the unpublished papers by Erho 2017 and Delamarter and Getatchew Haile 2018. All of Bausi's contributions with publications of texts of the *Aksumite Collections* also contain, either in a preface or in the apparatus or in both, synthetic palaeographic and linguistic remarks on codex Σ . Among the unpublished papers which approach issues of palaeography and language, see Bausi 2004, also dealing with the Octateuch of Qəfrəyā (MS C₃-IV-69, later MS UM-040).

63 For the discussion of the phenomenon, see Bausi 2005a; Bausi 2005b; Bulakh 2009, 402, n. 19; a short summary of previous research in Villa 2019, 204–206; Bausi 2016c, 76–77, n. 92, with further data. For some hints at this fundamental question of the relationship between apograph and antigraph(s) at the example of a new witness of the *Shepherd of Hermas*, see Erho 2020, 246–247.

above, numerals within the text have no stroke, either above or below; the numeral 1 (**Ḫ**) has the typical archaic shape opposed to 4 (**Ḫ**); and 6 (**Ḫ**) has no ring and is opposed to 7 (**Ḫ**) by larger width and lower height; numeral 10 (**Ḫ**) has a ring on the right side of the leg, like that used to mark the fifth order (ff. 7ra, 40vb, 76rb, 130va).⁶⁴ To the difference of the first order of *h* (*ha*, **Ḫ**), the sixth order (*hə*, **Ḫ**) has the external legs shorter than the central one, which is slightly bent leftward making the distinction between first and sixth order at times difficult (f. 64ra). The first and sixth orders of *s* (*sa* and *sə*, **Ḫ** and **Ḫ**) seem to have different shapes, with *sə* (**Ḫ**) more pronouncedly bent leftward and/or with an oriented serif on the stroke on top of the letter; yet, this distinction has no consistent application and first and sixth order are used for first and sixth order regardless of orthography (for which this phenomenon is also significant) and grammar. The first and sixth orders of *q* (*qa* and *qə*, **Ḫ** and **Ḫ**) and *t* (*ta* and *tə*, **Ḫ** and **Ḫ**) are also absolutely indistinguishable; in these and in the other orders as well the head of the leg is slightly bent leftward. To the difference of the first order of *t* (*ta*, **Ḫ**), the sixth order (*tə*, **Ḫ**) has the lateral legs as long as the central one, and differs from the first order only by the break in the central leg.

Moreover, there are other features that do not imply any neutralization of opposition, which are remarkable in themselves: the fifth order of *h* (*he*, **Ḫ**) typically resembles a V-shaped letter with a ring at the lower vertex and with arms of the same length (for example on f. 139ra); the seventh order of *l* (*lo*, **Ḫ**) has sometimes the ring immediately tied to the right leg, but much more often linked by a short stroke (for example on f. 4va); in the sixth order of *h* (*hə*, **Ḫ**) the left end of the letter drops under the lower half of the height of the letter; the sixth order of *ʿ* (*ə*, **Ḫ**) has the typical head extending all along its width parallel to the ruled line; the first order of *w* (*wa*, **Ḫ**) consists of two identical halves, separated by a vertical stroke; the second order of *w* (*wu*, **Ḫ**) has the lateral stroke at the side in the middle (not in the lower end, as in later

64 This feature was already noted in Dillmann 1907, 33, n. 1. Uhlig 1988, 212 interprets it as an imitation of the Arabic spelling for 10 (١٠), following an observation of Leroy et al. 1961, 24, and refers to Wright 1877, 186–187 (no. 232), MS London, British Library, Or. 706, a *Gadla Fāsīladas* and *Gadla Nob*, where several examples of the numeral are given in print; Uhlig, probably wrongly in my opinion, believes that this feature is typical of the second palaeographic period (end of the fourteenth-half of the fifteenth century); other attestations which should be interpreted as evidence for the late survival of this feature are MS London, British Library, Or. 551 (Wright 1877, 97–98, no. 144), f. 27va, version B of the *Laṣāfa ṣādq*, see Budge 1929, pl. of f. 27v; see also MS Berlin, Staatsbibliothek Preußischer Kulturbesitz, Orientabteilung, Peterm. II Nachtr. 28 (Dillmann 1878, 64–65, no. 71), ff. 15v, 40r, 62v, 64v, 65r–v, 66v.

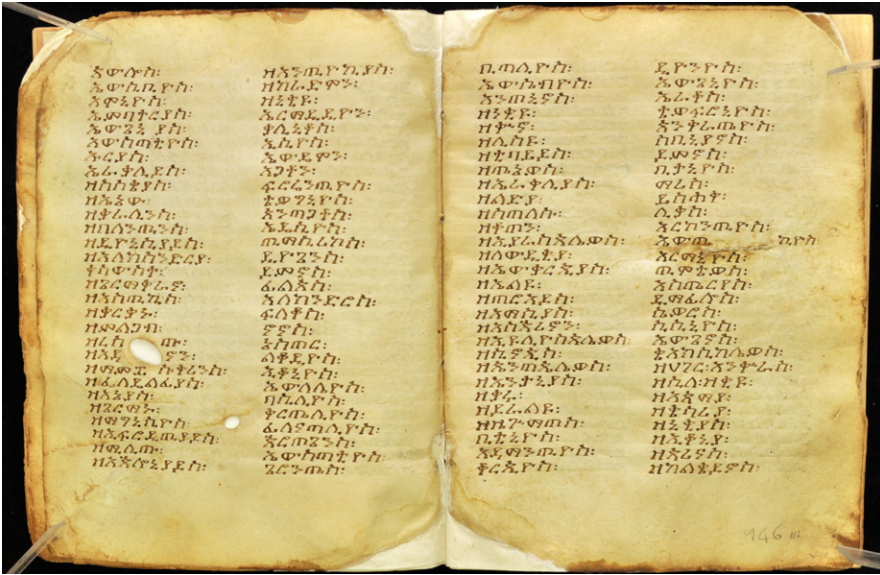


Fig 08. Codex Σ, ff. 101v-102r. Photo 2012 Denis Nossnitsin © Project ‘Ethio-SPaRe’

manuscripts), while the sixth order (*wə*, **ⲱ**) has the stroke at the top (not in the middle).

The letter *p*(^we) (**Ⲫ**, but written with an open ring to the right and with the left bottom stroke usually marking the labial appendix placed almost horizontally across the ruled line) appears in personal names in correspondence with the Greek sequences Φ– followed by consonant, or Ψ–, when followed by *s* (ff. 6va, 6vb, 7va, 71va (twice), 72rb, 72va, 73ra, 101va): see *p*(^we)*səton*, **Ⲫⲏⲉⲛⲧ**ⲟ, probably Psote; *p*(^we)*tenəto*, **Ⲫⲉⲛⲧⲱ**, and *p*(^w)*təneṭu*, **Ⲫⲉⲛⲧⲱ**, probably Φθενέτου;⁶⁵ *p*(^we)*laq(q)os*, **Ⲫⲏⲉⲛⲧⲱ**, and *p*(^we)*lāq(q)os*, **Ⲫⲏⲉⲛⲧⲱ**, Φλάκκος; *p*(^we)*labiyādos*, **Ⲫⲏⲉⲛⲧⲱ**, Φλαβιάδος; *ʿawp*(^we)*suki-yos*, **Ⲫⲏⲉⲛⲧⲱ**, and *ʿewp*(^we)*səkiyos*, **Ⲫⲏⲉⲛⲧⲱ**, Εὐψύχιος; *māmp*(^we)-*suqrinās*, **Ⲫⲏⲉⲛⲧⲱ**, certainly Μάμψου κρήνης⁶⁶ (Fig. 08). Aside from the phonetic questions related to the rendering in Gəʿəz script of Greek labials, the sign poses the palaeographic question of the invariability of the shape of the letter and of its interpretation, namely, which order this sign represents and

65 The identifications of *P*(^we)*səton*, *P*(^we)*tenəto*, and *P*(^w)*təneṭu*, are suggested by Alberto Camplani in his forthcoming commentary to the *History of the Episcopate of Alexandria*.

66 See Ruge 1933a; and for the passage from *Mops-* to *Mamps-*, which is attested from the first half of the third century to John Malalas (c.491–578), see Ruge 1933b.

which is the relationship of this sign with the letter *p* (τ), the regular sixth order of which *pə* (τ) is never attested in the manuscript; in fact, the letter *p* occurs only twice (f. 40va) in a short text on the Greek-Egyptian names of months: in both cases it is in the fourth order, in the words *pāwofî* (Ⲡⲓⲱⲓⲱⲓ) and *pārmoti* (Ⲡⲓⲣⲙⲟⲩⲓ).⁶⁷ The evidence would be in favour of interpreting the sign *p*(^v*e*) as an archaic form of the sixth order, with the value *pə/p* (phonetically corresponding to the standard τ), and with no labial appendix.

More to orthography than to palaeography belong the consistent and exclusive spellings 'əgzi'a bəher (ⲀⲒⲒⲓⲁ ⲃⲉⲎⲉⲣ), 'Lord, God', instead of the later 'əgzi'abəher (ⲀⲒⲒⲓⲁⲃⲉⲎⲉⲣ), and 'ēpīsqōpos (ⲉⲓⲡⲓⲚⲟⲩⲱⲱⲱⲱⲱⲱ), 'bishop', instead of the later 'ēpīsqōpos (ⲉⲓⲡⲓⲚⲟⲩⲱⲱⲱⲱⲱⲱ).

On this basis codex Σ can be dated at the latest to the thirteenth century with a concrete possibility of an earlier dating. It is one, probably the largest, of the most ancient (pre-fourteenth century) Gə'əz non-biblical manuscripts known so far.

§ 8. Inks of codex Σ (Denis Nosnitsin and Ira Rabin)

As part of the manifold study of the unique manuscript, in 2012, 2014 and 2015 several modern non-destructive techniques of material studies were applied to codex Σ in attempts to clarify the chemical composition of its inks.⁶⁸

In the course of the 2012 digitization of the manuscript and on some other occasions, the team of 'Ethio-SPaRe' conducted a quick NIR (near-infrared) reflectography of the inks by means of digital USB-microscope Dinolite Pro2 AD413T-I2V.⁶⁹ Exposed to NIR-light, the black ink of codex Σ largely

67 See Bausi 2013, 38–39, with figures, for a detailed discussion of the phenomenon; see also Villa 2019, 210–212.

68 Carbon and iron-gall inks are commonly considered the most important ink types for various manuscript traditions. Plant inks (also known as 'Theophilus ink') represent still another major type. Mixed inks also existed, composed of the mixture of the main ink types or their ingredients (cf. Déroche 2006, 111–119; Agati 2009, 267–271; Rabin 2015; Centre for the Study of Manuscript Cultures 2015). Recent studies showed that in some cultural contexts mixed inks were very wide-spread, for instance in the situations when scribes were not directly involved in the process of ink production but only wished to obtain ready black inks (as it appears to be the case with some of the inks encountered in the documents of the Cairo Genizah, see Cohen 2020; cf. also Colini et al. 2018; Ghigo et al. 2020). In the Ethiopian Christian manuscript culture, the dominance of the carbon inks starting from c. fourteenth century over the entire classical medieval ('Solomonic') period seems to be proven and hardly disputable, even though many details require further study (cf. Balicka-Witakowska et al. 2015, 156–157; Nosnitsin 2020, 292–294).

69 The team followed professional advice of Ira Rabin and the method developed in BAM ('Bundesamt für Materialforschung'). The results of the application of this

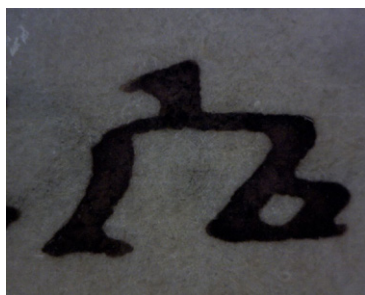


Fig. 09a-b. Codex Σ , character *se*, black ink in LED (a) and NIR (b), images taken with Dinolite Pro2 AD413T-I2V.



Fig. 10a-b. Codex Σ , character *qo*, black ink in LED (a) and NIR (b), images taken with Dinolite Pro2 AD413T-I2V.



Fig. 11a-b. Codex Σ , character *ro*, black ink in LED (a) and NIR (b), images taken with Dinolite Pro2 AD413T-I2V.

loses its opacity showing, however, some small carbon particles which retain the deep black colour (Figs. 09–11). This result indicates the presence of carbon that does not constitute the major component of the ink. Therefore, using reflectography alone it was possible to conclude that we deal with mixed ink here whose major component might belong to the iron-gall type. As to the red

method aimed at preliminary classification of the inks into carbon or non-carbon types are summarized in a report, see Nosnitsin 2014.

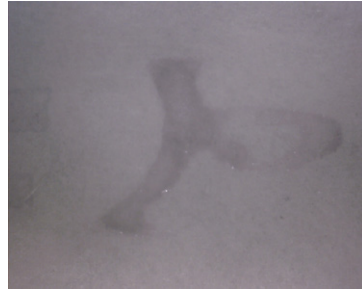
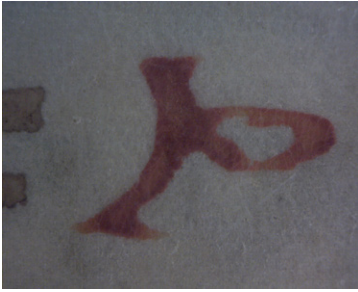


Fig. 12a-b. Codex Σ , character 10, red ink in LED (a) and NIR (b), images taken with Dinolite Pro2 AD413T-I2V.



Fig. 13a-b. Codex Σ , character *wa*, red ink in LED (a) and NIR (b), images taken with Dinolite Pro2 AD413T-I2V.

ink of the manuscript, when exposed to NIR-light it partly preserves its opacity (Figs. 12–13), indicating that it probably contains some carbon.

More advanced and complex methods were applied in 2014 and later in 2015, in the aftermath of the treatment by the specialists in manuscript conservation, as a part of the Ethio-SPaRe manuscript conservation programme.⁷⁰ At the concluding stage of the work⁷¹ the aim was to study the chemical composition of the inks of codex Σ and some other valuable manuscripts, and to gather as much information about their materiality as possible.

Ira Rabin conducted X-ray spectrometric study of codex Σ on 7–9 June 2014, *in situ* (the church of 'Urā Qirqos), using XRF portable spectrometer TRACER III-SD (Bruker). Measurements were gathered from the ink of the text, f. 23ra.29, and f. 23va.4, and from the blank parchment in the bottom margin of f. 23v (see Fig. 14a–b). The results showed that the non-carbon ink contains the enhanced amount of Fe accompanied by Mn (Chart 1), that possibly indicates the presence of the iron-gall ink. The elevated amounts of K that was also found could point to gum arabic as binder.

70 Nosnitsin 2019.

71 Conducted by the joint mission of the 'Ethio-SPaRe' project and specialists from the Center of the Studies of Manuscript Cultures group, 21 May–9 June 2014.

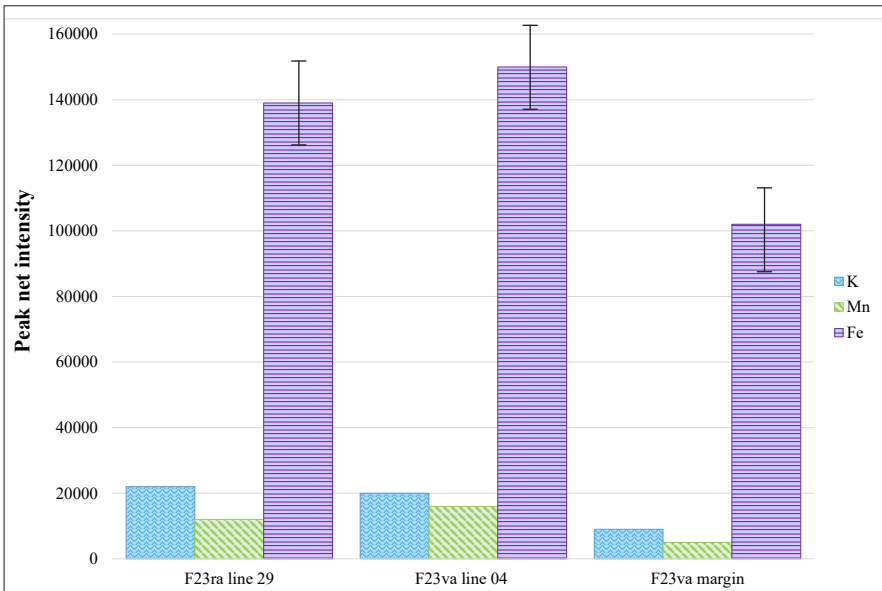


Chart 1. X-ray spectrometric study of Codex Σ with TRACER III-SD (Bruker), ff. 23ra (black ink), 23va (black ink), 23va (parchment).

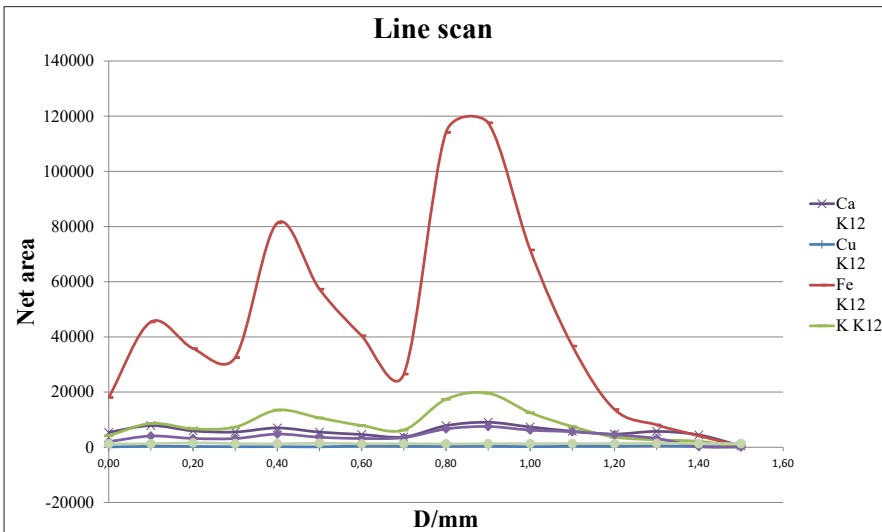


Chart 2. μ -X-ray fluorescence spectrometric study of codex Σ , with ARTAX (Bruker), a written line on f. 22ra.

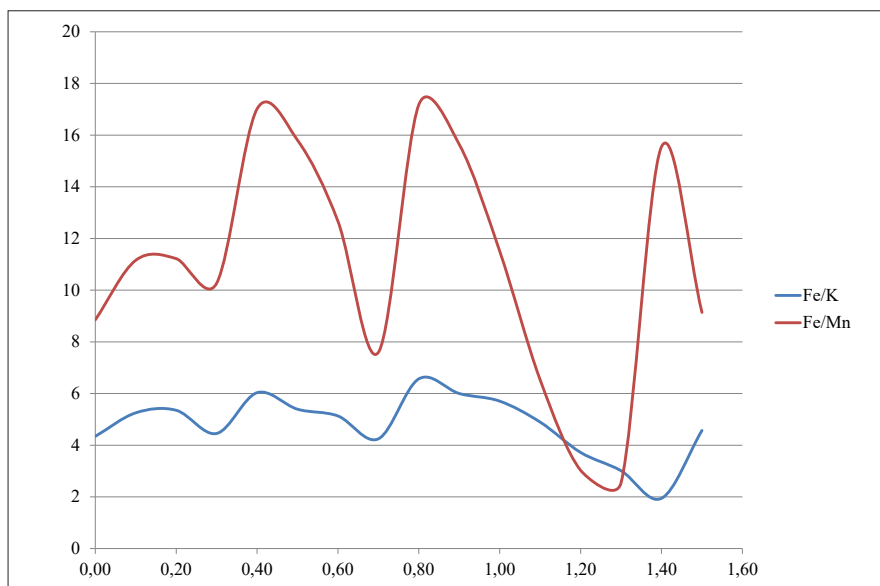


Chart 3. μ -X-ray fluorescence spectrometric study of codex Σ , with ARTAX (Bruker), f. 22ra, correlation of Mn and K with Fe.

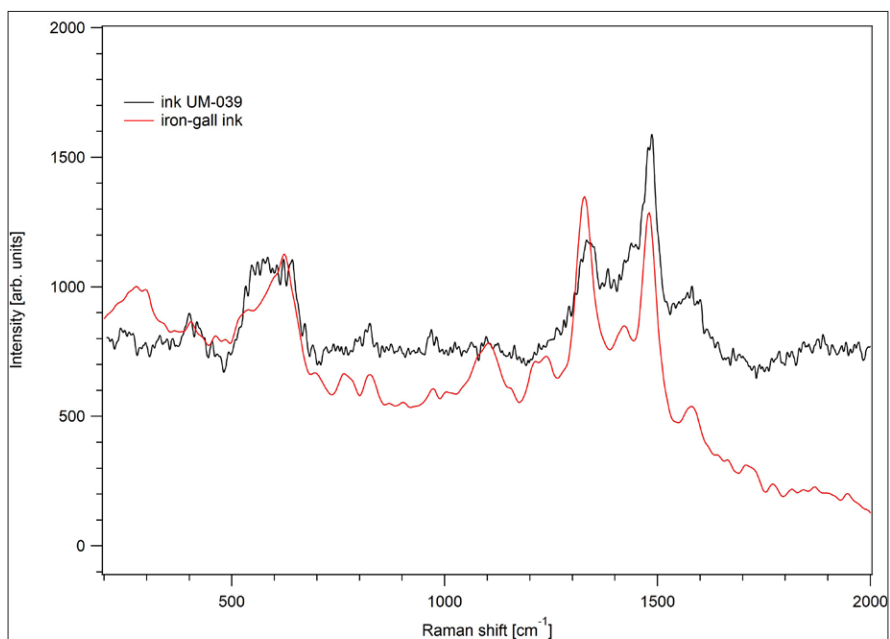


Chart 4. μ -Raman spectroscopy with InVia (Renishaw): codex Σ , f. 22r, black ink, and a fresh iron-gall ink.

bic as a binding agent. The ratio Fe/Mn is constant for the ink that could point to unusually clean vitriol as a source of iron. It seems probable that nails or filings that commonly contain manganese in addition to iron were used here in good accord with extant Arabic recipes.⁷² Moreover, the use of metallic iron for production of black pigment seems to belong to the traditional methods in Africa.⁷³ Recently, inks with a similar composition discovered in medieval Coptic and Hebrew manuscripts from Cairo Genizah have been ascribed to a non-vitriolic variety of iron-gall inks.⁷⁴

The final proof of the presence of the iron-gall ink has been delivered by Raman spectroscopy. Rabin measured a spot from f. 22r by means of the spectrometer InVia (Renishaw). The spectrum of the black ink of codex Σ and that of a fresh iron-gall ink are comparable (Chart 4). Raman spectrography cannot detect small amounts of soot, and the presence of a soot component could therefore not be proved. But it has unequivocally proved that at least one component is a kind of iron-gall ink. The overall conclusion is that the black ink of codex Σ is of the iron-gall type, with a very small admixture of soot.

The final conclusion provides another piece of information indicating that in the pre-fourteenth-century period the carbon ink was not the only and possibly not the first option of the Ethiopian manuscript-makers, even though soot could have been used. It is also another indirect indication that the carbon dominated the professional field of the Ethiopian manuscript making starting only from *c.* the late thirteenth/beginning of the fourteenth century.⁷⁵ However, the general picture is more complicated as the use of plant inks before and after the fourteenth century appears possible, as preliminary studies have

72 See e.g. Schopen 2006, 98, 124; Fani 2014, 111.

73 See Biddle 2011, 14, 19.

74 See Ghigo et al. 2020; Cohen 2020.

75 For the moment, it is not possible to learn how exactly the iron-gall ink was prepared in that remote time in Ethiopia, and what kind of raw materials were in use. The technology is very flexible and actually less time-consuming than the preparation of the carbon inks. The durability and persistence of the iron-gall inks is well known. It works its way into the writing support and produces intensive black colour (as a result of the reaction of oxidation) and retains the colour over a long time. Unlike the carbon ink, the iron-gall ink cannot be washed away. However, it can change its colour (since it deteriorates). Under certain conditions, it can damage the writing support (ink corrosion). In the last time it was seen by the scholars and conservators, the ink of codex Σ was for the most part of light brown colour. When discovered, the binding of the manuscript was destroyed and the quires were misplaced, nevertheless the parchment leaves survived many centuries without significant damage, the ink was in good condition and the text was overall well readable.

shown,⁷⁶ but more testing is necessary. In the end, the ink analysis does not bring forth a very precise dating for codex Σ , yet it contributes to elucidating the cultural and technological context of late antique/early-medieval Ethiopia (see the proposed dating above) where the manuscript was produced.⁷⁷

The discovery of the iron-gall ink remains bound to one single manuscript, codex Σ , with no other cases positively attested so far. It cannot be excluded that codex Σ will remain unique, but there may be also some other reasons. First, the manuscript material from the pre-fourteenth-century period is scanty, and identification and evaluation of the pre-fourteenth-century manuscripts is a problem in itself. Second, it is still not easy to surmount technical challenges that accompany the material study. The analysis of the inks can be conducted only in several steps, with the use of expensive and in part hardly transportable devices. The third problem concerns the physical accessibility of the manuscripts and the official permission for material studies. Some other ancient manuscripts and fragments could come in question for the analysis of inks and would provide, with great probability, important information, but in many cases the hope to get a chance even for a simple reflectography is small, especially in traditional Ethiopian repositories,⁷⁸ and can be realized in exceptional cases only. Without doubt, the analysis of the inks in the 'Āndā 'Abbā Garimā Gospels would clarify a number of questions, and it remains the main *desideratum*.⁷⁹

76 See the following footnote.

77 Cf. the results of the material study of the ancient fragments in mss Dabri Dabra Zakāryos Giyorgis, Ethio-SPaRe DGD-002, 'Urā Qirqos, Ethio-SPaRe UM-033 that indicated the admixture of non-carbon inks, i.e. iron-gall or plant (see Nosnitsin 2014), and the same for the fragment of Mə'əsār Gʷəḥilā (Nosnitsin and Rabin 2014, 75–76), all dated to the pre-fourteenth-century period also on the basis of various other evidence. We can only speculate as to why the transition to the carbon ink was necessary in Ethiopia and how it took place. During this period, the scribes could have been using mixed inks, experimenting with ingredients of different ink types and trying to achieve better results. Later they finally preferred the carbon inks (adherence to the soot-based inks has been observed in other African manuscript cultures, see Biddle 2011, 22–24, 27).

78 A number of ancient items are listed in Nosnitsin 2020. There is still a small hope to check the ancient ms MY-002 (Nosnitsin and Bulakh 2014) at least with the Dinolite, but hardly any chance to reach the ancient 'Comboni fragment' that may be comparable in age with codex Σ (Nosnitsin 2021). The ink of the recently identified ancient (probably pre-fourteenth century) fragment ms Archäologisches Landesmuseum Schloss Gottorf, collection Dettenberg, D845, is not purely carbon, as the preliminary reflectography with Dinolite has demonstrated.

79 This most important facet of the manuscripts' materiality has not been attended yet, cf. the recent study McKenzie et al. 2016 .

§ 9. *History of research and acknowledgements* (Alessandro Bausi)

The Ethiopic codex (here indicated as codex Σ) which is the subject of this contribution was first brought to scholarly attention from its original site of 'Urā Masqal, in north-eastern Təgrāy (in the 'East Tigray Zone') by Jacques Mercier in 1999.⁸⁰ Mercier, in his capacity of director of the project 'Safeguarding Religious Treasures of the Ethiopian Orthodox Church', entrusted me, as a specialist in canon law literature whom he had known since 1990, and who was at the time in Addis Ababa for a research trip, with the description and study, besides other material, of the microfilmed documentation of Σ .⁸¹ I started my research on Σ in 1999, when I was still based at the Università degli Studi di Napoli 'L'Orientale'. At this stage, the leaves of the manuscript were totally disarrayed and some of them appeared to be missing, but I proposed nonetheless a virtual reconstruction of the sequence of texts that was later confirmed. Eventually, two years later, a new set of images was made available, which was necessary due to the loss of the fifth, and last, microfilm of the first set; the new set confirmed that a few portions of the codex were lost. This still happened during the outbreak of the armed conflict between Eritrea and Ethiopia in 1998–2000, which put at risk the site of 'Urā Masqal, very near to the border, so that Mercier's project moved the manuscript collection from 'Urā Masqal to 'Urā Qirqos, where it is still found. In 2006 Antonella Brita—at the time a PhD student of mine—was able to locate exactly the co-

80 For a similar summary of research, see also Bausi and Camplani 2016, 254–255, with a full list of papers and publications related to Σ to 2016 on pages 255–265.

81 'Safeguarding Religious Treasures of the Ethiopian Orthodox Church' was a European Union-funded research project, carried out in cooperation with the Ethiopian Orthodox Tawaḥədo Church and the Regional Government of Təgrāy. See Mercier 2000, 36, n. 6; and for the project, Mercier and Daniel Seifemichael 2009. There were three meetings in Addis Ababa, on 6, 7, and 8 July 1999; Mercier was personally not particularly interested in the manuscript, but he had immediately realized its potential importance; the manuscript was on this occasion confidentially named '*Sinodos* of Qəfrəyā'. Among other materials, I described also an ancient Octateuch from the same site; the draft description integrated the description carried out by Abreham Adugna for the 'Ethio-SPaRe' project, which attributed the shelf mark UM-040 to the manuscript; also this manuscript was digitised for the first time by Brita in 2006. To the research visits to the site of 'Urā Masqal and 'Urā Qirqos mentioned here, others are certainly to be added. For example, Yaḳob Beyene of the University of Naples 'L'Orientale', visited the site in 2005 and 2006, and researchers of the 'Centre Français d'Études Éthiopiennes' also documented the site of 'Urā Masqal (for these latter, see the picture of the interior of the church of Beta Masqal by Marie-Laure Derat, in Fritsch 2010, 104 fig. 3). Partial documentation was acquired by Ewa Balicka-Witakowska and Michael Gervers for the 'Mäzḡäbä-Səəlat – Treasury of Ethiopian Images' project.

dex in the church of 'Urā Qirqos and to document it digitally for the first time during a series of trips funded by the Ministry of University and Scientific Research of Italy.⁸² This independent documentation allowed the publication of some texts attested exclusively by codex Σ. The manuscript had received in the meanwhile two shelf marks: the shelf mark 'Sinodos C₃-IV-71' ('ሲ.ፍ.ጸ.ሰ C₃-IV-71'), written on a paper sheet inserted in the bundles of dismembered leaves of the manuscript, and a smaller paper label with the shelf mark 'C₃-IV-73' pasted down on the bottom margin of present f. 4r. The attribution of these shelf marks dates to the time period elapsed between the second micro-filming carried out by Mercier and the digital recording carried out by Brita in 2006, when Brita first noted and documented the two shelf marks.

The study and the eventual publication of texts took place within the framework of university projects I directed from 1999 to 2008 on the language and literature of the kingdom of Aksum and its survival in medieval and modern Ethiopia and Eritrea at the Università degli Studi di Napoli 'L'Orientale'.⁸³ In the summer of 1999 I carried out the transcription of the whole manuscript in about one month of day-and-night work and was able to identify almost all the texts, most of which were unknown in the Ethiopic version, while a couple of them remain apparently unknown also in other languages. I also drafted a preliminary essay on the codex doomed to appear in a catalogue of Təgrāy antiquities prepared by Mercier, which was never published. This also implied that researches related to the manuscript, and particularly its contents, should not be published. I circulated the unpublished draft among some colleagues, among whom I would like to mention Alberto Camplani for his genuine and profound interest and the extraordinarily intense, fruitful, loyal, and fraternal cooperation he has put in his numerous contributions touching on the *History of the Episcopate of Alexandria*, being thus involved almost since the beginning in this study, and remaining the main associate in the researches carried out on codex Σ.⁸⁴

82 'Linguistic and cultural traditional chains in the Christian Orient and text-critical philology. Problems of the Ethiopic texts: Aksumite texts, texts on the Aksumite age, translated hagiographical texts', project funded by the Ministry of University and Scientific Research of Italy, Year 2005 (2005–2007, PI Bausi as National scientific director and director of the Naples unit, Università degli Studi di Napoli 'L'Orientale').

83 'Tradizioni letterarie dell'Etiopia antica e medievale. Alla ricerca delle sopravvivenze aksumite (IV–VII secolo d.C.)' (1999); 'La lingua e la letteratura del regno di Aksum e la sua tradizione nell'Etiopia premoderna' (2000–2002); 'Testi e tradizione della più antica lingua e letteratura ge'ez (etiopico antico): analisi filologica e linguistica' (2003–2008).

84 Along with him, I would like to mention here, among those who joined earlier or later, at least Gianfranco Agosti, Heinzgerd Brakmann, Benedetto Bravo, Paola

The research on the manuscript continued since 2009 at the Universität Hamburg, at the Hiob Ludolf Centre for Ethiopian and Eritrean Studies (HLCEES) and since 2011 also at the Centre for the Study of Manuscript Cultures (CSMC). The manuscript was already listed and scheduled to be further studied and documented in the proposed sub-project ‘Cross-Section Views of Evolving Knowledge: Canonico-Liturgical and Hagiographic Ethiopic Christian Manuscripts as Corpus-Organizers’ (2011–2015).⁸⁵ In the meanwhile the project ‘Ethio-SPaRe: Cultural Heritage of Christian Ethiopia: Salvation, Preservation, Research’ (2009–2015), during the first field trip led by Denis Nosnitsin with the participation of Stéphane Ancel and Vitagrazia Pisani, digitized again the manuscript.⁸⁶ This project documented digitally the codex for the second time with high professional quality pictures, attributed it the shelf mark UM-039, and prepared the manuscript for the subsequent conservation according to the philological description and hypotheses I had advanced. Moreover, the ‘Ethio-SPaRe’ expedition was also able to discover two additional dismembered leaves belonging to Σ that were not included in the previous sets of pictures and filled two gaps in the sequence of folia and texts (ff. 13 and 74).⁸⁷ The conservation and a codicological analysis were successfully carried out in May-June 2012 by Marco Di Bella and Nikolas Sarris, with the scientific assistance of Brita and Nosnitsin.⁸⁸

Buzi, Emmanuel Fritsch, Michael Kohlbacher, Annick Martin, Reinhard Meßner, Ágnes T. Mihálykó, Tito Orlandi, Ewa Wipszycka, and Ugo Zanetti.

- 85 ‘Cross-Section Views of Evolving Knowledge: Canonico-Liturgical and Hagiographic Ethiopic Christian Manuscripts as Corpus-Organizers’ (2011–2015) of the Sonderforschungsbereich (SFB) 950, ‘Manuskriptkulturen in Asien, Afrika und Europa’ (2011–2020, CSMC, TP C05, PI Bausi, with Brita as researcher), funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation).
- 86 ‘Ethio-SPaRe: Cultural Heritage of Christian Ethiopia: Salvation, Preservation, Research’ (2009–2015, HLCEES, PI Nosnitsin), funded by the European Research Council, European Union Seventh Framework Programme IDEAS (FP7/2007–2013) / ERC Advanced Grant agreement no. 240720.
- 87 On this discovery see Bausi 2015b.
- 88 Sponsored by the project ‘Ethio-SPaRe’, with the participation of Brita as fellow of the SFB 950 sub-project. The conservators, as recorded by pictures documenting their work, removed from the parchment, as required, the label containing the shelf mark ‘C₃-IV-73’ present on f. 4r, and pasted down the paper sheet reporting the shelf mark ‘ሲ.፻፳ሳ C₃-IV-71’ on the inner side of the cover of the archival box where the codex was accommodated. This twofold shelf mark has left traces in some publications, which mention either the first or the latter shelf mark; in fact, both shelf marks correspond to ephemeral circulation units (to be dated to the years 2000–2012) of the only production unit of codex Σ .

The scientific analyses which are the subject of the note on inks base on a third joint field-trip of the projects ‘Ethio-SPaRe’ and ‘Cross-Section Views of Evolving Knowledge’ carried out in June 2014. Laboratory scientific analyses were carried out within the framework of Ira Rabin’s work at the CSMC and at the Bundesamt für Materialforschung und -prüfung (BAM).

Codex Σ , for its exceptional textual contents, was also an important component in the project ‘TraCES: From Translation to Creation: Changes in Ethiopic Style and Lexicon from Late Antiquity to the Middle Ages’ (2014–2019): its evidence contributed to develop ideas and concepts which shaped the ‘GeTa’ tool developed for linguistic annotation.⁸⁹ At present codex Σ is being studied for the long-term project ‘Beta maṣāḥəft: Die Schriftkultur des christlichen Äthiopiens und Eritreas: Eine multimediale Forschungsumgebung’, where this description will eventually be made available;⁹⁰ it will be furtherly studied within the project ‘Understanding Written Artefacts: Material, Interaction and Transmission in Manuscript Cultures’.⁹¹

Abbreviations

Cae = *Clavis aethiopica*, see <<https://betamasaheft.eu/works/list>>.

CPG = M. Geerard, *Clavis patrum Graecorum*, I: *Patres antenicaeni, schedulis usi quibus rem paravit F. Winkelmann*; Id., II: *Ab Athanasio ad Chrysostomum*; Id., III: *A Cyrillo Alexandrino ad Iohannem Damascenum*; Id., IV: *Concilia. Cate-nae*; Id. and Jacques Noret, *Clavis patrum Graecorum, Supplementum, Corpus Christianorum* (Turnhout: Brepols, 1983, 1974, 1979, 1980, 1998).

Bibliography

Agati, M. L. 2009. *Il libro manoscritto da Oriente a Occidente. Per una codicologia comparata*, *Studia archaeologica*, 166 (Roma: «L’Erma» di Bretschneider, 2009).

89 ‘TraCES: From Translation to Creation: Changes in Ethiopic Style and Lexicon from Late Antiquity to the Middle Ages’ (2014–2019, HLCEES, PI Bausi), funded by the European Research Council, European Union Seventh Framework Programme IDEAS (FP7/2007–2013) / ERC Advanced Grant agreement no. 338756.

90 ‘Beta maṣāḥəft: Die Schriftkultur des christlichen Äthiopiens und Eritreas: Eine multimediale Forschungsumgebung’ (2016–2040, HLCEES, PI Bausi), funded within the Academies’ Programme, coordinated by the Union of the German Academies of Sciences and Humanities, under survey of the Akademie der Wissenschaften in Hamburg. The online description of codex Σ by Eugenia Sokolinski on the basis of this note is available at <<http://betamasaheft.eu/ESum039>>.

91 ‘Understanding Written Artefacts: Material, Interaction and Transmission in Manuscript Cultures’ (2019–2026, CSMC, Spokeperson Michael Friedrich), Germany’s Excellence Strategy EXC 2176 project no. 390893796, funded by the DFG.

- Alberigo, G., ed., 2006. *The Oecumenical Councils: from Nicaea I to Nicaea II (325–787)*, Corpus Christianorum, Conciliorum Oecumenicorum Generalium-que Decreta, 1 (Turnhout: Brepols, 2006).
- Balicka-Witakowska, E., A. Bausi, C. Bosc-Tiessé, and D. Nonsnitsin 2015. ‘Ethiopic Codicology’, in Bausi et al. 2015, 154–174.
- Bausi, A. 1995. *Il Sēnodos etiopico. Canoni pseudoapostolici: Canoni dopo l’Ascensione, Canoni di Simone il Cananeo, Canoni Apostolici, Lettera di Pietro. Textus; Versio*, ed., tr., I–II, Corpus Scriptorum Christianorum Orientalium, 552, 553, Scriptorum Aethiopicum, 101, 102 (Lovanii: In aedibus E. Peeters, 1995).
- 1998. ‘L’*Epistola 70* di Cipriano di Cartagine in versione etiopica’, *Aethiopica*, 1 (1998), 101–130.
- 2003. *La «Vita» e i «Miracoli» di Libānos. Textus; Versio*, ed., tr., I–II, Corpus Scriptorum Christianorum Orientalium, 595, 596, Scriptorum Aethiopicum, 105, 106 (Lovanii: In aedibus E. Peeters, 2003).
- 2004. ‘Charakteristika äthiopischer Handschriften: einige paläographische, sprachliche und philologische Daten’, paper presented as *Gastvortrag* at the *Seminar für Semitistik und Arabistik*, Freie Universität Berlin, 24 May 2004.
- 2005a. ‘Ancient Features of Ancient Ethiopic’, *Aethiopica*, 8 (2005), 149–169.
- 2005b. ‘Etiopico *ellē*: a proposito di un’ipotesi recente’, in D. Nonsnitsin, S. Frantsouzoff, L. Kogan, and B. Lourié, eds, *Varia Aethiopica: In Memory of Sevir B. Chernetsov (1943–2005)*, *Scrinium*, 1 (2005) (Saint-Petersbourg: Société des études byzantines et slaves, Byzantinorossica, 2005), 3–11.
- 2006a. ‘La *Collezione aksumita* canonico-liturgica’, *Adamantius*, 12 (2006), 43–70.
- 2006b. ‘La versione etiopica delle *Risposte canoniche* di Timoteo I attribuite a Pietro di Alessandria (*CPG II*, nr. 2520)’, in B. Lourié and A. V. Muraviev, eds, *Universum Hagiographicum. Mémorial R. P. Michel van Esbroeck, s.j. (1934–2003)*, *Scrinium*, 2 (Saint-Petersbourg: Société des études byzantines et slaves, 2006), 41–57.
- 2009. ‘The ›So-called *Traditio apostolica*‹: Preliminary Observations on the New Ethiopic Evidence’, in H. Grieser and A. Merkt, eds, *Volksglaube im antiken Christentum. Prof. Dr. Theofried Baumeister OFM zur Emeritierung* (Darmstadt: Wissenschaftliche Buchgesellschaft, 2009), 291–321.
- 2011. ‘La “nuova” versione etiopica della *Traditio apostolica*: edizione e traduzione preliminare’, in P. Buzi and A. Camplani, eds, *Christianity in Egypt: Literary Production and Intellectual Trends in Late Antiquity. Studies in Honor of Tito Orlandi*, *Studia Ephemeridis Augustinianum*, 125 (Roma: Institutum Patristicum Augustinianum, 2011), 19–69.

- 2012. ‘Una “lista” etiopica di apostoli e discepoli’, in A. Bausi, A. Brita, A. Manzo, C. Baffioni, and E. Francesca, eds, *Æthiopica et Orientalia. Studi in onore di Yaqob Beyene*, I, Studi Africanistici, Serie Etiopica, 9 (Napoli: Università degli Studi di Napoli “L’Orientale”, Dipartimento Asia, Africa e Mediterraneo, 2012), 43–67.
- 2013. ‘Liste etiopiche di vescovi niceni’, in P. Bruns and H. O. Luthe, eds, *Orientalia Christiana. Festschrift für Hubert Kaufhold zum 70. Geburtstag*, Eichstätter Beiträge zum Christlichen Orient, 3 (Wiesbaden: Harrassowitz, 2013), 33–73.
- 2014a. ‘Filologi o “falsari”? Ancora su un passo del *Gadla Libānos*’, in A. Bausi, A. Gori, and G. Lusini, eds, *Linguistic, Oriental and Ethiopian studies in memory of Paolo Marrassini* (Wiesbaden: Harrassowitz, 2014), 55–70.
- 2014b. ‘Writing, Copying, Translating: Ethiopia as a Manuscript Culture’, in J. Quenzer, D. Bondarev, and J.-U. Sobisch, eds, *Manuscript Cultures: Mapping the Field*, Studies in Manuscript Cultures, 1 (Berlin–New York: De Gruyter, 2014), 37–77.
- 2015a. ‘The *Aksumite Collection*. Ethiopic Multiple Text Manuscripts’, in Bausi et al. 2015, 367–372.
- 2015b. ‘Serendipity in the Tigray Highlands. When a Scholar Kneels down to Look underneath a Church Cupboard’, *SFB950 - Manuscript of the Month*, 08/2015 (2015), 1–2, <https://www.manuscript-cultures.uni-hamburg.de/mom/2015_08_mom_e.html>.
- 2016a. ‘I colofoni e le sottoscrizioni dei manoscritti etiopici’, in A. Sirinian, P. Buzi, and G. Shurgaia, eds, *Colofoni armeni a confronto. Le sottoscrizioni dei manoscritti in ambito armeno e nelle altre tradizioni scritte del mondo mediterraneo. Atti del colloquio internazionale. Bologna, 12–13 ottobre 2012*, *Orientalia Christiana Analecta*, 299 (Roma: Pontificio Istituto Orientale, 2016), 233–260.
- 2016b. ‘The Accidents of Transmission: On a Surprising Multilingual Manuscript Leaf. With the Edition of the Ethiopic Version of Two Constantinian Epistles (CPG no. 8517, *Epistula Constantini imperatoris ad ecclesiam Alexandrinam*, and CPG nos 2041 = 8519, *Lex lata Constantini Augusti de Arii damnatione*)’, *Adamantius*, 22 (2016, pub. 2017), 303–322.
- 2016c. ‘On Editing and Normalizing Ethiopic Texts’, in A. Bausi and E. Sokolinski, eds, *150 Years after Dillmann’s Lexicon: Perspectives and Challenges of Gə’əz Studies*, Supplement to *Æthiopica*, 5 (Wiesbaden: Harrassowitz Verlag, 2016), 43–102.
- 2018. ‘The Enigma of a Medieval Ethiopian Dynasty of Saints and Usurpers’ (review article of M.-L. Derat, *L’énigme d’une dynastie sainte et usurpatrice dans*

- le royaume chrétien d'Éthiopie du xi^e au xiii^e siècle*, Hagiologia, 14 (Turnhout: Brepols, 2018)), *Orientalistische Literaturzeitung*, 103/6 (2018), 439–447.
- 2019. ‘The Ethiopian Biblical Canon in its Earliest Literary Attestation: An Assessment of the Evidence’, paper presented at the *Society of Biblical Literature Annual Meeting 2019*, 23–26 November 2019 (San Diego, CA: 2019).
- 2020a. ‘Ethiopia and the Christian Ecumene: Cultural Transmission, Translation, and Reception’, in Kelly 2020, 217–251.
- 2020b. ‘A Few Remarks on the Hagiographical-Homiletic Collections in Ethiopic Manuscripts’, *Manuscript Cultures*, 13 (2020), 63–80.
- 2020c. ‘The *Baptismal Ritual* in the Earliest Ethiopic Canonical Liturgical Collection’, in H. Brakmann, T. Chronz, and C. Sode, eds, »*Neugeboren durch das Wasser und den Heiligen Geist*«. *Kölner Kolloquium zur Initiatio Christiana*, Jerusalem Theologisches Forum, 37 (Münster: Aschendorff Verlag, 2020), 31–83.
- Bausi, A. and A. Camplani 2016. ‘The *History of the Episcopate of Alexandria (HEpA)*: Editio minor of the Fragments Preserved in the Aksumite Collection and in the *Codex Veronensis* LX (58)’, *Adamantius*, 22 (2016, pub. 2017), 249–302.
- Bausi, A., M. J. Harrower, and I. A. Dumitru 2020. ‘The Gə‘əz Inscriptions from Beta Samā‘ti (Beta Samati)’, *Bibliotheca Orientalis*, 77/1 (2020), 34–56.
- Bausi, A. and D. Nosnitsin 2015. ‘Ethiopic Palaeography’, in Bausi et al. 2015, 287–291.
- Bausi, A., P. G. Borbone, F. Briquel Chatonnet, P. Buzi, J. Gippert, C. Macé, Z. Melissakes, L. E. Parodi, W. Witakowski, and E. Sokolinski, eds, 2015. *Comparative Oriental Manuscript Studies: An Introduction* (Hamburg: Tredition, 2015).
- Benešević, V. 1937. *Ioannis Scholastici Synagoga L Titulorum ceteraque eiusdem opera iuridica*, I, Abhandlungen der Bayerischen Akademie der Wissenschaften, Philosophisch-historische Abteilung, Neue Folge, 14 (München: Verlag der Bayerischen Akademie der Wissenschaften in Kommission bei der C. H. Beck’schen Verlagsbuchhandlung München, 1937).
- Biddle, M. 2011. ‘Inks in the Islamic Manuscripts of Northern Nigeria Old Recipes, Modern Analysis and Medicine’, *Journal of Islamic Manuscripts*, 2/1 (2011), 1–35.
- Brakmann, H. 2020. ‘ΒΑΠΤΙΣΜΑ ΑΙΝΕΣΕΩΣ. Ordines und Orationen kirchlicher Engliederung in Alexandrien und Ägypten’, in H. Brakmann, T. Chronz, and C. Sode, eds, »*Neugeboren durch das Wasser und den Heiligen Geist*«. *Kölner Kolloquium zur Initiatio Christiana*, Jerusalem Theologisches Forum, 37 (Münster: Aschendorff Verlag, 2020), 85–196.

- Brita, A. 2015. 'The Manuscript as a Leaf Puzzle: the Case of the *Gädlä Säma 'tat* from 'Ura Qirqos (Ethiopia)', *Comparative Oriental Manuscript Studies Bulletin*, 1/1 (2015), 7–20.
- Budge, E. A. W. 1929. *The Bandlet of Righteousness, an Ethiopian Book of the Dead: The Ethiopic Text of the ሉፋፋ፡ ጽድቅ፡ in Facsimile from Two Manuscripts in the British Museum* (New York, NY: AMS Press, 1929).
- Bulakh, M. 2009. 'Nota genitivi za- in Epigraphic Geez', *Journal of Semitic Studies*, 54/2 (2009), 393–419.
- Camplani, A. 2020a. 'Transmitting and Being Transmitted: The Spread and Reception of the *History of the Episcopate of Alexandria* in Carthage and Aksum', in M. Conterno and M. Mazzola, eds, *Intercultural Exchange in Late Antique Historiography*, Bibliothèqne de *Byzantion*, 23 (Leuven–Paris–Bristol, CT: Peeters, 2020), 65–94.
- 2020b. 'L'impatto istituzionale dello scisma meliziano sulle diocesi della valle del Nilo: il contributo delle recenti scoperte testuali in etiopico', in I. Aulisa, L. Avellis, A. Campione, L. Carnevale, and A. Laghezza, eds, *Esegesi, vissuto cristiano, culto dei santi e santuari. Studi di storia del cristianesimo per Giorgio Otranto*, Quaderni di «*Vetera Christianorum*», 34 (Bari–S. Spirito: Edipuglia srl, 2020), 129–140.
- 2021. 'Severus of Antioch on Ancient Church Customs: the Significance of Cyprian's Letters as Quoted by Severus and Some Oriental Canonical Collections', in B. Britton-Ashkelony, M. L. Hjälrm, and R. Kitchen, eds, *The Third Lung: New Trajectories in Syriac Studies*, Eastern Christian Studies (Leuven: Peeters, forthcoming 2021).
- Cavallo, G. 1995. 'Qualche riflessione sulla continuità della cultura greca in Oriente tra i secoli VII e VIII', *Byzantinische Zeitschrift*, 88/1 (1995), 13–22.
- Centre for the Study of Manuscript Cultures 2015. 'Manuscript Lab', <https://www.manuscript-cultures.uni-hamburg.de/lab_material_e.html>.
- Cohen, Z. 2020. *Analyses de la composition de matériaux d'écriture dans des manuscrits de la Génizah du Caire. Composition analysis of writing materials in Genizah documents. Analyse der Zusammensetzung der Schreibmaterialien der Geniza Manuscripts*, PhD thesis (Paris: École Pratique des Hautes Études - Université PSL and Hamburg: Universität Hamburg, 2020).
- Colini, C., O. Hahn, O. Bonnerot, S. Steger, Z. Cohen, T. Ghigo, T. Christiansen, M. Bicchieri, P. Biocca, M. Krutzsch, and I. Rabin 2018. 'The Quest for the Mixed Inks', *Manuscript Cultures*, 18 (2018), 41–48.
- Conti Rossini, C. 1903. *Ricordi di un soggiorno in Eritrea. Fascicolo Primo. I. la lista reale di Enda Yohannes. – II. Il Gadla Sâdqân. – III. Il Gadla Libânos. – IV. L'ambasciata francese a Negusé. – V. Leggi tigrâi. – VI. Tradizioni Beni Amar, Alghedên e Sabderât* (Asmara: Tipografia della Missione Svedese, 1903).

- 1905. *Vitae Sanctorum Indigenarum*, I: *Gadla Baṣalota Mikā'el seu Acta S. Baṣalota Mikā'el*; II: *Gadla S. Anorēwos seu Acta Sancti Honorii*. *Textus; Versio*, ed., tr., I–II, *Corpus Scriptorum Christianorum Orientalium, Scriptores Aethiopici*, II, 20 (Romae–Parisiis–Lipsiae: Excudebat Karolus de Luigi–Carolus Poussielgue Bibliopola–Otto Harrassowitz, 1905, repr. CSCO, 28, 29, SAe, 11, 12, Lovanii: In aedibus E. Peeters, 1961, 1962).
- 1909–1910. *Documenta ad illustrandam historiam*, I: *Liber Axumae*. *Textus; Versio*, ed., tr., I–II, *Corpus Scriptorum Christianorum Orientalium, Scriptores Aethiopici*, Series Altera, 8 (Parisiis–Lipsiae: E typographeo reipublicae, Carolus Poussielgue, Bibliopola–Otto Harrassowitz, 1909–1910, repr. CSCO, 54, 58, SAe, 24, 27, Louvain–Lovanii: Secrétariat du CorpusSCO–In aedibus E. Peeters, 1961, 1962).
- Delamarer, S. and Getatchew Haile 2018. ‘The Ethiopic Undertext of Sinai Greek NF 90: Discovery and Analysis’, paper presented at the *International Conference ‘New Light on Old Manuscripts: Recent Advances in Palimpsest Studies*, Vienna, 25–27 April 2018.
- Derat, M.-L. 2018. *L’énigme d’une dynastie sainte et usurpatrice dans le royaume chrétien d’Éthiopie du x^e au xiii^e siècle*, *Hagiologia*, 14 (Turnhout: Brepols, 2018).
- Déroche, F. 2006. *Islamic Codicology. An Introduction to the Study of Manuscripts in Arabic Script*, ed. Muhammad Isa Waley, tr. Deke Dusinberre and David Radzinowicz (London: al-Furqān, 2006).
- Di Bella, M. and N. Sarris 2014. ‘Field Conservation in East Tigray, Ethiopia’, in M. J. Driscoll, ed., *Care and Conservation of Manuscripts 14. Proceedings of the fourteenth international seminar held at the University of Copenhagen 17th–19th October 2012* (Copenhagen: Museum Tusulanum Press, 2014), 271–307.
- Dillmann, [C. F.] A. 1878. *Verzeichnis der abessinischen Handschriften*, *Die Handschriften-Verzeichnisse der Königlichen Bibliothek zu Berlin*, 3 (Berlin: Buchdruckerei der Königlichen Akademie der Wissenschaften (G. Vogt), 1878).
- 1907. *Ethiopic Grammar; Second Edition, enlarged and improved*, ed. C. Bezold, tr. J. A. Crichton (London: Williams & Norgate, 1907).
- Erho, T. 2017. ‘Ethiopic Palimpsests and the Curious Case of Petermann II Nachtr. 24’, paper presented at the *Society of Biblical Literature Annual Meeting 2017*, 18–21 November 2017 (Boston, MA: 2017).
- 2020. ‘A Fourth Ethiopic Witness to the *Shepherd of Hermas*’, in M. Toca and D. Batovici, eds, *Caught in Translation: Studies on Versions of Late-Antique Christian Literature*, *Texts and Studies in Eastern Christianity*, 17 (Leiden–Boston, MA: Brill, 2020), 241–266.

- Erho, T. and W. B. Henry 2019. 'The Ethiopic *Jannes and Jambres* and the Greek Original', *Archiv für Papyrusforschung*, 65/1 (2019), 176–223.
- Fani, S. 2014. *Le arti del libro secondo le fonti arabe originali. I ricettari arabi per la fabbricazione degli inchiostri (sec. IX-XIII): loro importanza per una corretta valutazione e conservazione del patrimonio manoscritto*, PhD thesis (Napoli: Università degli studi di Napoli "L'Orientale", 2014).
- Fritsch, E. 2010. 'Twin pillars: an epistemological note in church archaeology', *Annales d'Éthiopie*, 25 (2010), 103–111.
- Fritsch, E. and Habtemichael Kidane 2020. 'The Medieval Ethiopian Orthodox Church and Its Liturgy', in Kelly 2020, 162–193.
- Gaudemet, J. 1985. *Les sources du droit de l'Eglise en Occident du II^e au VII^e siècle*, Initiations au christianisme ancien, 1 (Paris: Editions du CERF–Editions du C.N.R.S., 1985).
- Ghigo, T., I. Rabin, and P. Buzi 2020. 'Black Egyptian inks in Late Antiquity: New Insights on Their Manufacture and Use', *Archaeological and Anthropological Sciences*, 12/3 (2020), no. 70 <<https://doi.org/10.1007/s12520-019-00977-3>>.
- Hartmann, W. and K. Pennington, eds, 2012. *The History of Byzantine and Eastern Canon Law to 1500*, History of Medieval Canon Law, 4 (Washington, DC: The Catholic University of America Press, 2012).
- Kaufhold, H. 2012. 'Sources of the Canon Law in the Eastern Churches', in Hartmann and Pennington 2012, 215–342.
- Kelly, S., ed., 2020. *A Companion to Medieval Ethiopia and Eritrea*, Companions to European History (Leiden–Boston, MA: Brill, 2020).
- Leroy, J., S. Wright, and O. Jäger 1961. *Ethiopia. Illuminated manuscripts*, UNESCO World art series (New York: New York Graphic Society, 1961).
- Lizzi Testa, R. 2014. 'La *Collectio Avellana* e le collezioni canoniche romane e italiane del V-VI secolo: un progetto di ricerca', *Cristianesimo nella Storia*, 35 (2014), 77–102.
- Lowe, E. A. 1947. *Codices Latini antiquiores: a Palaeographical Guide to Latin Manuscripts prior to the Ninth Century*, IV: *Italy. Perugia – Verona* (Oxford: At the Clarendon Press, 1947).
- Marconi, G. and S. Margutti 2014. 'La *Collectio Avellana* e le collezioni canoniche romane e italiane del V-VI secolo: un progetto di ricerca. Appendice', *Cristianesimo nella Storia*, 35 (2014), 103–236.
- Maximous el-Antony, Fr., J. Blid, and A. M. Butts 2016. 'An Early Ethiopic Manuscript Fragment (Twelfth-Thirteenth Century) from the Monastery of St Antony (Egypt)', *Aethiopica*, 19 (2016, pub. 2017), 27–51.
- Mäzḡäbä Səəlat. *Treasury of Ethiopian Images*, <<http://ethiopia.deeds.utoronto.ca>>, MG-2005.092:012–023.

- McKenzie, J. S., F. Watson, and M. Gervers 2016. *The Garima Gospels: Early Illuminated Gospel Books from Ethiopia*, with Preface and Photographs by M. Gervers and contributions by M. R. Crawford, L. R. Macaulay, S. S. Norodom, A. T. Reyes, and M. E. Williams (Oxford: Manar al-Athar, 2016).
- Mercier, J. 2000. 'La peinture éthiopienne à l'époque axoumite et au XVIII^e siècle', *Académie des Inscriptions & Belles-Lettres, Comptes Rendus des séances*, 144/1 (2000), 35–71.
- Mercier, J. and D. Seifemichael, eds, 2009. *Ethiopian Church. Treasures & Faith* (Montpellier: Archange Minotaure, 2009).
- Meßner, R. 2016–2017. 'Die angebliche *Traditio Apostolica*. Eine neue Textpräsentation', *Archiv für Liturgiewissenschaft*, 58–59 (2016–2017), 1–58.
- Nosnitsin, D. 2013. *Churches and Monasteries of Təgray. A Survey of Manuscript Collections*, Supplement to Aethiopica, 1 (Wiesbaden: Harrassowitz Verlag, 2013).
- 2014. *Ethio-SPaRe Cultural Heritage of Christian Ethiopia: Salvation, Preservation and Research: Seventh and Eighth Mission 2014 Report, Part 2* (Hamburg: Hamburg University, 2014) <<https://www.aai.uni-hamburg.de/en/ethiostudies/research/ethiospare/missions/pdf/report2014-pt2.pdf>>.
- 2015. 'Pricking and Ruling in Ethiopic Manuscripts: an Aid for Dating?', *Comparative Oriental Manuscript Studies Bulletin*, 1/2 (2015), 94–108.
- 2016. 'The Old Chants for St. Gärîma: New Evidence from Gär'alta', *Scrinium*, 12/1 (2016), 84–103.
- 2018. 'Ancient Chants for 'abba Yoḥanni: Text Variance and Lost Identity', in V. Brugnatelli and M. Lafkioui, eds, *Written sources about Africa and their study. Le fonti scritte sull'Africa e i loro studi*, *Africana Ambrosiana*, 3 (Milano: Biblioteca Ambrosiana, Centro Ambrosiano, 2018), 287–311.
- 2019. *Ethio-SPaRe Cultural Heritage of Christian Ethiopia: Salvation, Preservation and Research: Manuscript Conservation Programme (2010-15): Report* (Hamburg: Hamburg University, 2019) <<https://www.aai.uni-hamburg.de/en/ethiostudies/research/ethiospare/missions/pdf/conservation-report.pdf>>.
- 2020. 'Christian Manuscript Culture of the Ethiopian-Eritrean Highlands: Some Analytical Insights', in Kelly 2020, 282–321.
- 2021. 'An Ancient Ethiopic Treatise on Computus and Chronology: A Preliminary Evaluation', in A. Gori and F. Viti, eds, *L'Africa nel mondo, il mondo in Africa / Africa in the World, the World in Africa*, *Africana Ambrosiana*, 5 (Milano: Accademia Ambrosiana, forthcoming 2021).
- Nosnitsin, D. and M. Bulakh 2014. 'A Fragment of an Ancient Four Gospels Book (Lk 6:35–7:7): A Short Analysis', in A. Bausi, A. Gori, and G. Lusini, eds, *Lin-*

- guistic, Oriental and Ethiopian studies in memory of Paolo Marrassini* (Wiesbaden: Harrassowitz, 2014), 551–581.
- Nosnitsin, D. and I. Rabin 2014. ‘A Fragment of an Ancient Hymnody Manuscript from Mə’əsar Gʷəḥila (Təgray, Ethiopia)’, *Aethiopica*, 17 (2014), 65–77.
- Orlandi, T. 2016. *Coptic Texts Relating to the Church Canons*, Unione Accademica Nazionale, Corpus dei Manoscritti Copti Letterari, Letteratura copta, Serie studi (Roma: CIM, 2016).
- Pasquali, G. 1952. *Storia della tradizione e critica del testo*, (2nd edn) (Firenze: Le Monnier, 1952).
- Pereira, F. M. 1907. *Acta Martyrum. Textus, Versio*, ed., tr. F. M. Esteves Pereira, Corpus Scriptorum Christianorum Orientalium, Scriptores Aethiopici, Series Altera, 28 (Romae: Excudebat Karolus de Luigi, 1907, repr. CSCO, 37, 38, Ae, 20, 21, Lovanii: In aedibus E. Peeters, 1962).
- Rabin, I. 2015. ‘Codicology: Inks’, in Bausi et al. 2015, 75.
- Ruge, W. 1933a. ‘Mopsukrene’, in G. Wissowa and W. Kroll, eds, *Paulys Realencyclopädie der classischen Altertumswissenschaft, Neue Bearbeitung*, XVI/1 (Stuttgart: Alfred Druckenmüller Verlag, 1933), 250–251.
- 1933b. ‘Mopsu(h)estia’, *ibid.* 243–250.
- Savvidis, K. 2016. *Athanasius Werke, I/I: Die dogmatischen Schriften*, 5. Lieferung: *Epistulae dogmaticae minores*, ed. K. Savvidis (Berlin–New York: Walter de Gruyter, 2016).
- Schopen, A. 2006. *Tinten und Tuschen des arabisch-islamischen Mittelalters. Dokumentation – Analyse – Rekonstruktion. Ein Beitrag zur materiellen Kultur des Vorderen Orients*, Abhandlungen der Akademie der Wissenschaften zu Göttingen, Philologisch-Historische Klasse, 3. Folge, 269 (Göttingen: Vandenhoeck & Ruprecht, 2006).
- Steimer, B. 1992. *Vertex Traditionis. Die Gattung der altchristlichen Kirchenordnungen*, Beihefte zur Zeitschrift für die neutestamentliche Wissenschaft und die Kunde der älteren Kirche, 63 (Berlin and New York: De Gruyter, 1992).
- Trovato, P. 2020. ‘Neo-Lachmannism: A New Synthesis?’, in P. Roelli, ed., *Handbook of Stemmatics: History, Methodology, Digital Approaches*, De Gruyter Reference (Berlin–New York, NY: De Gruyter, 2020), 109–138.
- Uhlig, S. 1988. *Äthiopische Paläographie*, Äthiopistische Forschungen, 22 (Stuttgart: Franz Steiner Verlag, 1988).
- 1990. *Introduction to Ethiopian Paleography*, Äthiopistische Forschungen, 28 (Stuttgart: Franz Steiner, 1990).
- Villa, M. 2019. *Filologia e linguistica dei testi gə’əz di età aksumita. Il Pastore di Erma*, Studi Africanistici, Serie Etiopica, 10 (Napoli: UniorPress, 2019).

- Voicu, S. J. 2015. 'Vincenzo e Vito: note sulla Collezione aksumita', in R. Zarzeczny, ed., *Aethiopia Fortitudo ejus: Studi in onore di Monsignor Osvaldo Raineri in occasione del suo 80° compleanno*, Orientalia Christiana Analecta, 298 (Roma: Pontificio Istituto Orientale, 2015), 479–492.
- Wright, W. 1877. *Catalogue of the Ethiopic Manuscripts in the British Museum Acquired since the Year 1847* (London: Gilbert and Rivington, 1877).
- Yadabra Libānos 'Abuna Taklahaymānot 'Andənnat Gadām 2014–2015. ንድላ ኣቡነ ሊባኖስ ተአምረ ኣቡነ ሊባኖስ በግዕዝና በአማርኛ መልክኦ ኣቡነ ሊባኖስ (መጣዕ) (Gadla 'Abuna Libānos ta'amməra 'Abuna Libānos bagə'əzənnā ba'amārəññā malkə'a 'Abuna Libānos (Maṭā'), 'Life of 'Abuna Libānos, miracles of 'Abuna Libānos in Gə'əz and Amharic, Image of 'Abuna Libānos (Maṭa')') (Dabra Libānos: YaDabra Libānos 'Abuna Taklahāymānot 'Andənnat Gadām, 2014–2015).
- Zuurmond, R. 1989. *Novum Testamentum Aethiopice: The Synoptic Gospels, I: General Introduction, II: Edition of the Gospel of Mark*, Äthiopistische Forschungen, 27 (Stuttgart: Franz Steiner Verlag, 1989).

