ETHIOPIAN MANUSCRIPT CULTURE: PRACTICES AND CONTEXTS

by

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Abstract

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The Ethiopian tradition of manuscript production, despite being the longest-lived in the Christian world, is one of the most understudied. This dissertation, based in part upon a series of field reviews conducted with scribes and manuscript craftsmen in the Ethiopian highlands between 2007 and 2011, presents information from those interviews and contextualizes it in relation to other published sources in order to describe the Ethiopian tradition in its own terms before transitioning to selected conclusions about how scholars of foreign manuscript traditions might use the Ethiopian tradition to inform their approaches to historical practices.

This work is divided into seven chapters. Chapter 1 introduces the research approach followed in the dissertation. Chapter 2 analyzes what is known about the contexts of manuscript production in Ethiopia, with a special emphasis on interrogating the lack of surviving books from the earliest periods of Ethiopian bookmaking. Chapter 3 describes the practices of parchmenters in the Ethiopian tradition and documents their tools. Chapter 4 describes the work habits of scribes including the cutting of pens, preparation of quires, and the situation of writing. Chapter 5 relates methods and recipes for the making of inks. Chapter 6 covers the processes and tools of the book binder and decorator and includes a more complete inventory of known decorator’s tools than other studies.

Chapter 7 transitions away from describing the Ethiopian tradition and focuses on what scholars of foreign manuscript traditions can learn from ethnographic parallels with documented practices. The Ethiopian tradition is continuous since at least late Antiquity, and serves as an important source for analogies to those who wish to better understand vanished historical practices.
Dedication

To my parents

and in memory of my grandparents,

with love and thanks for a lifetime of support.
I first discovered the existence of an extant tradition of Ethiopian manuscript production during one of the many browsing expeditions I was wont to carry out in the Thomas Fisher Rare Books Library at the University of Toronto, during the time of my MA degree, concurrent with the Codicology course I was then taking from the late and missed Virginia Brown. Among the items I came across in trawling the catalogue was Sergew Hable Selassie's *Bookmaking in Ethiopia*, which introduced me to the Ethiopian tradition, but left many questions in my mind about technical aspects of book production which either did not interest Dr. Sergew or were not, due to the size of the work, included in his treatment. Though I did not immediately latch upon the specialty of Ethiopian production, focusing on my study of historic book production more broadly, I kept the subject in mind. As such, I would like to thank the staff of the Fisher Library, and especially Pearce Carefoote, who was a knowledgeable guide to manuscripts in the collection and especially helpful in navigating both the electronic and card catalogues.

Investigation of Ethiopia followed in the form of auditing the course of my advisor-to-be, Prof. Michael Gervers, who lectures on the political history of Ethiopia at the Scarborough campus. His insights, copiously illustrated by his own photographs of the country, were an invaluable entrepôt to a foreign culture south of the Sahara, and thus, further than my previous studies had ever taken me into Africa. In 2007, I won a Year of Languages "Study Elsewhere Scholarship for Less-Commonly Taught Languages" from the University of Toronto, which allowed me to undertake basic Amharic under Retta Alemayehu and to travel to Ethiopia, which I did in the autumn of that year. Though I did not stray far from the established tourist routes, it introduced me to the country in a first-hand way that could not be conveyed in the classroom, and afforded me many opportunities to investigate the collections of church treasuries and to satisfy myself that there was indeed something worth pursuing in further fieldwork.

The further fieldwork was funded by the U. S. State Department, in the form of a Fulbright Fellowship. As a Junior Fellow in the U.S. Student Program, I lived in Ethiopia for the 2008-9 academic year, and did the majority of my fieldwork in that time. Among the many people involved with the Fulbright program and at the U.S. Embassy in Addis Ababa, I would like to specifically thank Jer-
maine Jones, the coordinator for my program, for his help in getting my application in line and his prompt and consistent communication during my time in the program; Ato Yohannes Birhanu and Weyzerit Lensa Mekonnen, who oversaw my arrival in Addis, helped me get set up in housing and at the university and were always helpful in answering questions about the country and my interaction with the embassy; and Natasha Poeschl, who lent me a level of support which was beyond what was required. Michael McClellan, head of Public Affairs for the U.S. Embassy, gave me the opportunity to work in Harar, thereby advancing my understanding of Harari manuscripts, as part of the Ambassador's Fund for Cultural Preservation project, “Establishment of a Center for the Study of Islamic Manuscripts at the Sherif Harar City Museum, Harar, Ethiopia” immediately upon the termination of my Fulbright. Special thanks go out to Linda Rosalik, then a Vice-Consul, for her friendship and hospitality during my Fulbright year and a follow-up visit.

During my Fulbright year, I was associated with the Institute of Ethiopian Studies, Addis Ababa University, as a Researcher, and made extensive use of the collections of the library, which has a great deal of material that is exceedingly hard to find elsewhere. I also spent a goodly deal of time in the IES manuscript section, and wish to acknowledge the hospitality of the institution during my time there.

There are several Ethiopian clergymen to whom I owe debts of thanks, starting with Abunä Matthias, Archbishop of Canada for the E.O.T.C., who kindly met with me at the very beginning of my project and provided introductions to regional bishops, the Patriarch, and to Liqä Kahanat Birhanu, who, alongside his son, Tewodros, were generous in introducing me to Addis Ababa and in arranging permission to attend religious events. The late Abunä Paulos, Patriarch of the E.O.T.C., was gracious enough to meet with me on two occasions and provided appropriate letters in support of my project. Qes Mebratu Kiros Gebru kindly helped me to understand the different church titles and offices held by my informants. Many other priests and monks were generous in showing me the manuscripts of their churches and answering my questions, for which I am duly thankful.

This work is in debt to those who have had the foresight to take interest before it was too late; I have cited many authors in what follows, but John Mellors and Anne Parsons merit especial praise
for both their work and their kindness to a student who was lost and beginning to find his way on a path that they had blazed.

At various times in Ethiopia, I worked with translators and guides, who negotiated access to sometimes-distrustful people and assisted with interviews and led me to remote areas of the countryside surrounding the more familiar provincial cities. I would specifically like to thank Ghebrehiwot Ghebreselassie (Mäqälä, Adigrat), Teschome (Axum, Adiet), Kasahun (Bahir Dar, Gälawdiwos, Andabet), Addisalem (Lalibela, Gälawdiwos, Andabet), Ato Russom (Addis Ababa), and Wihib Tesfay (Mäqälä). Mesfin Gebreselassie was an excellent and careful driver over rough roads. My thanks similarly extend to the Centre Français des Études Éthiopiennes, specifically Marie-Laure Derat and Fauvelle François-Xavier, for support and advice.

My thanks goes out to all of my friends who supported and encouraged me in this project, including, but not limited to Andrew Reeves, Rachel Kessler, John Geck, Christian Knudsen, Kristen Allen, Jan Safran, Peter Vieth, and Justin Mostacci. Similarly, Timothy Groth, Michael Prescott, Michael Atlin, Stephen Shapiro, my colleagues at the John P. Robarts Library, and the crew at the Academy of European Medieval Martial Arts. Mélanie Brunet provided much help in finishing this dissertation, most notably her excellent illustrations. Bill Hanscom, Rick Cavasin, and Laurel Phillipson provided feedback on drafts of the whole or part of this document. Laurel Phillipson, Denis Nosnitsin, and Michael Gervers kindly lent me images from their work for reproduction here, for which I am thankful. Joshua McEvilla provided careful proofreading and feedback on citation styles.

I would like to acknowledge the work of the present and former members of my committee: Michael Gervers, David Galbraith, John Marshall, and Alexander Andrée for their feedback. Timothy Graham, the external examiner, and Alexandra Gillespie, the internal examiner, both contributed valuable feedback, and have my thanks. When my work was substantially complete but stalled, Brian Stock gave me a sense of how to actually finish a project which then seemed too large to end. My thanks go out to a variety of inspirational instructors, who have made me feel most collegially welcome at the Centre for Medieval Studies, notably David Townsend, Joe Goering, George Rigg, and Suzanne Akbari. Though Virginia Brown's name will not be formally found attached to this project,
her memory looms large in its early conception and in my understanding of what it means to be a historian of manuscript studies. Grace Desa remains the indispensable nerve centre of the CMS and has supported me, along with other students, since I arrived. For better or for worse, it was the inspirational teaching of Cynthia Polecrtti, Buchanan Sharpe, and Bruce Thompson at UC Santa Cruz that inspired me to pursue my PhD, for which I send them thanks and curses in equal parts.

This work, like so much else in the field, is indebted to the access to manuscripts provided by the British Library, the Bodleian, and the Cambridge University Library. The Walters Art Museum gave me access to their Ethiopic manuscripts on very short notice during a last-minute trip to Baltimore. My thanks to the special collections staff who assisted me in accessing and photographing their Ethiopic treasures.

Finally, this work could not have been done without the extremely gracious and generous cooperation of the scribes who were my informants for this study. For the most part, they were extraordinarily generous in interrupting their days to invite me into their homes and conduct interviews and demonstrate techniques. My heart warms at the memory of days spent with gracious hosts, who indulged a strange foreigner in his interest in their craft, and while I know that I have missed much in the production of this flawed work, I nevertheless hope that they will accept it as my small part in letting the world know of the care and dedication they put into the production of manuscripts for church use.
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Transliteration

This dissertation follows the transliteration rules of the *Encyclopaedia Aethiopica*, except where copying English transcriptions in quotations.

### Consonants

| ṛ | ḯ | ḳ | ḍ | ḍ̣ | Ḍ̣ | ḍ̣ | ḍ̣̣ | ḍ̣̣̣ | ṙ | ᵃ | ḃ | ᶉ | ᶋ | ᶐ | ᶏ | ᶙ | ᶝ | ᶞ | ᶟ | ᶠ | ᶡ | ᶢ | ᶣ | ᶤ | ᶥ | ᶦ | ᶧ | ᶨ | ᶩ | ᶪ | ᶫ | ᶬ | ᶭ | ᶮ | ᶯ | ᶰ | ᶱ | ᶲ | ᶳ | ᶴ | ᶵ | ᶶ | ᶷ | ᶸ | ᶹ | ᶺ | ᶻ | ᶼ | ᶽ | ᶾ | ᶿ |
| Ṝ | ḙ | ṙ | Ṝ̣ | Ṝ̣̣ | Ṝ̣̣̣ | Ṝ̣̣̣̣ | ᵄ | ᶁ | ᶂ | ᶃ | ᶄ | ᶅ | ᶆ | ᶇ | ᶈ | ᶉ | ᶊ | ᶋ | ᶌ | ᶍ | ᶎ | ᶏ | ᶐ | ᶑ | ᶒ | ᶓ | ᶔ | ᶕ | ᶖ | ᶗ | ᶘ | ᶙ | ᶚ | ᶛ | ᶜ | ᶝ | ᶞ | ᶟ | ᶠ | ᶡ | ᶢ | ᶣ | ᶤ | ᶥ | ᶦ | ᶧ | ᶨ | ᶩ | ᶪ | ᶫ | ᶬ | ᶭ | ᶮ | ᶯ | ᶰ | ᶱ | ᶲ | ᶳ | ᶴ | ᶵ | ᶶ | ᶷ | ᶸ | ᶹ | ᶺ | ᶻ | ᶼ | ᶽ | ᶾ | ᶿ |

### Vowels

| Ḱ | Ḳ | Ḵ | Ḷ | ḹ | ḻ | Ṱ | ṻ | Ṽ | ṽ | ṿ | ṿ̃ | ṿ̣̃ | ṿ̣̣̃ | ṿ̣̣̣̃ | ṿ̣̣̣̣̃ | ṿ̣̣̣̣̣̃ | ṿ̣̣̣̣̣̣̃ | ṿ̣̣̣̣̣̣̣̃ | ṿ̣̣̣̣̣̣̣̣̃ | ṿ̣̣̣̣̣̣̣̣̣̃ |
| ā | ē | ī | ľ | į | ū | ụ̄ | ụ̣̄ | ụ̣̣̄ | ụ̣̣̣̄ | ụ̣̣̣̣̄ | ụ̣̣̣̣̣̄ | ụ̣̣̣̣̣̣̄ | ụ̣̣̣̣̣̣̣̄ | ụ̣̣̣̣̣̣̣̣̄ | ụ̣̣̣̣̣̣̣̣̣̄ | ụ̣̣̣̣̣̣̣̣̣̣̄ | ụ̣̣̣̣̣̣̣̣̣̣̣̄ |

Names and Titles

Ethiopians have one name, followed by their father's name for identification, thus, Ethiopian names are not sorted in the style of Western names, by the surname, but by their given name. In most cases in this dissertation, I have listed the titles of those mentioned, in italics, before their names. Since I realize these titles may be unfamiliar to many readers, I have glossed some of them here. (For more complete information, see Siegbert Uhlig and Alessandro Bausi, eds., *Encyclopaedia Aethiopica*, 5 vols. (Wiesbaden: Harrassowitz, 2003–2014), 5: 580–590 and relevant corresponding entries.)

**Abunä** Title of the Patriarch (*Patriyark*), an Archbishop (*Liqä Pappasat*), a Metropolitan (*Pappas*), or a Bishop (*Ep̣p̣isqop̣os*). Always drawn from the ranks of monks.

**Abba** A regular (celibate) monk or priest.

**Afä Liqawǝnt** “Mouth of the Scholars,” a title given to the head of a specific church school.

**Aläqa** “Chief,” properly used for the head of a church or monastery, but also an honorific for artists
and craftsmen, especially, it seems, in Təgray. Tigrinya: Ḥalāqa.

_Ato_  Mr.

_Diyaqon_ A deacon, often a secular priest who is not yet married.

_Ḥalāqa_ Tigrinya form of _Alāqa_.

_Liqä Haruũan_ “Chief of the Chosen Ones,” a mark of distinction in the church education system, usually a priest but sometimes a deacon.

_Liqä Kahənat_ “Archpriest,” a secular priest who is head of a church, monastery, or other group of priests.

_Keši_ Tigrinya form of _Qes_.

_Māl‘akä Gännät_ “Angel/Messenger of Paradise,” honorific granted to the head of a church dedicated as Däbrä Genet, “Mountain of Paradise.”

_Māl‘akä Məḥrät_ “Angel/Messenger of Mercy,” honorific granted to the head of a church dedicated to Kidanä Məḥrät, “Covenant of Mercy.”

_Māl‘akä Ṣehai_ “Angel/Messenger of the Sun,” honorific granted to the head of a church dedicated to Däbrä Ṣehai Kidist Maryam, “Mountain of the Sun, Saint Mary.”

_Marigeta_ Chief of the cantors. Also a courtesy title for learned dübtäras (section 2.2) commonly applied to scribes.

_Māmhər_ “Teacher/Master,” a church teacher or an abbot.

_Meselaney_ An unofficial title for someone who acts on behalf of a Māmhər.

_Māzāmmər_ “Psalmist.” A cantor.

_Qes_ Also _Qesis_. A secular (married) priest. Tigrinya: _Keši_.

_Wäyzärēt / Wäyzāro_ Ms. / Mrs.
Chapter 1

Introduction

The book has been central to Western culture since Antiquity: the three major religions that shaped modern Europe are all “of the book” and the development of efficient ways of disseminating text played a critical role in the dissemination of religion and culture. The impact of improvements in literary technology are hard to overstate: from the invention of the codex to the Internet, the medium and format of text has played a major role in both religious and intellectual history. The book developed into its most recognizable form as a result of progress in Late Antiquity and the Middle Ages, which saw such developments as the codex, word separation, punctuation, and indexing. The developments of this period are critical for our understanding of the book as possessed of a consistent shape and format, but the processes that underlie the production of such books are understood only partially, as the tradition of craftsmanship completely died out in Europe in the centuries after the introduction of moveable-type printing.

Ethiopia, isolationist for a period of almost 700 years due to geopolitical and religious factors, has preserved many practices intact from the medieval period, including the production of parchment manuscripts.\(^1\) By analogy with the blossoming of the arts in the Italian Renaissance, once might term-

\(^1\) Whereas scholarship clearly associates the Kingdom of Aksum with the Ancient period, the question of what, if anything, is properly “medieval” in Ethiopia is harder to pin down. Given the inexactness of the “medieval” characterization in the European context to which it is most clearly native (the period between one of the dates for the fall of Rome and one of the various Renaissances),
minate medieval Ethiopia with the beginnings of the Gondärine period. In terms of its incorporation into a wider context in the Age of Exploration, then it might be said to end with the intervention of the Portuguese in the Ethiopia-Adal war and the missionary contacts of the sixteenth century. Based upon the similarity in social organization to medieval Europe, an agrarian society with stratified classes of peasants, clergy, and a martial nobility, the Ethiopian medieval period could be said to have lasted up until the rule of Ḫaylä Šallase, only truly extinguished with his death at the hands of the Dārg. If it is defined in contrast with the trappings of modernity, the medieval period persists into the nineteenth century, when it begins to recede, starting from the metropole of Addis Abäba, in a process that is still incomplete in its penetration into the remote and rural areas of the country. For the purposes of this dissertation, characterizing Ethiopia formally as “medieval” is less important than engaging with the aspects of Ethiopian cultural practices that are clearly analogous to those which would have been common to the whole of the medieval Mediterranean. Though greatly reduced since the introduction of printing to Ethiopia around the turn of the twentieth century, pockets of scribal activity nevertheless survive throughout the country, mostly engaged in the production of manuscripts for church use. This survival has, so far, little excited the interest of the scholarly community, which tends to overlook Christian Africa, and the tradition is in danger of disappearing.

This dissertation catalogues practices and documents skills involved in the production of manuscripts by interviewing and observing the remaining scribes, who can demonstrate pen-techniques and methods of preparing parchment and inks. The current generation of scribes will likely be the last one privy to many traditional practices: modernization, changing markets, and a shrinking...
number of scribes have led to the abandonment in recent years of local materials in favour of mass-produced supplies. Crucial knowledge is increasingly possessed by the oldest practicing scribes; if practices are to be documented and retained, more work needs to be done through interview and study. This work supplements interview with direct observation of manuscripts in order to compare current with historical practices. A clear aim of this work is to aid in organizing the Ethiopic manuscript tradition into categories understood by European traditions of manuscript studies, while respecting the differences.

The field of Medieval Studies and the European tradition of teaching history have both sadly neglected Christian Africa, limiting the teaching of medieval history to Europe, the Near East, and Islamic North Africa. Ethiopic materials merit study alongside other medieval Christian manuscripts, and this project is a step towards integrating the study of Ethiopian materials into the well-established discipline of manuscript studies. It is hoped that projects like this one will encourage interest in Ethiopia as part of medieval Christendom: Ethiopia is one of the oldest Christian societies in the world, and its scribal and binding practices flow from the same tradition of book production as in Europe. My project underlines the deep parallels in these separated Christian cultures, as well as the powerful impact of the different social forces that determined very different paths for these two regions, leading to the art’s extinction in one of them centuries before it began fading in the other.

My central idea in pursuing this line of research was to use modern practitioners of Christian manuscript production in Ethiopia as informants for practices that would have been handed down in a continuous line of craftsmanly training from the Ancient world. This is in many ways a risky proposition; indeed, many of the questions which seemed most interesting at the start of the field portion of the research were found not to have adequate answers in the end, and the extent to which Ethiopian practice provides actual, direct, insight into Ancient methods is questionable, except in the simplest aspects of practice. Nevertheless, the study of Ethiopian manuscript production is in-

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2. It holds the distinction of being the second-oldest country (assuming a continuity from the Aksumite Empire) to officially convert to Christianity (ca. 330–360), after Armenia. Uhlig and Bausi, *Encyclopaedia Aethiopica*, s. v. “Ezana.”
teresting in itself, both as a self-contained tradition, and as one of the last survivors of a medieval
Christian world that persisted longer in Ethiopia than in other parts of Christendom. A reader in-
terested in the practices of Christian Ethiopia will find herein an account of the methods of the
production of written materials in that country, and a reader interested in the persistence of Chris-
tian texts will find an account of the means by which many manuscripts in that tradition have been
uniquely transmitted, along with many others that see daily use in a variety of translations. Those
who work on medieval European and Mediterranean manuscript production are sure to find much
that is analogous with that tradition, as well as some divergence which produces minor but notable
differences in the finished product.

1.1 Ethnoarchaeology as an Informant for Medieval / Manuscript

Studies

While this dissertation is produced from the perspective of a historian of manuscript studies, it nev-
ertheless makes use of some techniques more normal to other fields. Specifically, I have undertaken
interviews in an ethnological fashion for the purpose of documenting current practices, but with
an eye towards reconstructing those of the past. This approach, called ethnoarchaeology by an-
thropologists, has its own literature, proponents, and critics, which are beyond the scope of this
introduction. An ethnoarchaeological approach supplements the study of material objects—in this
case books—with observation and interaction with living people, to provide context for understand-
ing historical subjects. Codicology, the study of the material aspects of books, is in a very real way
the archaeology of the book; books, after all, are historical artefacts nonpareil, as they preserve the
voices of the past for new generations of scholars, as well as providing a material object that can be
studied for its own secrets and insight into the past.\(^3\) As the craft practices of Christian manuscript

\(^3\) A useful introduction to the concerns of this disciplinary approach is Nicholas David and
University Press, 2001); this dissertation shares a conceptual space with studies which have ap-
production have vanished outside the Ethiopian context, much of our understanding of the craft tradition comes from experimental archaeology, in the form of re-creators trying their hands at historical recipes and processes. Experimentation and recreation plays an important part in establishing baseline expectations from which to proceed, and can approach but not definitively recover the knowledge that would have been possessed by the original artisans (%knowledge%), as modern experimenters have only what was documented (%knowledge%) to work with in creating a reconstruction. Gaps in knowledge can arise from a variety of sources: gaps due to differing understanding (some process steps would be obvious to a historical actor without saying, but are not obvious to modern reconstructors), secrecy (competitive production leads some users to be resis-
tant to sharing their processes), or lack of process-formalism (the writing of recipes and instructions for process—always fertile grounds for misunderstanding—were less-formalized historically, and doubtless omitted steps which were hard to characterize). Observation helps remedy this in the case of the current project, supplementing interview by making explicit matters that might otherwise have remained tacit.

One aim with which this project was conceived is the creation of analogical material which can be used to expand understanding of other historical manuscript practices, now defunct. Expanding knowledge of the methods of production expands the range of possible analogies which might be applied in approaching the study of other manuscript practices which, after all, spring from the same source as the Ethiopian one. In this case, this is specifically accomplished by examining the way traditionally trained craftsmen, as opposed to re-creators, approach the aspects of their craft. Not all of the information contained herein will be appropriate to use in approaching the study of other, homologous, traditions, nor should it be, as the production of analogical material is subsidiary to the primary goal of documenting the Ethiopic tradition on its own terms, with an approach informed by knowledge of the pan-Mediterranean tradition, but without imposing foreign constructs on the Ethiopian tradition, nor explaining it in terms of other practices.\(^6\) Ultimately, the goal is to increase the number of analogical cases, in order to expand what I might term the “Toolbox of Analogy,” that is to say, the range of possible analogies by which we might approach the study of what would otherwise be a distant and unknowable subject.\(^7\) This analogical information informs the

\(^6\) An example of trying to use European manuscripts and their production to directly illustrate the Ethiopian tradition, with regrettable mistakes as a result, is N. W. Sobania and Raymond A. Silverman, *The Parchment Makers: an Ancient Art in Present-Day Ethiopia*, Video recording, Grand Rapids, MI, 2000. Although much in the video is valuable, where European material is introduced, the inclusions are inevitably misleading in context.

\(^7\) This is not meant to imply that the use of analogous information is in any way a novel idea, as debate about the use and misuse of analogy in archaeology has been going on for decades: “Ethnographic parallels in fact afford only clues in what direction to look for an explanation in the archaeological record itself.” V. Gordon Childe, *Piecing Together the Past: the Interpretation of Archaeological Data* (London: Routledge, 1956), 49; for a recent article on the state of the issue, see Mads Ravn, “Ethnographic Analogy from the Pacific: Just as Analogical as Any Other Analogy,” *World Archaeol-*
scholarly approach to foreign or historical traditions by broadening the base of knowledge of what is possible by illustrating specific ways that people engaged in similar production practices have solved similar problems. While there is no substitute for direct evidence, analogies give us the tools that we need to interpret the limited evidence of historical practice more accurately by helping us more fully understand the range of what is possible.  

1.2 Research Design

The field research referenced in this dissertation was carried out by the author during a series of trips to Ethiopia in September–November 2007, September 2008–July 2009, October–December 2009, and November–December 2011. During these trips, I traveled around the Christian areas of Ethiopia, investigating manuscripts and interviewing scribes and others involved in book production. The new material incorporated in this document is primarily the result of these interviews. To supplement my interviews, I studied the Ethiopian manuscript collections of the Addis Ababa University Institute for Ethiopian Studies, the British Library, Cambridge University Libraries, the Bodleian Library, The Walters Museum, the Hill Museum and Manuscript Library, and many church libraries throughout Ethiopia. Eritrea is doubtless possessed of practicing scribes as well, but due to political

8. “Increased attention has been given in recent years to the application of archaeological perspectives to the study of recent societies and their material culture (David and Kramer 2001). To some practitioners, the principal aim of ethnoarchaeology is to gain insights to aid in the interpretation of archaeological data relating to earlier periods. This is an exercise which must be approached with great caution. It cannot be emphasized too strongly that observations of recent societies are of value only in suggesting possible interpretations of archaeological data; they can never themselves provide conclusive proof. Secondly, use of ethnoarchaeologically based interpretations may carry the hidden implication that the recent peoples studied are in some way backwards or primitive. Those who practice or make use of ethnoarchaeology must beware of thus unintentionally insulting those who have provided their inspiration. This is not to belittle the value of such studies, provided that the models which they help to generate are applied with care and sensitivity.” David W. Phillipson, African Archaeology, 3rd ed. (Cambridge: Cambridge University Press, 2005), 10; citing David and Kramer, Ethnoarchaeology in Action.
tensions, the border was closed between Ethiopia and Eritrea, and though it was possible to take an alternate route to get into the country, restrictions on travel in the countryside made the expansion of the project impractical at the time. One of the scribes, Marigeta Ḥaylä Šollase (Mäq̲älä) was originally from Asmara, and it is to be fervently hoped that future scholars will investigate the Eritrean highlands for scribal workers.

1.2.1 Identifying Interview Subjects, Compensation, and Interview Format

For interviews, I primarily targeted manuscript producers, specifically parchmenters, scribes, and bookbinders. Second, I targeted artists working with manuscripts and magicians who had a literate aspect to their practice. In many cases one person was found to be performing multiple roles. Based in Addis Abäba, but initially unable to procure interviews with the three scribes/parchmenters I identified there, I traveled to major provincial centres, specifically Mäq̲älä, Axum, Baḥǝr Dar, and Lalibäla, and made inquiries among members of the church, usually beginning with the office of the bishop. I asked anyone that I interviewed for references to other scribes or parchmenters. As such, I made my way to places and interviewed a number of individuals overlapping with Mellors and Parsons’ (published and unpublished) research (which, though I was previously aware of it, I did not make any attempt to follow in terms of research subjects; but see interview design, below).

I offered no compensation for interviews, but rather offered to compensate producers for a written sample, at a standard rate of 200 ETB for a commission. The price was to comply with expectations.

9. These aspects of the project were eventually determined to be out-of-scope and have been reserved for future work.

10. Though Axum and Aksum refer to the same city (አክሱም) in principle, I think it useful to distinguish, for the purposes of this dissertation, between the city in its modern and ancient forms. I have used Axum for the modern city where I conducted interviews and Aksum for the ancient city and its associated empire.

11. ETB = Ethiopian Birr, the currency of Ethiopia. During the period of the interviews, the Birr changed from approximately 9.6 to 13.2 ETB/USD. Based on calculations of the prices volunteered by scribes for works on a per-page rate, this was usually above market price for the amount of work
tations set by Mellors and Parsons for samples they procured during their work; as scribes were left to choose the amount of material they would provide for this price, I received from one page to a full quire of written pages with cover-sheets for the same amount. As scribes were left to choose the amount of material they would provide for this price, I received from one page to a full quire of written pages with cover-sheets, which made the amount of compensation as compared to their normal work vary from very high to somewhat close to their normal rates. Material that had been previously produced for market (not a new commission) was compensated at the asked-for price. A few scribes were compensated at higher rates, either because they were known as the best scribe in the region or because they provided additional materials or services. The first interview, with Marigeta Ḥaylā Śəl-lase (Māqālā), was an exception to the compensation rule: though the interview was not intended to be paid, there was a miscommunication through a third party; since I ended up with a sample in any event, there was limited dissimilarity in the effect of the interview. The decision to not compensate interviews was made because I was afraid that the expectation of being paid for interviews would make it impossible for local scholars to come up with the required amounts of money to pay the rates established by foreigners. Since I wanted samples of writing in any case, compensation for samples seemed fair and normal to the way the scribes worked; since foreigners are charged a different price for goods than locals, I did not risk creating an unreachable market even if I slightly over-paid for samples in some cases. One scribe, who was unable to produce a sample and demanded payment solely for being interviewed (and at an exorbitant rate that would not have been feasible) was not so-interviewed. Where additional samples and services were procured, they were over-and-above the above-mentioned prices, limited by my (poor) negotiating abilities.12 Where appropriate, I left a small amount to cover food or coffee consumed in houses which fed me, in order to not be a burden involved in the production of samples.

12. So, for example, I commissioned Marigeta Birhane to produce a piece of parchment and he allowed me to photograph and question him about the various stages of production. In other cases, scribes were in the process of producing parchment or arranged for me to return to observe the process when they would be producing parchment for other clients.
on the means of rural farmers. I also took photographs of scribes for my records and, if the scribe wanted, I would also take photos of them with their families; as access to good portrait photography is rare in the rural areas the scribes are largely found in, prints of their photos were considered desirable and appropriate thank-you gifts.

1.2.2 Localities of interviews

Field interviews were conducted in Addis Abäba, Axum (and environs, including Adiet), Yeha, Mäqälä, Adigrat, Baḥar Dar (and environs), Gondär, Lalibäla (and environs), Gälawdiwos, and the region of Andabet. Additional interviews, primarily with Muslim book producers, but one Christian scribe, were conducted in Harar. Other areas of the country were searched without success. I initially located respondents by going to the area and asking local ecclesiastical authorities; since most manuscript producers are priests or lower clergy, this was an efficient way to start. After that, I followed recommendations from the scribes asking for recommendations for scribes who might
be willing to be interviewed. The goals of the interview were explained as well as the intended uses before starting the recordings. Being interviewed and photographed was for most scribes novel and flattering: they were glad that someone was taking an interest in their craft, since it has become increasingly economically marginal (though still socially commendable) to compete with printed books. Many scribes had been previously photographed by John Mellors for the pamphlets *Book-making in Ethiopia* and *Scribes of South Gondar* and were eager to show their photograph in the book and talk again about scribing.\(^\text{13}\)

### 1.2.3 Conduct of Interviews

Interviews were conducted through a translator and based on an interview guide that I produced in English and had separately translated into Tigrinya and Amharic. The questions in the interview guide were intended to be non-exclusive, and I directed additional questions or deviated from the set list as I thought appropriate. The guides were changed based on experience in the field; final versions may be found in the Appendices.\(^\text{14}\) A limited number of questions on the guide were suggested by others: thus, questions about the *Dawit* are from Steve Delamarter and the question about mirrors is from Richard Pankhurst.

Once the interview began, the translator read off the first part, which was a clear restatement of the goals of the interview already agreed-upon: “There is concern that the shrinking number of people making books in Ethiopia means that we are losing information about how books are produced. The aim of this study is to learn as much as possible about the process of making, distributing, and using books, so please answer the questions as fully as you can.” At the end of the interview, the interviewee was asked if he had any questions for me about the project, which I answered as best I could. Such questions were largely about the finished form of the work (which they seemed pleased


\(^{14}\) The Amharic and Tigrinya interview guides are Appendix A and Appendix B, respectively.
with) and how I was going to help the tradition (to which I would reply that it was my hope to raise the profile and awareness of the tradition through presenting on it). I would take photographs of the scribe and his tools, clearly indicating that these might be used in the finished work.

### 1.2.4 Names and Anonymity

The interview guide originally had a question specifically stating that a scribe could choose to share his information anonymously, but my local fixers/guides said that this was an inappropriate thing to say in post-Därg Ethiopia, as it implied that there was something wrong with talking about scribing and that there might be retaliation. Accordingly, the translators were instructed to tell people who might be hesitant to share certain information that I could make it anonymous, and I pointed this out on a few occasions. No scribes chose anonymity and, indeed, the majority of what they do is entirely laudable in local eyes. Only one scribe spoke of performing “black” magic, but he did not seem interested in anonymity. The specific elements of “black” magic were out of the scope of the current project, though they might be within those of a future project. In any case, anonymity was not an issue in the overwhelming majority of cases or indeed in any case which will be included in this work.

Given the historical objectives of this work and because the scribes who were interviewed are craftsmen working in a laudable trade, I have not withheld any names. This decision was to meet norms of history and some fields of anthropology, and is in the spirit of recent writing on ethnoarchaeological practice. Informants consistently indicated that their work was valued by the community and its artisans take pride in the history and their achievements, and wish to be named. They may gain political and economic benefit from the presence and writings of their ethnoarchaeological guests. In such situations the names and affiliations of the persons who supplied the information establish the authority of the accounts. David and Kramer, *Ethnoarchaeology in Action*, 86.
munity and personally important to them in a spiritual sense. Writing, for the scribe, can be more than a necessity for worship or a means to make a living: the act of writing holy books is inherently worthy of spiritual honour.\textsuperscript{17}

1.3 Ethiopian Manuscript Production in the Context of the Greater Mediterranean World

Initially, this project was intended to be explicitly about discovering the lost practices of the Late Antique Mediterranean in a “living laboratory” possessed of a remnant tradition largely consistent with the practices of that era. Though this idea is not without merit, it is, perhaps obviously, fraught with both historical and theoretical peril, as Ethiopia of the twenty-first century is not Aksum of the sixth: great social changes have occurred over the intervening centuries, religion has been reformed several times, and the tradition is unmistakably and characteristically Ethiopian. This dissertation, at its core, seeks to present the Ethiopian tradition on its own, without comparison to foreign traditions, even as it is hoped that the material will be informative to scholars of other manuscript traditions in sparking thoughts about how they approach their own specialties. That said, it has been noted that the Ethiopian tradition is fundamentally conservative in its practices, and there is a strong temptation to characterize its techniques as survivals of the early period of Christian

\textsuperscript{17} This is illustrated in the miracle of the two scribes who were brothers: See E. A. Wallis Budge, ed. and trans., \textit{One Hundred and Ten Miracles of Our Lady Mary: translated from Ethiopic manuscripts for the most part in the British Museum, with extracts from some ancient European versions, and illustrations from the paintings in manuscripts by Ethiopian artists} (Oxford: Oxford University Press, 1933), chap. 59; and this 15th-century colophon in Pistoia, Biblioteca Forteguerriana, Martini etiop. 5, fol. 195r: “It was Our Father Gabramâryâm who had it written: let God write his name on the golden pillar by a bejewelled pen in the Heavenly Jerusalem with all his [spiritual] sons for ever and ever. Amen. Malka Šêdêq wrote the Book of Numbers, Deuteronomy and Joshua, while I myself, Pâwlos, wrote the other [books]. If we added or omitted anything, either wittingly or not, forgive and bless us for ever and ever. Amen. And bless the makers of parchment, because they laboured much.” Translation from Alessandro Bausi, “Writing, Copying, Translating: Ethiopia as a Manuscript Culture,” in \textit{Manuscript Cultures: Mapping the Field}, ed. Jörg B. Quenzer, Dmitry Bondarev, and Jan-Ulrich Sobisch, Studies in Manuscript Cultures 1 (Berlin: De Gruyter, 2014), 43.
manuscript production, little influenced by outside trends, even in such close contexts as Coptic Egypt (with which it had direct contact through ecclesiastical authority), allied Oriental churches in Syria and Armenia (with which it had contact through pilgrims to Jerusalem, as with the rest of the Mediterranean world) and surrounding Arab countries. There is a significant gap of centuries in the evidence used to underlie this claim, and to a certain extent, it is based on there being no apparent advancement in techniques or tools used elsewhere in Christian and Islamic scribal craft which post-date the early days of Christianity in Ethiopia. So, for example, the lack of any progress from the early style of Coptic binding to later styles employed in Egypt, according to Szirmai's study of the topic, is taken as a sign of a fundamental conservatism and lack of influence in the tradition.\textsuperscript{18} The retention of the reed-pen, abandoned from the sixth century on in favour of the quill in (other) Christian contexts, is paired with the lack of adoption of any of the auxiliary tools which accompany the use of the reed-pen in the Islamic context, such as the use of wicking material in both pen and inkwell. Taken together, these suggest that the tradition is being influenced perceptibly neither by the rest of the Christian world nor by the Islamic. The very simplicity of the tradition suggests that it has not been subjected to the thorough development that took place elsewhere in the Christian manuscript-producing world.\textsuperscript{19}

All of these issues raise problems, however: the typecasting of Africa as somehow backward, or undeveloped as opposed to developed feeds into a narrative of a static society which is deficient as opposed to a progressive West, where narratives of the insufficiency of African culture originated.\textsuperscript{20}

\textsuperscript{18} J. A. Szirmai, \textit{The Archaeology of Medieval Bookbinding} (Aldershot: Ashgate, 1999), chaps. 2–5.

\textsuperscript{19} This has been pointed out by others, as Nosnitsin: "One can hardly claim that the techniques of Ethiopian manuscript-making are precisely the same today as they were many centuries ago; however, they do represent the organic and conservative continuation of the ancient tradition. Moreover, despite the great changes that took place in Ethiopia in the 20th century, Ethiopian manuscript culture can still be found, at least in a few places, in cultural settings which still closely resemble the original medieval context." Denis Nosnitsin, “Ethiopian Manuscripts and Ethiopian Manuscript Studies: a brief overview and evaluation,” \textit{Gazette du livre médiéval} 1, no. 58 (2012): 3.

\textsuperscript{20} An outline of some of the problematic issues raised by Eurocentric (Colonialist) approaches
The “failure” to adopt the quill, as a superior technology to the reed-pen can similarly be cast in this negative light, as is almost certain by the very choice of the word failure. The author comes at this project from a background in European Codicology and in the context of a field of Ethiopian Studies which is largely dominated by foreign scholars and with a significant under-representation from native Ethiopians in the production of the narrative of the artistic and cultural progress of Ethiopians. Inherent in the approach of Ethiopia from a foreign field are the advantages of seeing cross-border relations and the danger of perceiving all progress in Ethiopia as linked to a foreign source. Approaching the history of Ethiopian manuscript production on its own terms is a project complicated by the simple fact that the introduction of the craft in its current form was almost-certainly co-incident with the introduction of a foreign belief system, in the form of Christianity. That same Christianity made Ethiopia part of a larger community where we are able to observe broad trends in manuscript production in terms of tools and techniques, and for this reason it seems fair to relate the adoption (or lack thereof) of innovations disseminated in the larger Christian context to Ethiopia as a reasonable and expected occurrence, one whose absence merits comment and scrutiny, and, in this case, invites speculation regarding the perceived stability in the tradition, based on the similarities between the current observed tradition and known practices contemporary with the introduction of Christianity to Ethiopia. Acknowledging that the idea of Ethiopia as possessor of a largely static and ancient form of manuscript culture, which is apparently little changed from its introduction from abroad, is inherently problematic in its resemblance to imperialist and colonialist approaches to Africa, and their responses, may be found in Nick Shepherd, “The Politics of Archaeology in Africa,” Annual Review of Anthropology 31 (2002): 189–209.

21. The present author is certainly aware how he might see himself in Posnansky’s complaint that “All too frequently many of the foreign researchers have been graduate students working with limited funds themselves … exporting their finds abroad for study. We certainly now know much more about West Africa’s past than we did a quarter of a century ago, we have paid a price in … an awareness by the wrong groups, for the wrong reasons, of the intrinsic value of the cultural patrimony.” Merrick Posnansky, “Coping with Collapse in the 1990s: West African Museums, Universities, and National Patrimonies,” in Plundering Africa’s Past, ed. Peter Ridgway Schmidt and Roderick J. McIntosh (Bloomington, IN: Indiana University Press, 1996), 149–150.
typologies in archaeological practice, I evaluate the evidence for the stability narrative in chapter 2, “Contexts.”

This work then proceeds in an order following the page to be written. Chapter 3 describes the processing of skin into parchment. Chapter 4 deals with preparation of and writing on the finished parchment. Chapter 5 discusses the ink-making process. Chapter 6 is devoted to describing some aspects of the binder’s art: both the fitting of boards to the book and the decoration of the cover. Transitioning away from a strict focus on the Ethiopian tradition, Chapter 7 points towards some sample conclusions that may suggest how the study of Ethiopian manuscripts might promote understanding of the greater Mediterranean tradition.
Chapter 2

Contexts

The region now covered by the countries of Ethiopia and Eritrea has a long and complex history and has hardly been a national or unitary state, even for the short time that Ethiopia and Eritrea were united in the twentieth century.¹ This chapter focuses on factors relevant to the history of manuscript and scribal culture in the sources, in order to provide background to the practices, and their place in a broader Christian and regional context, as well as to illuminate some of the problems in evidence and challenges to preserving the scribal and manuscript heritage of the country.

¹ For a fuller picture of Ethiopian history, the following sources are recommended: David W. Phillipson, *Foundations of an African Civilisation: Aksum & the Northern Horn 1000 BC – AD 1300*, East Africa Series (Woodbridge, Suffolk: James Curry, 2012), is the most recent and comprehensive approach to the period of the first millennium BCE to the end of the Zagwe dynasty; Paul B. Henze, *Layers of Time: A History of Ethiopia* (London: Hurst, 2000), is a good general introduction to all eras of Ethiopian history; Sergew Hable Selassie, *Ancient and medieval Ethiopian history to 1270*, is no longer as current, but focuses on the ancient and medieval periods; Taddesse Tamrat, *Church and State in Ethiopia* (Oxford: Clarendon, 1972), is the best work available specifically treating with church history; the recently completed Uhlig and Bausi, *Encyclopaedia Aethiopica*, remains the most comprehensive and premier source for information on all fields of Ethiopian Studies. Note that Sergew defines the Solomonic Restoration as the end of the “medieval” period in Ethiopia, as does Taddesse Tamrat, but based upon the characteristics of the age which define “medievalness”—rather than temporal comparison with Europe—that period could be argued to have extended well into the 19th century.
2.1 Language and Writing

Semitic languages are now thought to have originated in the Levant, though the subject has been a matter of some contention in the past; they have sometimes been thought, primarily on the evidence of diversity, to have developed in Ethiopia. According to recent computer models, the South Semitic languages (which lead to South Arabian) and the Ethiosemitic languages diverged from the Central Semitic languages (which lead to Hebrew, Aramaic, and possibly Arabic) around 5400 years ago, with the Ethiosemitic group diverging from the South Arabian group around 2600 years ago. The Semitic speakers moving into the Horn of Africa would have interacted with speakers of the Cushitic group, also part of the Afro-Asiatic language family, notably the Agaw in the north, as well as speakers of Nilo-Saharan languages. The primary language of the Aksumite Kingdom, Ge’ez, is the ancestor of modern Tigrinya (spoken in Tigray and parts of Eritrea) and Tigré (spoken in northwestern Eritrea), and retains its place as the liturgical language of the Ethiopian church. Amharic, a related language spoken by the Amhara people to the south of Tigray, is the language of the clergy and became the language of power in the Abyssinian kingdom after the ascension of the Solomonic dynasty around 1270 CE. It was used in biblical commentaries from an earlier date, but only developed its own written culture in the sixteenth century, and did not become widely used as a written language until the nineteenth.


3. Ge’ez is variously referred to as Ethiopic, Ancient Ethiopic, and Classical Ethiopic. It is the practice of this dissertation to refer to the language as Ge’ez and the script as Ethiopic.

4. Amārānīnə, but “Amharic” is used throughout this dissertation.

Figure 2.1: Epigraphic traces of Sabean and Greek languages.

(a) Sabean inscriptions stored in the treasury of the church of Abba Afse at Yeha.

(b) Greek inscription on Ezana’s Stela, Aksum.
Sabean inscriptions found in northern Ethiopia and Eritrea represent a continuity with those across the Red Sea in the Sabean homeland, and represent the extension of Sabean cultural (and variously political) hegemony over Ethiopia in the eighth to second centuries BCE. The Ethiopic (Ge’ez) script developed based upon that of the South Arabians, known as Ancient South Arabian Monumental (fig. 2.1a), which is attested in abundance in South Arabia and also preserved in around 180 known Ethiopian examples (including Eritrean), of which the earliest are in the Sabean language, with later examples introducing more elements which would come to characterize Ge’ez. The earliest inscription in Ge’ez (perhaps, more properly, “proto-Ethiopic”) dates to the third century or perhaps the fourth century CE. Originally unvoiced, vowels were added to the script around the fourth century CE, perhaps based upon the vowel system of an Indian script. Though the ASAM script was written boustrophedon, Ethiopic has from the beginning been written left-to-right, possibly under the influence of Greek. The ancient form of Ethiopic is used in Ezana’s inscriptions, and the fully developed form of the language appears in sixth-century monuments by King Kaleb. The fact that the Ge’ez script had evolved out of the Sabean script without leaving significant epigraphic


7. Also known as Epigraphic South Arabian. The term Ancient South Arabian Monumental (ASAM) is preferred by D. Phillipson, and I have followed his use here. Phillipson, Foundations of an African Civilisation, 37.


10. “Graffiti on pots and on rocks are rarely informative; only the former are likely to be dateable. A pot from Aksum, probably c. fourth century in date, bears a Ge’ez inscription (RIE 311) that may be loosely translated as ‘breakage must be paid for;’” ibid., 52.

traces strongly implies, to the point of necessitating, a contemporary literate tradition using perishable media.12

In the period immediately before King Ezana’s conversion to Christianity, two stelae of his reign are triply inscribed in ASAM-derived, Ethiopic, and Greek characters13, suggesting that enough written material was available to preserve knowledge of the Sabean language and to transmit knowledge of Greek, in addition to the amount of writing that was presumably involved in the divergence of the Ethiopic script from that of the Sabeans.

The context of early Christian texts in Ethiopia would have been Greek; the Ge’ez version of the Gospels is derived from the Greek version, translated in the sixth century, though much later material (largely post thirteenth century) is derived from Arabo-Coptic sources. Greek would have been the trade language of the ancient Red Sea and the Periplus records that trade with Aksum would go

12. Similar arguments have been made about the evolution of Ancient South Arabian Minuscule script:

Une preuve indirecte est donnée par les graffites — simples signatures — gravés dans le plâtre ou sur des tessons : l’écriture cursive en est fort différente, dans son évolution, de l’écriture monumentale des monuments des mêmes couches archéologiques. Cette cursive représentait donc une écriture utilisée parallèlement à l’écriture monumentale, mais sur un autre matériau.


13. The inscription has obvious implications regarding the relationship between language and power in the Aksumite state. Though both of the non-Greek inscriptions are in Ge’ez, one of them is written in the ASAM-derived script, which could represent territorial pretensions as ruler of Himyar or be a reference to the old ritual language, which may have retained a formal and/or religious role. Ge’ez was by this time indubitably the language of local authority and a uniquely Aksumite/Ethiopian state. Greek was presumably the major trade language of the Red Sea area, brought with Greek and Graeco-Egyptian merchants.

Figure 2.2: Languages of interest. Based mainly upon Kitchen et al. 2009.
through King Zoskales who was “Skilled in Greek letters.” In later times, there was a Greek-speaking merchant community in Aksum, though it is thought to have diminished or disappeared after the sixth century.

### 2.2 Who are the Scribes?

Producers are largely secular (non-monastic) members of the clergy; I only met two monks and a small number of lay artisans in the process of doing my research. Scribing, while a manual task, does not bear the stigma that some other crafts in Ethiopia share, although the stench and mess associated with parchmenting makes it less well-regarded than the rest of the scribal process. Scribing is taught as an adjunct to church schooling or in a family context, passed from father to son. Though schools like Andebet may have been famous in the past, it is far from clear that it would have been necessary to take a course of time at such a centre to learn an art that would have been essentially taught in a largely informal way, by observation. Scribes would have and should have been learning locally and passing on their knowledge locally. This secular siting of manuscript production may not have always been the case: Heldman suggests that there was a change from monastic to secular production in the seventeenth century. If religious book production (and therefore most book pro-

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18. As was indicated by my informants and confirmed by observation, students are taught through a cycle of observation, repetition, and correction.

duction) was historically sited in the monastery, it is more reasonable to assume that it was tightly regulated and dogmatically taught, as church subjects have traditionally been in Ethiopia. With the shift of monasticism south in the fifteenth century, the limited style of scribal production practiced in the north came with it and when production of religious books, as with other religious artifacts, moved from the regular to the secular world, as per Heldman, it was the continuous tradition of the northern monasteries that moved from monastery to church school.

2.2.1 Scribes and Magic

The Ethiopic magical tradition has a thoroughly literate component, one which associates the power of writing with the ability to bring about magical results. Scribes (and especially those from Goǧǧam, which, according to my informants, has a reputation for being especially-associated with magic) by default fall into suspicion of magic and magical practices. The power of the däbtära—a word which my informants, parchmenter Mämhǝr Yohannes (Axum) was a monk, and I could not locate any others, but it is clear that there were scribes attached to monastic centres in the past, and one informant spoke of a deceased relative who had been a scribe, associated with the monastery of Däbrä Dammo, in Təgray. There is certainly much more work to be done establishing the relationship between secular and regular clergy among church artisans in the past, and Heldman’s conclusion merits closer examination.


21. “In the past, the general attitude of many Ethiopians was not favourable towards writing. It was more or less identified with black magic and consequently the man who writes considered as a magician.” Sergew Hable Selassie, *Bookmaking in Ethiopia* (Leiden: Karsten Drukkers, 1981), 27.

22. The clear association between the ability to write and the capacity for magic reinforces studies like *Binding Words*, and seems to provide a test case for my persistent suspicion that non-elite Medieval Europeans, like Ethiopians, likely had an essentially magical understanding of the liturgy. Don C. Skemer, *Binding Words: Textual Amulets in the Middle Ages* (University Park, PA: Pennsylvania State University Press, 2006); the emperor Zär’a Yaʿaqob (section 2.6) was especially concerned about magical books in his reign, which comes through in his writings: Getatchew Haile, ed., *The Epistle of Humanity of Emperor Zär’a Yaʿeqob: Ṭomarä Tosbǝ’‐t*, Text, Corpus scriptorum Christianorum Orientalium. Scriptores Aethiopici 95 (Louvain: Peeters, 1991); Getatchew Haile, trans., *The Epistle of Humanity of Emperor Zär’a Yaʿeqob: Ṭomarä Tosbǝ’‐t*, Translation, Corpus scriptorum Christianorum
refers to education in church liturgy, and by extension learning, and by further extension, has come
to refer to “magician” (writing being inseparable from the ability to create magical works)—to pro-
duce wards against the evil eye, the dangers of childbirth, and sickness is also the ability to make
non-religiously-sanctioned good luck charms and love charms and to curse with misfortune.23 This
should not be especially surprising: in a society that accepts the power of the word of God, through
the Mass, to create extraordinary effects, it is easy to see how written words, especially calling upon
the names of saints or even demons, has a supernatural authority. Thus, the “ Scrolls of Spiritual
Healing” referred to by Getatchew, which can be healing and call upon proper (saintly) sources of
power, and therefore legitimate, can be transformed into pernicious magical scrolls, by crafting them
for bad ends or calling upon unclean (demonic) sources of power.24 In-between, scrolls of protec-


23. Sergew relates the following proverb regarding the relationship between the däbtära (here,
meaning learned/teacher) and writing:

አይጥፍ፥ደብተራ፣  ከያቄ፥የለው፥አሞራ።

A Däbtära who does not write,
An eagle without wings.

Sergew Hable Selassie, Bookmaking in Ethiopia, 28; quoting Kidanä Wäld Käflé, Book of Grammar,
Verbal System and a New Dictionary, (Amharic) (Addis Ababa, 1940/1), 337–338; for more about
däbtāras and magic, see: Haile Gabriel Dagnew, “Education Magic in Traditional Ethiopia,” Ethiopian
Some Preliminary Remarks,” in Studia Aethiopica: in honor of Siegbert Uhlig on the occasion of his
65th birthday, ed. Verena Böll et al. (Wiesbaden: Harrassowitz, 2004); Getatchew Haile, “Introduction
to the Scrolls of Ethiopian Spiritual Healing,” in Codices 1–105, Magic Scrolls 1–134, vol. 1 of Cata-
logue of the Ethiopic Manuscript Imaging Project, ed. Getatchew Haile, Melaku Terefe, and Roger M.
Rundell, Ethiopic Manuscripts, Texts, and Studies 1 (Eugene, OR: Pickwick Publications, 2009); Al-
lan Young, “Magic as a ‘Quasi-Profession’: The Organization of Magic and Magical Healing among
Amhara,” Ethnology 14, no. 3 (1975): 245–265; Kay Kaufman Shelemay, “The Musician and the Trans-
mission of Religious Tradition: the Multiple Roles of the Ethiopian Däbtära,” Journal of Religion in
la médecine,” Abbay 7 (1976): 113–134; Jacques Mercier, “Approche de la Médecine des Debteras,” Ab-
G. Braziller, 1979); Jacques Mercier, Art that Heals: The Image as Medicine in Ethiopia (New York: Mu-
seum for African Art, 1997).

tion from *buda* ("evil eye spirits") may call upon clean sources of power or even use the visage of the
demon in the creation of the scroll, as demons are supposed to be so horrible that their visage scares
even themselves. In having the power to write, scribes have the power to copy magical scrolls, even
when they do not take the magical initiative to decide which are appropriate when. Learning to
write is inherently learning dangerous knowledge, which can be used for magical ends: so, when I
visited the church of Däbrä Bǝrhan Śǝllase in Gondǝr, I was told by the *Mämhǝr* that the church had
caued all of the *qästänǝčča* (*Asparagus sp.*) to be removed, because students were using it in the
production of (presumably written) love charms (footnote 45, page 145). This suspicion can lead to
the interesting phenomenon of very learned men in the Ethiopian tradition who cannot read, hav-
ing memorized the material they need to know. As was stated in the introduction, the practices
of magic are out of the scope of this dissertation, and reserved for exploration in a future work, but
the association of scribes with magic is important in understanding the power and social role of the
scribe.

### 2.3 Scribal Production in Pre-Christian Aksum

The area of what is now northern Ethiopia and Eritrea in ancient times had strong links across the
Red Sea to the areas of the modern-day Yemen, and the opposing shores were active in each other's
political affairs, as evidenced in inscriptions and archaeological remains, from sometime around the
middle of the first millennium BCE until the sixth century CE. Remains at Aksum, Yeha and Adulis

25. In this way, one can draw a distinction between the magician and the scribe, much like
the distinction between a doctor and a pharmacist: though some scribes also act to diagnose and
prescribe scrolls, others just create scrolls on the orders of magicians, taking no responsibility for the
magical efficacy themselves.

26. "Ethiopian scholars avoided writing and concentrated in memorizing their subject, what-
ever its length. ... It was no surprise, therefore, if an Ethiopian scholar could not write." Sergew Hable

point to the shared culture of the pre- and early-Aksumite state and southern Arabia, with the Sabean
syllabary in use in Aksum before its development locally into Ge’ez and the presence of Sabean
artifacts and buildings, most notably those at the Great Temple at Yeha and the ruins of Adulis. The
Kingdom of Aksum, which emerged in the first half of the first century CE forms the nucleus of the
Ethiopian civilization, centred in the city of Aksum and areas of modern T’gray province and Eritrea.
Aksum was served by Adulis as a port and perhaps as a client kingdom. The Aksumites traded with
interior areas of the highlands and may have at one time controlled areas of the Sudan and South
Arabia, though likely only as tributary states. They had “a polytheistic belief system analogous —
but by no means identical to — S. Arabian religion,” and a funerary practice which resulted in the
erecting of great stelae which cease to be erected with the advent of Christianity. The question of
what, and, more relevant to this dissertation, how, they wrote may be difficult to solve, but it can at
least be interrogated.

The literate culture of pre-Christian Aksum is exclusively represented in the historical record by
a variety of non-perishable writing media, including stone, iron, pottery, and coins. Little-to-nothing
is known about the perishable writing media that were used for the normal writing of the period,
though we can assume, from the evolution of the Ethiopic script, that there was use of perishable
media, as the few inscriptions known to survive are insufficient to account for such a change, and
we have scanty evidence, in the form of writing on a pot (presumably to customers or transporters),
that members of non-elite classes may have been able to read in the time of Aksum. The question
then arises: what perishable medium did Aksumites use for their writing?


29. Ibid., 73.

30. Ibid., 91.

31. “A pot from Aksum, probably 4th-century in date, bears a Ge’ez inscription (RIE 311) that may be loosely translated as ‘breakage must be paid for.’” ibid., 52.

32. Note that Sergew suggests that “The introduction of soft writing materials seems to be the
While we have no direct material evidence before the sixth century, a variety of suggestions have been made and we know enough about the surrounding manuscript cultures and the contexts of manuscripts in the period to fill in some details. Aksum was engaged with a Sabean manuscript culture that was known to have written on wood and stone; stone and bronze were preferred for public religious texts, whereas wood or palm fronds were preferred for correspondence and contracts.

2.3.1 Judaic Influences?

Despite the claims that the Betä ‘Esраel (Falasha or “Ethiopian Jews”) are descended from the Israelites of ancient Judea, there is no evidence for this assertion, and scholarly opinion is work of the Nine Saints ...,” a proposition which does not take into account the evolution of the Ethiopic script or the medium used for communication and record-keeping in the pre-Christian period. Sergew Hable Selassie, Bookmaking in Ethiopia, 8; this has been pointed out in footnote 80 and by other authors, e.g.: “That pre-Aksumite writing would have been restricted to the slow and painstaking work of stone-carved temple adornment, regal or familial commemoration and laboriously incised graffiti is implausible. Readier and more portable means of written communication would have existed contemporaneously with the monuments.” Laurel Phillipson, “Parchment Production in the First Millennium BC at Seglamen, Northern Ethiopia,” African Archaeological Review 30, no. 3 (2013): 225–252.

33. “Any substantial vernacular writings that may have existed were probably executed on perishable materials which, with the sole exception of the Abba Gärima Gospels, no longer survive.” Phillipson, Foundations of an African Civilisation, 52.

34. For example, Henze states “Aksumites may have written on wood, and in all likelihood on parchment, for parchment continued in use during medieval and into modern times, though neither wood nor parchment has been recovered during excavations.” Henze, Layers of Time, 38.

35. “Thousands of texts inscribed on stone or wood or cast in bronze and discovered at archaeological sites throughout Yemen ...” St. John Simpson, ed., Queen of Sheba: Treasures from Ancient Yemen (London: British Museum, 2002), 51.

36. Ibid., 51.
against it.\textsuperscript{37} While there is definitely the possibility (and even likelihood) of contacts with Judaism, there is neither positive evidence in support of this claim, nor are there any clear practices which can be linked directly to Judaism, as opposed to through the mediation of Christianity, and so it seems unlikely (though by no means impossible) that Aksumite manuscript culture was influenced by Jewish examples. Himyar, a South Arabian kingdom that was at times dominated by Aksum,\textsuperscript{38} has been traditionally identified as Jewish, but scholars now think that the people of Himyar were monotheistic without being Jewish (sometimes identified with Raḥmanism) and there is no compelling reason to believe that this non-Jewish society would have shared many elements of the unique manuscript culture of the Jews.\textsuperscript{39}

2.3.2 Wood and Palm

As has been noted above, Sabean was frequently written on wood and palm fronds. Frantsouzoff has suggested that this would have been the case in Aksum as well: “it seems strange that the same forms appeared as the result of the use of different writing materials. ... Therefore, it is tempting to assume that the migrants from Saba brought to the Horn of Africa not only the art of monumental epigraphy, but also that of writing on sticks and on palm-leaf stalks.”\textsuperscript{40} Certainly, the availability of material could not have been a hindrance, nor the style of the script, virtually identical at this time

\begin{itemize}
\item \textsuperscript{38} King Kaleb invaded and conquered the kingdom in the 520s, with Aksumite rule lasting until the 570s.
\item \textsuperscript{39} "Monotheists recalled — probably misleadingly — as Jews." Phillipson, \textit{Foundations of an African Civilisation}, 50.
\end{itemize}
on both sides of the Red Sea. Without evidence of the practice in Ethiopia, it is impossible to say how long writing on sticks may have lasted (if ever it took place), but evidence in the Hadith indicates it may have been in use in Arabia as late as the time of Mohammed.\textsuperscript{41} This suggests that use of sticks and palm fronds persisted in the general region to the period when parchment became the dominant perishable medium in the Christian world (fig. 2.7), a period exclusively witnessed in the Ethiopian context by the Gospels of Inda Abba Gärìma.

A marginal candidate for writing material is that the Aksumites might have written on the leaves of palms, as in India (fig. 2.4). Aksum was on the Indian trade route to the Mediterranean, and Aksumite traders would have had exposure to this practice, much used on the subcontinent, including later Christian communities. As mentioned, the Ge‘ez vowel system is said to have been modelled

upon an Indian script, and one might imagine the transfer of this kind of document, as well as the form of vowels, from India to Ethiopia. There is no evidence for the actual use of this material, however.

Figure 2.4: Writing on a palm leaf. Image courtesy of the HMML.

2.3.3 Papyrus

Papyrus is perhaps the leading contender for use among the various possibilities in pre-Christian Aksum. Although a number of authors have suggested the possibility that papyrus was used as a writing medium, there is no evidence of such a practice, save a solitary report of a papyrus fragment used in the binding of the Ǝnda Abba Gärima Gospels. A reasonably strong circumstantial case may be made for the use of papyrus, however. Ethiopia was in the orbit of Egypt, with sea trade described in the Pharaonic and Hellenistic periods, and Egypt, which had been producing papyrus

42. Bausi, “Die äthiopische Manuskriptkultur / The Ethiopian Manuscript Culture,” 53.

43. See, for example, Sergew’s hypothesis that “it is quite conceivable to see papyrus as a writing medium in Ethiopia.” Sergew Hable Selassie, Bookmaking in Ethiopia, 7–8.

since at least 3000 BCE, was the source of the ancient world’s papyrus. Papyrus was an inexpensive and portable trade good preferred for writing throughout the Mediterranean and traded in huge quantities to Rome, among other destinations. There is no evidence of papyrus being made or used in Ethiopia, but, in the context of trade with the Graeco-Egyptian world, it seems probable that there was some exposure to the material, and it made its way to Ethiopia in at least one case, that of the aforementioned fragment in the binding of the Gospels of Ǝnda Abba Gärima.

The papyrus reed, *Cyperus papyrus*, is found abundantly along the Blue Nile, from its source at Lake Tana all the way to the Nile delta, where it was farmed in plantations and shipped in great quantities across the Mediterranean. Elsewhere in Ethiopia, it grows at lake Zway and throughout the Awash river system; Strabo mentions a lake with “papyrus round its edges,” which is probably Lake Afambo or one of its neighbours in the Gemeri lake complex, due to the proximity to the nearby saltwater “sea,” Lake Assal, in Djibouti. There is no evidence of a tradition of papyrus production


46. “Alexandria was undoubtedly the headquarters of the papyrus industry, especially from the viewpoint of the Mediterranean world, which received its shipments of rolls from there.” ibid., 116.


48. Strabo, *Geography* 16.4.14:

for writing purposes, but the survival of quantities of papyrus in Egypt is made possible by the dry climate, whereas Ethiopia is extremely wet for at least three months of every year. Records of trade between Egypt and “Punt” mention trade goods which were the chief exports of Aksum: namely, gold, frankincense, ivory, and myrrh. Papyrus is listed as neither an import nor an export commodity. It does not appear in lists of trade goods with South Arabia nor does The Periplus of the Erythraen Sea make any mention of any writing material, though it explicitly mentions goods exchanged in trade between Egypt and areas as far south as Tanzania and as far East as India, and a section specifically on Adulis, trade-port of the Aksumite kingdom:

49. Papyrus does see some local use: the local people of Tana, Awassa, and Zway use bundles of the buoyant stalks of the papyrus to make a type of boat, called a and as type of siding material for buildings.

50. The location of Punt is disputed, variously identified as lying anywhere from present-day Sudan to Somalia.


52. Ryckmans argues that we do have evidence, of papyrus used as cordage material:

Nous n'avons aucune indication sur l'usage de papyri. L'anonyme Périple de la Mer Érythrée (§ 24) mentionne l'importation de papyrus en Arabie du Sud, mais apparemment comme matière première destinée à la fabrication de cordages.

We have no indication of the use of papyrus. The anonymous Periplus of the Erythraean Sea (§ 24) mentions the importation of papyrus to South Arabia, but apparently as a material primarily destined for the fabrication of rope.

Ryckmans, Les inscriptions anciennes de l'Arabie du Sud, 80–81; Lewis, following Theophrastus, has stated that the Greek word πάπυρος is used to refer to the use of the papyrus reed as food, as opposed to βύβλος; neither seems to have been remembered in the language despite the Greek origin of the Ethiopic Gospels. Lewis, Papyrus in Classical Antiquity; Casson, in contrast to Ryckmans, provides the reading κύπερος, which, following Dioscorides (1.4) is a medicinal reed, either Cyperus rotondos or longa. Casson, The Periplus Maris Erythraei, 64, 153.
In the end, it is difficult to say whether the lack of mention of papyrus as a trade good is due to demand being supplied locally or a lack of demand (or, as is possible, it may have been left off the list). To what effect, it is, at this time, impossible to tell; due to the despoliation and situation of Aksumite tombs, it seems unlikely that any future excavations will yield papyrus fragments, even if


55. Ibid., sel. from chap. 4–6.

56. The tombs at Aksum are situated at the base of a large hill; during the rainy season, water
such existed in the first place (for more information on problems related to the survival of Ethiopian materials, see Sec. 2.9.).

2.3.4 Parchment

Though leather production dates to before 2700 BCE, the exact origin of the production and use of parchment is less clear. The basic processes of parchment production were known to the Egyptians before 1600 BCE, but it is not known whether these processes were used in the combination that would have produced parchment, rather than leather, before the twelfth–eleventh centuries BCE. Use of parchment was known among the Assyrians between the sixth and second centuries BCE, and among the Jews before the fourth century BCE. The traditional story that parchment was invented in Pergamum has been dealt with in great detail elsewhere; for this purpose it is sufficient to note that parchment antedates the Pergamum story, which is neither to be believed, nor particularly relevant and sediment moves down the hill and settles in the tombs, spoiling remains.


58. For a list of the various processes assigned to the period 2000–1570 BCE, see ibid., 86–89.

59. For the distinction between parchment and leather, please see page 72, footnote 5.

Il più antico esempio che possediamo è un rotolo egezio della XX Dinastia (1195-1085 a.C.), e al Museo del Louvre si conserva un atto giuridico egiziano del 1000 a.C. (XXI Dinastia), scritto in ieratico ... su di un foglio di pergamena.

Maria Luisa Agati, Il libro manoscritto: introduzione alla codicologia, Studia Archaeologica (L’Erma di Bretschneider, 2003), 65.

to the Aksumite context.61

The fourth century is often cited as the turning point in the adoption of parchment as the manuscript standard for the Christian world,62 which is possible,63 though not explicitly supported by surviving manuscripts, for which see fig. 2.7, which suggests a transition closer to the beginning of the fifth century. Although we have limited and problematic evidence, given the prevalence of Egyptian material in early surviving manuscripts, and that region’s preference for papyrus, we cannot date the decisive period of transition to the fourth century, as the evidence for prevalence only appears in the fifth.64

The Ge’ez word for parchment, ዌሳይን brana, is thought to have derived from the Greek μεμμαρνα membrana. This suggests that parchment was not known natively, but was an introduced material,


62. One recent example is to be found in the well-regarded Clemens and Graham textbook: “parchment had largely replaced papyrus ... by the fourth century AD.” Raymond Clemens and Timothy Graham, Introduction to Manuscript Studies (Ithaca, NY: Cornell University Press, 2007); Agati is more cautious:

La vera esplosione della pergamena in campo librari avvenne però tra il IV e il V secolo dell’era cristiana

The true explosion of parchment in the field of books occurred between the fourth and fifth centuries CE

and this assertion better corresponds with the evidence in fig. 2.7. Agati, Il libro manoscritto, 65.

63. We know that in the 330s, Emperor Constantine ordered that copies of Christian texts be produced on parchment: “I have thought it expedient to instruct your Prudence to order fifty copies of the sacred Scriptures, the provision and use of which you know to be most needful for the instruction of the Church, to be written on prepared parchment in a legible manner, and in a convenient, portable form, by professional transcribers thoroughly practiced in their art.” Eusebius Pamphilus, Church History, Life of Constantine, Oration in Praise of Constantine, ed. Philip Schaff and Henry Wace, A Select Library of the Nicene and Post-Nicene Fathers of the Christian Church 1 (Edinburgh: T. & T. Clark, 1890), 4:36.

64. Graphing that evidence, as in fig. 2.7, shows the point of transition in the fourth century, but this is likely an artifact of the graphing process; in the absence of further evidence, we should probably assign the transition to around the year 400.
either by Greek traders or, as seems more likely, Christian missionaries. This could have happened anytime in the period of Christianization of Aksum, from the third to the sixth centuries; given the dominance of parchment in the fifth century (fig. 2.7) it seems likely that by the time the Gospels of Ḫanda Abba Gärima were produced, apparently in the sixth century, it was in an exclusively parchment context. Evidence pointing to earlier adoption of parchment is scarce: there is a stone, now in the Axum Archaeological Museum, found in a fifth-century context at site K which has been identified as a parchment-burnishing stone (fig. 2.5). A broken burnishing stone made of basalt has been identified in a fourth/fifth-century Aksumite context by excavations at Misti Werkah Gumalah (fig. 2.6): in form it is very similar to medmeṣ described in the scribing chapter (compare, for example, with the medmeṣ in fig. 4.30a). Other burnishing stones have been found, such as one from the

65. As mentioned above, parchment was not part of the South Arabian tradition inherited by the Aksumites; the earliest mention of parchment in South Arabia post-dates the Ḫanda Abba Gärima Gospels:

Nous n'avons pas davantage trace de parchemin, sinon que l'historien arabe al-Hamdānī, qui vivait au Xe siècle, mentionne un livre de généalogies royales anciennes écrit en musnad, c'est-à-dire en caractères sud-arabes. We have similarly little evidence of parchment, except that the Arab historian al-Hamdānī, who lived in the 10th century, mentioned a book of ancient royal genealogies written in musnad, which is to say, in South Arabian characters.

Ryckmans, Les inscriptions anciennes de l'Arabie du Sud, 80–81; Note that Laurel Phillipson considers the use of parchment by pre-Christian Aksum as “plausible,” continuing: “we can be almost equally confident that neither papyrus, wood nor other vegetable substrates were commonly used as pre-Aksumite writing surfaces.” Phillipson, “Parchment Production in the First Millennium BC at Seglamen, Northern Ethiopia.”

66. A non-elite dwelling in Aksum.

67. “A rectangular piece of fine-grained pumice (Fig. 359b) from phase II measures 61 by 47 by 22 mm, smoothed on all surfaces. Such stones are now used for fine leatherwork and preparation of vellum.” Phase II at site K corresponds to part of the fifth century. David W. Phillipson, Archaeology at Aksum, Ethiopia, 1993-7 (London: British Institute in Eastern Africa, 2000), 408.

Mausoleum at Aksum which has the word አዳክ ሰላ ха “to rub or grind” on it. Laurel Phillipson has made the case that tools, including scrapers, handstones (see section 3.3.3), burnishing stones (see section 4.5.2), and awls (see section 4.1.3) recovered from eighth- to fourth-century BCE contexts at Seglamen (near Axum) constitute evidence that parchment-making was active in pre-Christian Aksum; while the scrapers, handstones, and awls have other uses in leather production, which industry would be expected to have been active in this period, the burnishing stones, if actually examples of medmes, would push the earliest evidence of parchment in Ethiopia back by a millennium. If parchment-making was a native industry, it is extremely curious that the Ethiopic word for parchment comes from a Greek root; given the evidence of the use of parchment in the regional context (fig. 2.7), a cautious approach to pushing back the date of the earliest use of parchment in Ethiopia seems appropriate.

69. Phillipson, Archaeology at Aksum, Ethiopia, 1993-7, 216, fig. 197.

70. Phillipson, “Parchment Production in the First Millennium BC at Seglamen, Northern Ethiopia”; she similarly identified scrapers at Misti Werkah Gumalah which might perhaps have been used in the making of parchment, though note the comparative caution in this earlier article’s assignment of tools to the parchmenting process: “No conjecture is offered as to the possible use of these scrapers. While they might have served for the final stages in the preparation of manuscript vellum and of similarly fine leather articles, the great extent of such use that would be implied by the numbers of scrapers which have been found is at best improbable.” Phillipson, Using Stone Tools, 120. Studies of leather production have been carried out in southern Ethiopia, among culturally-distinct groups; it would be interesting to establish if northern (highland) Ethiopian leatherworkers use handstones in current practice, as a step towards establishing comparative use of the tools of parchment and leather production. Parchment tools are, after all, hide-working tools, and it would be curious if completely different sets of tools arose in the same context for the same task. Unfortunately, in my investigations, I only encountered leather makers using modern (imported) leatherworking processes. Other burnishing tools have been found in pre- and Aksumite contexts which have been interpreted as having been used in finishing the surfaces of unfired ceramics: Laurel Phillipson, “Lithic Tools Used in the Manufacture of Pre-Aksumite Ceramics,” African Archaeological Review 30, no. 3 (2013): 380–402; see also the presentation of scribal tools in Laurel Phillipson, “Grindstones and Related Artefacts from Aksum, Ethiopia,” Lithics, no. 22 (2001): 13–21; and related discussion in Laurel Phillipson, “Grindstones and Related Artefacts from Pre-Aksumite Seglamen, Northern Ethiopia, and Their Wider Implications,” Azania: Archaeological Research in Africa 47, no. 4 (2012): 509–530.
2.3.5 Mixed media

It should be noted that it is possible (even probable) that a variety of these media circulated together. Papyrus would have been the dominant medium for works attained from the Roman/Greek/Egyptian world, but the material was likely not locally available and probably not imported in any great quantity, if at all. Following on well-established South Arabian tradition, pre- and early-Aksumites could have written on palm sticks, and we know that inscriptions were made on metal and stone. Parchment would likely have been found to meet local needs better than papyrus or sticks, being locally
available and a better writing surface than the latter. A singular clay tablet (fig. 2.8) has been found, which might have been used for tallies, but does not seem to convey actual text.

2.4 The Coming of Christianity

At the time of the introduction of Christianity to Aksum, third to sixth centuries CE, Christians already showed a marked preference for the codex, as is well-established (fig. 2.9), and an increasing preference for parchment, as demonstrated in fig. 2.7. The book culture which survives into the 71. Note that the quality of the writing surface does not seem to have influenced preferences with regard to papyrus versus parchment; quality of the surface does not make the case, so much as availability.

72. Now found in the Axum Archaeological Museum.

73. "First, it is clear that Ancient Christians preferred the codex, and that this preference is already demonstrated in the earliest artifacts of Christian texts. As noted, the overwhelming majority of all forms of second-century Christian items (over 70%) are codices, whereas among all second-century items rolls amount to 74%. In the third century CE, there is a somewhat larger percentage of codices in the total number of items (about 21%), but the roll remains by far the dominant book
period that we have evidence of is almost exclusively devoted to the production of Christian books, and extrapolating from these two ends, it seems likely that the period between the production of the Gospels of Înda Abba Gäríma and the early surviving books, followed the model of parchment codex book production.

According to tradition, Christianity came to Ethiopia with a Syrian Christian by the name of Frumentius, who was taken captive while returning from India. Rufinus, in his Historia Ecclesiastica (a free translation of Eusebius' work, with many additions), gives the main version of this:

Meropius quidam Tyrius philosophus adire Indiam... voluit, habens secum duos puerulos, quos liberalibus litteris utpote propinquos instituebat. Quorum unus qui erat junior Ede- form. So the early Christian preference seems at odds with, or at least clearly distinguishable from, general tastes of the time about the preferred form for books, and this justifies further investigation and analysis.” Larry W. Hurtado, The Earliest Christian Artifacts: Manuscripts and Christian Origins (Grand Rapids, MI: Eerdmans, 2006), 49.


75. Known in Ethiopia as Abba Säläma. First Bishop of Aksum.
C. sius, alter Frumentius vocabatur.... Invaditur navis philosophi: cuncti cum ipso pariter perimuntur. Pueruli reperti sub arbore meditantes, et lectiones suas parantes, Barbarorum miseratione servati, ducuntur ad regem. Horum ille alterum, id est, Edesium sibi pincernam fecit. Frumentio vero, quem quasi perspicacem deprehenderat et prudentem, rationes suas scriniaque commisit.\textsuperscript{76}

The story highlights Aksum’s location on the trade route from Egypt to India (which we also know from other sources, such as the \textit{Periplus}) and therefore the geographical scope of ideas that the Aksumites might have been exposed to. Notably for the history of manuscripts in the country, “The boys were discovered under a tree going over and preparing (\textit{lectiones}, ‘readings’) their lessons” suggesting that they had at least some books with them (perhaps the Psalter), consistent with the mission of their mentor to educate them. This is the first reference to Christians with books in Ethiopia, and the evidence would suggest that they were likely codices: Christians had already shown an early and overwhelming preference for codex books, demonstrated in Figure 2.9.\textsuperscript{78} Whether there was knowledge of parchment in Aksum before the coming of Christianity is of course impossible to determine without new evidence, but it seems likely that its knowledge was introduced by Christians (see section 2.3.4), as the vast majority of texts from later periods are religious in nature. In any case, a parchment codex manuscript culture came to characterize the Ethiopian tradition, in what was surely a transformative change on the writing culture of Aksum.

Alongside the other Oriental churches, the Ethiopian church did not accept the doctrines of the Council of Chalcedon in 451, and has remained miaphysite in doctrine to the present day. In the wake

\begin{itemize}
\item \textsuperscript{76} Rufinus Aquileiensis, \textit{Rufini Aquileiensis presbyteri historiae ecclesiasticae libri duo}, ed. Jacques-Paul Migne, Patrologia Latina 21 (Imprimerie Catholique, 1849), bk. 10, chap. 9.
\item \textsuperscript{78} This is dealt with most fundamentally in Colin H. Roberts and T. C. Skeat, \textit{The Birth of the Codex} (Oxford: Clarendon, 1983), chap. 8; significant updates are in Hurtado, \textit{The Earliest Christian Artifacts}, chap. 2.
\end{itemize}
of Chalcedon, and possibly fleeing persecution of miaphysites, a group of monks, called the “Nine Saints” or the “Nine Syrian Saints” came to Aksum to establish monasticism in the country, founding a number of Pachomian monasteries in the area of modern-day Tigray, with notable foundations in and around Aksum (Liqanos and Pänṭälewon), Adwa (Gärima—the oldest Ge’ez manuscripts, the Ùnda Abba Gärima Gospels, are supposed to have been written by the saint’s own hand, and have been carbon-dated to around the sixth century), Yeha (Afše), and Däbrä Damo (Aragawi). They were joined in this period by other “Roman” (Byzantine) monks known in Ge’ez as the Ṣadəqan (“Righteous Ones”), who settled in at least ten locations throughout the area represented by modern Eritrea and Tigray. These foundations were fundamental to monasticism in Ethiopia and important avenues of engagement between the Ethiopian church and the wider Christian world, dispersing Church practices in the Aksum region, likely including manuscript production.

79. Though they were mostly not Syrian, identified in Ethiopian sources as “Roman,” (i.e. Byzantine). The Encyclopaedia Aethiopica lists them as coming from:

<table>
<thead>
<tr>
<th>Location</th>
<th>Zämika’el Aragawi, Gärima, Pänṭälewon</th>
<th>Liqanos</th>
<th>Guba</th>
<th>Ṣaḥma</th>
<th>Alef</th>
<th>Yəm’ata</th>
<th>Afše</th>
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<tbody>
<tr>
<td>Rome</td>
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<td>Constantinople</td>
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<td>Cilicia</td>
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<td>Antioch</td>
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<td>Caesarea</td>
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<tr>
<td>Egypt(?)</td>
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<tr>
<td>Edessa(?)</td>
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</tr>
</tbody>
</table>

80. For the history and hagiography of the Nine Saints, see Antonella Brita, I racconti tradizionali sulla “seconda christianizzazione” dell’Etiopia, Studi Africanistici: Serie Etiopica 7 (Naples: Università degli Studi di Napoli “L’Orientale,” 2010).

81. Uhlig and Bausi, Encyclopaedia Aethiopica, s. v. “Ṣadəqan.”

82. Sergew goes so far as to attribute “the introduction of soft writing materials” to the Nine Saints, though it seems unlikely that the church operated for over a century without them, both given the book-based traditions of Christianity and the assertion by Rufinus that the evangelists of Ethiopia, Frumentius and Aedesius, were reading their lessons under a tree when discovered (for discussion of which, see above). Sergew Hable Selassie, Bookmaking in Ethiopia, 8; “Pueruli reperti sub
2.4.1 The Gospels of Înda Abba Gärima

Virtually no known manuscripts in Ethiopia are dated to before the twelfth century, and the earliest dated manuscript was produced in the 13th. The notable exceptions to the rule of non-survival are the Gospels of Înda Abba Gärima monastery, near Adwa, Tigray. Though the dating has been subject to debate, carbon dating of the manuscripts (though only the pages with paintings on them) places them in the sixth century, making them the sole witnesses to the period of absence in the Ethiopian manuscript record. They are most notable, for the purposes of this dissertation, for providing examples of parchment codices transmitting Ethiopic Christian texts, and are a significant bridge between the contexts for manuscript production, around the introduction of Christianity and the period, after the thirteenth century, when there are significant survivals of manuscripts to compare them to.

2.5 Contact and Trade

2.5.1 Trade

There has been a tendency among scholars of Ethiopia to assign either great or trivial importance to the influence of the foreign in Ethiopia. To read some authors, all innovation in Ethiopian art and architecture is influenced by the foreign (imperialists) whereas others (nationalists) acknowledge no foreign influence (and in fact promulgate the opposite). The reality is that there is very little arbore meditantes, et lectiones suas parantes,” “The boys were discovered under a tree, praying and preparing their readings.” Rufinus Aquileiensis, Rufini Aquileiensis presbyteri historiae ecclesiasticae libri duo, bk. 1, chap. 9.


evidence to clearly establish the fact of influence, though there is a reasonable assumption that it happened, and several discrete, identifiable examples. In the ancient period, Ethiopia is known to have had strong links with Sabea and Nubia and to have had trade contacts with Egypt (see above)\(^{85}\) and as part of this, is part of a trade network that linked Rome and India. Roman goods have been discovered in Aksumite tombs and Roman/Egyptian sea trade passed by Adulis, the seaport of Aksum (though the importance of the Red Sea route, as opposed to the overland or Persian route, is a matter of debate). In any event, Ethiopia's contact with the rest of the world declined throughout the medieval period, until it picked up in the sixteenth century, with the involvement of Jesuits and the Portuguese in Ethiopian affairs.\(^{86}\) While the Umayyads and Abbasids “never actually dared to challenge the mountainous Ethiopian citadel,” they nevertheless “neglected the Red Sea, ruined Aksum's seafaring, and condemned Ethiopia to isolation.”\(^{87}\) As early as the time of Kaleb, we have reports (through Procopius) that Aksum had no ability to trade with India, the trade route having changed such that the goods of India were shipped to the Persian coast and purchased there, shutting Ethiopia out.\(^{88}\) The Red Sea route may have also bypassed trade in Adulis in favour of South

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\(^{85}\) Though other areas are clearly more important to Egyptian trade: see, for example, the identification of Punt as on the Nubian coast, as opposed to modern Eritrea/Somalia, as previously suggested.

\(^{86}\) The invasion of South Arabia by Kaleb seems to have been the last case of a strong Ethiopian extra-territorial engagement. Muhammad ordered the destruction of the Ethiopian trading post at Shua'yba, “bringing to an end the ancient Meccan-Aksumite commercial relations.” Competition for the Red Sea increased after Muhammad's death, with a raid on Adulis in 640, and Aksumite sea power declined after the 7th century. Haggai Erlich, *Ethiopia and the Middle East* (Boulder, CO: Lynne Rienner, 1994), 9.

\(^{87}\) Ibid., 11.

\(^{88}\) Procopius, referring to a missive of the Byzantine Emperor Justinian (r. 527–565), notes that Ethiopians at the time of King Kaleb seem to be shut out of the trade with India, since the trading vessels across the Indian Ocean make landfall first in Persia, where Persian merchants buy up all the goods: “At that time, when Ellesthaeus was reigning over the Ethiopians, and Esimiphaeus over the Omeritae, the Emperor Justinian sent an ambassador, Julianus, demanding that both nations on account of their community of religion should make common cause with the Romans in the war against the Persians; for he purposed that the Ethiopians, by purchasing silk from India and selling it
Arabia before taking the journey across the Indian Ocean.

Though the rise and spread of Islam bypassed Ethiopia in the period of conquest (possibly due to the influence of the Hadith to “leave the Abyssinians alone, so long as they do not take the offensive”)\(^\text{89}\), nevertheless, Ethiopia’s geopolitical situation had a long-term detrimental effect on its power, trade relations, and religious autonomy. The Abyssinian highlands were surrounded by lowland areas in the power of the Muslims: Somalia and the Sultanate of Ifat (and later Adal) on one side, Nubia and Egypt on the other. The Ethiopians, dependent for their bishops upon the Alexandrine church, had to pay tribute to the Sultan of Egypt for the privilege of the appointment, and the increasing pressure on the Byzantine Empire and the Coptic Christian community deprived Ethiopia of its traditional allies in the region. Ethiopian pilgrims did continue to go to Jerusalem, and visitors from Egypt, Armenia, and even Europe are known in Ethiopia, but Ethiopians travelling abroad and foreigners in Ethiopia both seem to have been exceedingly rare.

### 2.5.2 Ethiopia and Christian Egypt

The Ethiopian church was dependent, from its foundation and for most of its history, on the Alexandrine Patriarch for the provision of bishops; this is a clear avenue for cultural and artistic exchange, but the extent of such transfer is unclear. Presumably, the new bishop would come with books and perhaps a retinue; at the same time, it is known that some bishops did not (at least initially) speak the local language, though exceptionally, Abba Sälama, known as Mätärg “the Translator”, is known to have translated many texts into Ge’ez from Arabic, and is the author of the Ge’ez text among the Romans, might themselves gain much money, while causing the Romans to profit in only one way, namely, that they be no longer compelled to pay over their money to their enemy (this is the silk of which they are accustomed to make the garments which of old the Greeks called ‘Medic,’ but which at the present time they name ‘Seric’).” Procopius, *History of the Wars*, trans. H. B. Dewing (Cambridge, MA: Harvard University Press, 1914).

called the “Homily on the Deceased.” While early translations into Ethiopic from Greek do not reveal the origin of the copies used for translating (Greek being the lingua franca of the early church), later texts are known to come in many cases from arabo-coptic sources, such as the Sankassar, which was translated into Ge’ez in the 14th century. Though Ethiopia seems to have had little cultural exchange in the medieval period with its neighbour Nubia, Ethiopians are thought to have performed pilgrimages to Jerusalem since the early period of Christianity, (Kaleb is recorded as donating his crown to the Holy Sepulchre in Jerusalem) and would have presumably travelled through the region on the pilgrimage route, which passed through Egypt. Records of Ethiopian pilgrims in Egypt are known from the eleventh or twelfth century, and an Ethiopian community may already have been in existence in the desert near Scetis by the twelfth century. Ethiopian monks are known to have inhabited the monasteries of Dayr al-Muḥarrak from the thirteenth to eighteenth centuries, where the Sankassar was translated ca. 1400, and Dayr as-Suryān is said to have been a place “where Copts, Syrians, and Ethiopians could easily meet and have fruitful intellectual exchanges.” Several

90. Πάπας Ἐθιοπικός, Metropolitan from 1348/50 to 1388/90. Uhlig and Bausi, Encyclopaedia Aethiopica, s. v. “Sālāma.”


92. Uhlig and Bausi, Encyclopaedia Aethiopica, s. v. “Egypt: Ethiopian Monks in Egypt.”

93. al-Muḥarrak near Qūṣiya (Qusquam), a Pachomian monastery on the supposed site of the Holy Family’s residence in Egypt, where “over the centuries there had been a tradition ... of welcoming Ethiopian monks.” Barbara Watterson, Coptic Egypt (Edinburgh: Scottish Academic Press, 1988), 109–112; “During the 13th–18th cent. there was a community of Ethiopian monks living in Dayr al-Muḥarrak.” Uhlig and Bausi, Encyclopaedia Aethiopica, s. v. “Dayr al-Muḥarrak” and “Sankassar.”

94. Uhlig and Bausi, Encyclopaedia Aethiopica, s. v. “Dayr as-Suryān.”
prominent Ethiopian church leaders are thought to have visited the community near Scetis, including Ewosṭatewos, the fourteenth-/fifteenth-century leader of the movement bearing his name, who is also known to have visited the Patriarch in Egypt and to have died in exile in Armenia. Armenians were also commonly merchants in Ethiopia, and were favoured guests to Yohannes I.95

There is a significant amount of artistic exchange with Coptic Egypt: the monastery of Däbrä Dammo shares motifs with near-contemporary church buildings in Egypt,96 and the Zaggwē king Yemreḥanna Krestos sources “Egyptian shutters” for the decoration of his church; both buildings marry Aksumite architecture with geometrical (and other) patterns which may be inspired by foreign examples.97 There are many similarities in the styles of harägs with other Byzantine and Eastern Church ornamentation.98

2.5.3 Ethiopia and Europe

Getatchew Haile has suggested that finer qualities of parchment may have been imported from abroad, specifically from Europe:

Governor Sǝmön of Hagărä Maryam, in Šäwa, who lived during and after the reign of Emperor Labnā Dǝngǝl, (1508–1540), describes his Psalter, stolen with other property, in the following fashion:99

95. Henze, Layers of Time, 102.


98. A haräg is a type of vinework decoration characteristic of (Christian) Ethiopian texts, generally used to head books or major divisions. Compare with examples from the Schema dei principali motivi ornamentali bizantini da Alison Frantz 1935, elaborazione di P. Canart in Agati, Il libro manoscritto.

But I grieve over the picture of (Mary’s) beautiful image, the like of which cannot be found, which I had the European Märqorewos paint, because a thief has taken it from me. (O My Lady Mary,) let whatever is lost of my property remain lost, but does not (the fact) that he took the beautiful and delightful picture, which I had a painter paint in Egyptian ink of different colours, grieve you? The brightness of its vellum looks like an Egyptian linen cloth which a cleaner has brightened. Its ink is like the colour of black crystal, like soot. The redness of its ink is like the colour of amber which glows. The cover of its boards is a badger skin, that has the beauty of a European red wool. Each picture is covered with scarlet.

The vellum was most probably European, as Sǝm’on would have not bothered to describe it in this fashion, had it been an ordinary, locally-produced parchment.101

The assertion that the vellum must be imported due to its quality seems to be largely unfounded. The source is very clear on the origin of the imported Egyptian wares, but, at least in the quotation as given, there is no mention that the vellum itself is imported; if it were imported parchment, this would seem out of character, given the specificity which the author uses in detailing the foreign origin of the ink, the wool used as a comparative, and the foreign artisan who produced it. I rather suspect that finer grades of parchment were commonly produced in the past: Assefa refers to a final rubbing with hoṣä making a very white and fine parchment,102 one of my informants in Mäqälä produced quite passably white parchment, and I saw a very white modern parchment book for sale in Lalibäla.103

100. The Italian painter, Nicolò Brancaleone. cf. Uhlig and Bausi, Encyclopaedia Aethiopica s.v. “Brancaleone, Nicolò.”


103. I presume it to have been made in the traditional way—it was quite inexpensive, and on sheep-parchment; I have not encountered parchment makers who use Western methods of production.
2.5.4 Differences with Other Traditions

Discussing trade and its influence on the Ethiopian church and manuscript tradition, it is worth discussing features of related manuscript traditions not present in the Ethiopian tradition.

Quills

Finlay traces the earliest mention of the quill pen to Isidore of Seville in his *Etymologiae*, and the quill seems to have become dominant after the sixth century, however there is no recorded use of quills for pens in Ethiopia. Bausi notes that there are traditions that quill pens were used in previous times, and it was reported to me that quill pens were used “in the times of our grandfathers,” a term which may represent lost historical practice or simply that it seems reasonable to think that such may have been used.


106.

Sono prodotti usando una canna locale (fambaqo, o anche qastanecchii, «asparago selvatico», o rambalal, «gelsomino»), anche se esiste la tradizione orale, senza alcun riscontro nella pratica attuale, e forse di esclusiva derivazione letteraria, dell’uso della penna di volatile; le miniature mostrano comunque sempre calami di canna.

It is produced using a local cane (shambägo, or even qästänčča (wild asparagus) or rambalal (jasmine). There also exists an oral tradition (without any basis in actual practice, and perhaps exclusively derived from literature) of the use of quill pens; miniatures, however, always depict pens made of cane.

Figure 2.10: Syrian portraits of the Evangelists, twelfth/thirteenth c. Paris BNF Syr. 356 f. 2v.104
Scissors

Scissors, which, as it may be seen in fig. 2.10 are current in Syria and throughout the Mediterranean by or before the twelfth century, do not appear in images of Ethiopian scribal practice before the nineteenth, though they are used in current practice.

The lunellum

The small curved knife on the table of the Evangelists in fig. 2.10 is called a lunellum, and is characteristic of parchment production throughout the Christian Mediterranean. It does not appear in historical sources relating to Ethiopian production, though a head-knife was used as equivalent by at least one of Sergew’s informants. See also the discussion on page 76.

Paper

Arabs learned the making of paper in the eighth century, and it became widely used in Islamic book-making after that time, spreading throughout Muslim lands and making its way as far as Europe by the eleventh to thirteenth centuries. In Ethiopia, paper is used exclusively in Harari manuscripts (and printed books of all languages), but, as discussed below, there seems to be no cross-pollination


108. See, for example, the depictions of scissors in Sergew Hable Selassie, *Bookmaking in Ethiopia*, 13, fig. 3.

109. Ibid., 12.

110. Michelle P. Brown, *Understanding Illuminated Manuscripts: a Guide to Technical Terms* (Malibu, CA: J. Paul Getty Museum, 1994), 93–94; Bloom says that the traditional story of Muslims learning papermaking from a Chinese papermaker named Cai Lun who was captured at Samarkand is not to be believed, and that it is likely “that anonymous Central Asian papermakers invented rag paper well before the Islamic conquest and that when Central Asia became Islamic, the technology was transferred to the Islamic lands,” continuing: “a mere two centuries after Muslims encountered paper in Central Asia, they were using it in Spain.” Jonathan Bloom, *Paper Before Print: the history and impact of paper in the Islamic world* (New Haven: Yale University Press, 2001), 45–47.
of the Ethiopic and Harari manuscript traditions.

Wicked Inkwells

Another feature of Syrian scribal practice that was common to both Oriental churches and the Arabic tradition is the use of the wicked inkwell, where “the inkwell (miḥbara) was fitted with a wool or cotton wick (līqa) to control the quality of the ink taken up by the calamus.”\(^\text{111}\) A version of this can be seen on the desks of the Evangelists in fig. 2.10 and was current in Harari practice\(^\text{112}\) but never depicted or used in the Christian Ethiopian tradition.

2.5.5 Muslim Bookmaking in Ethiopia

Muslim bookmaking is outside the scope of this dissertation, but within the orbit of the traditional practice, as the Christian kingdom had Muslim neighbours, was visited by Muslim merchants, and conquered Muslim areas. The bookmaking tradition of Harar\(^\text{113}\) is very much Arab in its techniques and the objects it produces. Harari books are written on paper, in envelope-flap bindings, and impressed using a book-press in the Arab manner. Though Harari is now written in Ethiopic characters, it was formerly an Ajemi language, which is to say that it used Arabic script. Items now in the Sherif Harar City Museum attest to the use of wicked inkwells and books were stored in traditional cabinets by families who maintained schools and shrines, in a traditional Islamic fashion. Apart from the characteristics that the Ethiopian and Arab traditions always have in common (use of reed pens, carbon inks, chain bindings, etc.), there is nothing about the bookmaking tradition in Harar that would suggest any kind of cross-fertilization of bookmaking traditions, and the Harari tradition is presumably an implant that came with Arab books and Arab scholars to teach with them.


\(^\text{112}\) Examples are in the collections of the Sherif Harar City Museum.

\(^\text{113}\) A Muslim (primarily Sufi) city in the former Sultanate of Adal, now in Eastern Ethiopia.
2.6 Imperial Patronage

The emperors, kings, and noblemen of Ethiopia long played an important role in the commissioning and production of manuscripts, one that can be traced, in many cases, through the testimony of the manuscripts themselves. Rich foreign fabrics lining the boards of manuscripts (section 6.3) likely came as gifts, and the donation of manuscripts was apparently a normal and expected behaviour. Lesser patrons appear in dedicatory images but emperors are the earliest and most important patrons for whom we have records. The reigns of Emperor Dawit\textsuperscript{114} and his successor, Zăr'a Ya·əqob\textsuperscript{115} are two of the most interesting in terms of early accounts of book production in Ethiopia. Though book production, as part of church foundation, would be routinely commissioned by emperors, Dawit’s reign was the time of the translation of the Ṭä·äməmrä Maryam.\textsuperscript{116} Emperor Dawit is known for ordering the production of two of the earliest datable Ethiopian manuscripts; one, the Gospels of Geshän Maryam is the subject of the miracle which is discussed in section 5.3. The other, the Kebran I Gospels also shows the use of gold in the manuscript illumination. His successor, Zăr’a Ya·əqob was especially engaged with books; he was concerned about the production and circulation of magical books, which he condemned, and the author of three religious works, including the Maṣḥafa Bərhan.\textsuperscript{117} He also demonstrates the role of manuscripts in doctrinal debate and resistance, in an example where he gifts the monastery of Däbrä Bizän with a copy of his work (the Maṣḥafa Bərhan). The book, which condemns their part as the opposition party in the religious debate, is a not-so-subtle censure of the monks, who apparently censor the parts most offensive to their cause.

\textsuperscript{114} ṢṬ, sometimes Dawit II, counting the biblical king as first in the line. Regnal name Qʷäştänṭinos, Solomonid ruler from 1379–1413.

\textsuperscript{115} Ṭækä:Yaqob, regnal name Ḥäșṭänṭinos, Solomonid ruler from 1434–1468.

\textsuperscript{116} The Miracles of Mary, an extremely popular text in the Ethiopian Church, which has an especially strong devotion to the cult of the Virgin Mary.

\textsuperscript{117} The “Book of Light,” a homiliary produced as part of his campaign to reform the church.
Gälawdewos, in the wake of the Ethiopia-Adal war (see section 2.9), set about rebuilding the devastated kingdom, including its churches. One of his foundations is the church in the modern village of Gälawdiwos, where several active scribes were interviewed for this project. He is recorded as having been very learned and is credited with authoring the Confession of Faith in response to arguments for Catholicism advanced by Jesuit missionaries who had begun to arrive in the kingdom in order to convert the population to the Roman religion.

The “vast majority” of extant manuscripts “date from the 17th century onwards,” as is readily evident from working with collections in the field. The founding, by Emperor Fasilidas, of a perma-


119. He “did not cease to study the Holy Scriptures until he had acquired a greater knowledge of them than that of most aged priests, and he purchased a large number of books which cost him at least ten thousand ounces of gold.” Richard Pankhurst, ed., The Ethiopian Royal Chronicles (Oxford: Oxford University Press, 1967), 79.


nent capital at Gondär in 1636 ushered in a new period of artistic and craft production, likened to an Ethiopian “Renaissance.”\textsuperscript{122} It became a centre for learning, book production, and culture.\textsuperscript{123} Heldman has suggested that the Gondärine period marks a transition from monastic to secular production (both secular clergy and laity).\textsuperscript{124} A series of palaces were built in a walled compound, among which was the library of Yohannes I, which may be the first dedicated library building in the country’s history.\textsuperscript{125} Catholic religious works were circulating in the country in translation by this time, as Yohannes went about collecting and burning them.\textsuperscript{126}

After the reign of Iyasu II, the succession devolved into a revolving door of kings, an era known

\begin{itemize}
\item \textsuperscript{122} Henze, \textit{Layers of Time}, 100.
\item \textsuperscript{123} “Gondär, as a religious as well as a political and commercial centre, also had many skilled artisans catering for the needs of the Church, such as calligraphers, artists and book-binders. Rüppell, who praised their craftsmanship exclaimed that one could only wonder at the elegance of the tooled leather binding of Gondäré manuscripts. This work, according to the French Scientific Mission, was normally carried out by däbtäras, or lay clergy.” Richard Pankhurst, \textit{A Social History of Ethiopia: the Northern and Central highlands from early Medieval times to the rise of Emperor Tewodros II} (Addis Ababa: Institute of Ethiopian Studies, Addis Ababa University, 1990), 233; citing Eduard Rüppell, \textit{Reise in Abyssinien}, 2 vols. (Frankfurt am Main: Gedruckt auf kosten des verfassers und in commission bei S. Schmerber, 1838–40), 1:367; 2:179–182; and Charlemagne Théophile Lefebvre, \textit{Voyage en Abyssinie} (Paris: Arthus Bertrand, 1845–8), 2:45; 3:244, 246–9.
\item \textsuperscript{124} “Scribes probably continued to receive their training in monastery schools, yet monasteries independent of courts or courtly patronage were no longer centers where religious art of any great artistic significance were produced. … Evidence suggests that by the seventeenth century the production of religious art had ceased to be the primary domain of the monk, and, although the priest-artisans or deacon-artisans who produced religious art were not removed from lay society like monk-artisans, they, as creators of religious art, were not grouped with low-status craft workers.” Heldman, “Creating Religious Art,” 142–143. It is worth noting that most scribes are däbtäras or secular clergy today, and this argument deserves further research, to see if it holds up.
\item \textsuperscript{126} Henze, \textit{Layers of Time}, 101.
\end{itemize}
as the “Era of Princes” or “Era of Judges.” Despite the political turmoil, many of the cultural advances of the Gondärine kingdom persisted, as local nobles took it upon themselves to establish churches and commission manuscripts for them as acts of both religiosity and patronage. The Era of Princes ended with the reign of Tewodros II, a modernizer who set out to create strong institutions, including a significant library at his imperial church, on the *amba* of Mäqdälä. When his policies crossed the British, leading to a punitive British Indian force under Lt. Gen. Sir Robert Napier being sent to Ethiopia, the works that he collected fell into British hands, and became one of the most significant (and controversial) collections of Ethiopian manuscripts outside Ethiopia, the so-called “Mäqdälä Treasures.”

Alongside manuscripts, liturgical items, and other resources, imperial gifts of land and manuscripts were collected for the church of Medhane Alem which had been built there. The looted treasures were pooled together and auctioned off, mostly to the officers and to Richard Holmes, a representative of the British Museum who had accompanied the expedition. The 350 manuscripts which form the largest portion of the British Library's Ethiopic holdings are volumes from this sack, which is described in Wright's *Catalogue* thus:

When the expedition against King Theodore was organized by the English Government in 1867, it was determined to send an archaeologist to accompany it, and Mr. R. R. Holmes (then an assistant in the Department of Manuscripts, now librarian at Windsor Castle) was selected by the Trustees for this purpose. It was hoped that Mr. Holmes would be able to visit sites of importance, to collect antiquities, and to procure valuable manuscripts. The state of the country, the hurried character of the expedition, and the route chosen for the army, prevented the first part of this program from being carried out. Of manuscripts Mr. Holmes was able to procure only a very few on the way up the country (Orient. 451, 452, 453); but their scarcity was easily accounted for when the fortress of Magdala (Maḳdalā) fell into our hands. King Theodore intended, it appears, to build there a church, in honour of the Saviour of the World (Madḥānē ʿĀlam). Now a church requires a collection of service-books; and, as oriental churches and mosques are places for study as well as worship, libraries are usually formed in connection with them. King Theodore for years previous to 1868 had been actively engaged in collecting manuscripts from other churches for the active endowment of the church he proposed to build; and the result was a library of about a thousand volumes, which fell into the hands of our victorious troops... the number of manuscripts brought to this country in 1868... cannot, at the lowest computation, have been less than five hundred.

W. Wright, *Catalogue of the Ethiopic Manuscripts in the British Museum Acquired since the Year 1847* (London: British Museum, 1877), iii–iv. A longer account may be found in Clements Robert Markham, *A History of the Abyssinian Expedition* (Macmillan, 1869). The Mäqdälä expedition is a
were long an important source of continuing revenues for the church. The Ethiopian church was still, in the reign of Ḫaylä Śəllase, a major landowner,\textsuperscript{128} using its lands to support its clergy and monks both by direct grants to clergy and in the form of rents owed to the church on land it let to tenants. The Emperor engaged in the traditional foundation of churches, building the new cathedral at Axum and commissioning donations of furnishings and manuscripts, maintaining an Imperial Scriptorium for the production of manuscript material, to which scribes might aspire.\textsuperscript{129} He also rewarded scribes of superior ability, for their work: at least two scribes I met had been awarded capes as a token of recognition from the emperor for their manuscript work, Lisana Werq (Mäq̲älä, not formally interviewed) and Marigeta Asnak (Gälawdiwos) (section 2.6).

In 1974 a military junta known as the Därg seized power, eliminating the imperial state and executing Ḫaylä Śəllase. They instituted a series of Soviet-inspired reorganizations of the country and society, disrupting many traditional areas of Ethiopian life and culture. The land reforms of the Därg eliminated all private land, reserving all lands for the state, dispossessing the church and cutting off the revenue streams of its foundations and hierarchies. With the passing of the Empire, traditional patronage by the emperor ceased. After the fall of the Därg, the new government maintained the foundational event in the awareness of the Ethiopian manuscript tradition, not just for the treasures it brought to European collections (which after all were hardly the first to come to Europe, as early collectors such as d'Abbadie had already returned with significant numbers of books) but also for the role it plays in the popular attention to the subject of manuscripts and church treasures in Ethiopia. The Mäqdālā treasures have been a point of much contention, with demands from cultural organizations and others for their return, but they have also been an important resource for the study of Ethiopian art and history by Western academics. The leading voice for return is AFROMET: the Association for the Return of Ethiopian Maqdala Treasures. http://www.afromet.info/

\textsuperscript{128} On the percentage of land owned by the church, Pankhurst, referring to the early nineteenth century, has said: “Statements that the Church owned one-third of the land were much exaggerated, but there can be no gainsaying the observation of Heuglin, a much more careful observer, that it possessed ‘a very large part of the land.” Pankhurst, \textit{A Social History of Ethiopia}, 182.

Figure 2.12: *Marigeta* Asnak wearing the cape he received from Emperor Ḫaylā Śəllase.

*Dārg’s* policy towards national ownership of land, enshrining it in the constitution.\(^{130}\)

\(^{130}\) “The right to ownership of rural and urban land, as well as of all natural resources, is exclusively vested in the State and in the peoples of Ethiopia. Land is a common property of the Nations, Nationalities and Peoples of Ethiopia and shall not be subject to sale or to other means of exchange.” *Constitution of the Federal Democratic Republic of Ethiopia, Proclamation No. 1/1995*, 1995, Article 40, section 3.
2.7 Education

Land-use was not the only area of Ethiopian society to see a shake-up in the latter half of the twentieth century: education was radically transformed. Traditional Ethiopian church education has a vested interest in the production of traditional scribes that modern Western schools do not. Many scribes, like Mulugeta Araya Gebeyehu (Gälawdiwos), learned the craft from their family, and some, like Qes Mogas (Gälawdiwos) and Marigeta Birhane (Mäqällä) were teaching the craft to their children. All of the scribes were products of the traditional church education system, and I was told that the time commitment and differing focus of the modern, Western-style school system is a serious impediment to students taking the time to learn an increasingly marginal craft. Western-style schools are a recent development, first established by missionary organizations and by the governments of Menelik II and Ḥaylä Śəllase, and have experienced dramatic growth since the 1960s. Modern systems of education persisted throughout the Dārg period and their growth was accelerated by the post-Dārg government and international partners; now, modern education has expanded throughout the country and the attendance of these schools directly competes with traditional systems of church education.

2.8 Printing

The first books in Ge’ez were printed in the sixteenth century, beginning with the Psalter of 1513, though they were produced for European Biblical/Orientalist scholars, and none are known to have ever made their way to Ethiopia. It was not until the nineteenth century that printed books started circulating widely in Ethiopia, starting with foreign-printed Ethiopic, Amharic, and Tigrinya (among

131. For a description of traditional Ethiopian education, see: Girma Amare, “Aims and Purposes of Church Education in Ethiopia.”

132. For the story of how modern education was introduced to Ethiopia and its early formation, see Pankhurst, “Foundations of Education, Printing, Newspapers, Book Production, Libraries, and Literacy in Ethiopia.”
others) works, largely as a result of the efforts of the British and Foreign Bible Society, which sent thousands of volumes to the country.\textsuperscript{133} The first presses in Ethiopia and the region were a series of missionary presses, active as early as the 1860s, starting with the Imprimerie Catholique.\textsuperscript{134} However, printing was only really established in the country in the first decade of the twentieth century, with the founding of the Imprimerie Éthiopienne (Addis Abäba between 1897 and 1910), the St. Lazar

\textsuperscript{133} “The importance of the literate population was recognized early in the century by the British and Foreign Bible Society which pursued a fairly active policy of scripture printing for Ethiopia. In 1810 the Society printed 220 Psalters in Ethiopic or Ge'ez which were distributed by Henry Salt at Aksum and elsewhere in the Tigré area. After an interval of a couple of decades the Society produced the Four Gospels in a diglot Ethiopic-Amharic edition in 1824, two editions of the New Testament, one in Ethiopic and one in Amharic in 1825, and the Old Testament in Amharic in 1836, and finally the complete Bible in four volumes in 1840. 200 copies of the Four Gospels are known to have been taken to Ethiopia in 1832 by members of the Church Missionary Society. In 1841 the missionary Krapf supplied 1,000 Arabic-Amharic diglot scriptures in response to a request from King Sahle Sellassie of Shoa. The Society’s records, which, however, contain a number of minor discrepancies, suggest that by 1853 the following printings had occurred:

<table>
<thead>
<tr>
<th>In Ethiopic</th>
<th>In Amharic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psalms and New Testaments 2,100</td>
<td>Bibles 1,996</td>
</tr>
<tr>
<td>Testaments 2,020</td>
<td>Testaments 6,010</td>
</tr>
<tr>
<td>Old Testament Portions 2,010</td>
<td></td>
</tr>
<tr>
<td>Total 4,120</td>
<td>Total 10,016</td>
</tr>
</tbody>
</table>

A total of 14,136 volumes would thus appear to have been produced in the first half or so of the nineteenth century. Many of the texts, it may be noted, were written in poor Amharic with an incorrect word order; Mittwoch says Ethiopians therefore spoke derogatorily of ‘mission Amharic.’” Pankhurst, “Foundations of Education, Printing, Newspapers, Book Production, Libraries, and Literacy in Ethiopia,” 246–247.

\textsuperscript{134} “The printing press was first introduced to East Africa in Theodore’s time. In October 1863, Lorenzo Biancheri, a Lazarist father who had been appointed apostolic vicar of Abyssinia, brought to Massawa, then nominally still under Turkish rule, a small printing press and a sort of Amharic type cast from matrices made for Antoine d’Abbadie in France. Father Biancheri called himself ‘printer to His Majesty Emperor Theodore’ and published an Amharic catechism which appeared early in 1864, but he died a few months later in September after which his press was destroyed.” Pankhurst, “Foundations of Education, Printing, Newspapers, Book Production, Libraries, and Literacy in Ethiopia,” 249; the Encyclopaedia Aethiopica states that it was in existence until 1867 and also produced Tigrinya catechetical material. Uhlig and Bausi, Encyclopaedia Aethiopica, s. v. “Printing.”
Printing Press (Harar 1905, Dire Dawa 1908), and the Ethiopian Printing Press (Addis Ababa, established by Menelik II in 1906). Church books began to be printed in this period, and the Ethiopian Orthodox Tewahedo Church established its own press, Tansa’e Ząguba’e, in 1944. The last major liturgical book to be printed, the Sənkəssar, was not produced until the final years of the twentieth century. The need for this text was a large source of orders for scribes, and its availability in printed form cut into the sustainability of their profession.

2.9 Survival and Destruction

The climate of Ethiopia is not kind to manuscript materials: it is damp for much of the year, and subject to extremes in humidity that are unhelpful to the survival of parchment. Parchment does best in conditions of stable humidity, but the highlands are yearly inundated with heavy rains which cause flooding followed by periods of dryness. During the rainy season, torrents are a daily occurrence, and water may leak into poorly protected storage rooms, in addition to devastating swings in humidity. Most Ethiopian manuscripts are working manuscripts, and are used and venerated to the point of disintegration. It is frequently attested that Ethiopian manuscripts are buried, either with their owners or in times of danger or stress, as a method of hiding them. Even those which are afterwards discovered form a large source of orders for scribes, and its availability in printed form cut into the sustainability of their profession.

...
recovered suffer from their time in the earth. One such manuscript, EMML 6837, “was discovered ... by a farmer who was ploughing his field.”

Destruction of churches has been a problem at many times in Ethiopia's history including some of the oldest churches, where we might reasonably expect the oldest manuscripts to have been stored. The church of Maryam Ṣion in Axum (supposed resting place of the Ark of the Covenant) has been destroyed several times, including during the reign of “Queen Gudit,” a favourite touchstone (alongside Mohammed Grañ) for accounting for the


destruction of so much Ethiopian cultural patrimony.\textsuperscript{139}

Churches were supposedly destroyed by Queen Gudit and assuredly were by the army of the Sultanate of Adal under Mohammed Grañ. As part of a longstanding conflict between the Solomonid kingdom and the Muslim Sultanates of Ifat and Adal, a war leader of the latter kingdom, Ahmed, known as Grañ (“the Left-Handed”) led his troops in a successful war against the highland kingdom, with massive looting and destruction: “Thousands of manuscripts were reported destroyed.”\textsuperscript{140}

While some churches managed to escape with some portion of their treasures, as at Däbrä Hayq Ǝstī-

\textsuperscript{139} Legend has it that Aksum’s decline was hastened by “Queen Gudit”:

The \textit{History of the Patriarchs of Alexandria} makes a reference to a Pagan queen of the Bani al-Hamwiyah, who led her people against the Christians in the tenth century. Conti Rossini … indicates that the queen was probably of Damoti (Sidama) origin. Her hostile activities are presented as a revolt and they had a particularly religious undertone. The queen and her pagan followers destroyed churches and killed Christians. The Christian king himself probably lost his life in the conflict, and the queen … seems to have been widely known as the most powerful ruler in the Ethiopian region for a long time …

Taddesse Tamrat, \textit{Church and State in Ethiopia}, 38–39; citing C. Conti Rossini, \textit{Storia d’Etiopia} (Istituto italiano d’arti grafiche, 1928), 286; her name and legacy are invoked when referring to destruction and the loss of cultural legacies at the end of the Aksumite period. As Henze notes:

Accounts of her violent misdeeds are still related among peasants in the north Ethiopian countryside … She is credited by both Ethiopian tradition and scholarly opinion with weakening what remained of the Aksumite state and undermining the Solomonic royal line to the point where a new dynasty took its place and completely abandoned the old capital.

Note that Henze uses the term \textit{Solomonic} based upon the claims of the dynasts who “restored” the line in 1270. There is little evidence that it is actually the same line. Henze, \textit{Layers of Time}, 48; Finneran cautions, however:

Archaeologically speaking, there are problems with the account of Gudit. … there is actually no archaeological evidence at any major site (except for Adulis) for any large-scale episodes of destruction as are recognized almost 500 years later during the campaign of [Mohammed Grañ]…

and suggests that landscape degradation and “attacks by a variety of pastoralist peoples” may be behind the failure of the Aksumite state. Finneran, \textit{The Archaeology of Ethiopia}, 219–221.

\textsuperscript{140} Henze, \textit{Layers of Time}, 79.
fanos, where all the gold items were offered up in exchange for the sparing of (some) manuscripts, many others were destroyed outright, as at Däbrä Libanos, where despite an agreement the church was burned, with many of the monks voluntarily joining the conflagration. The emperors of the period were pushed to the margins of their empire, until, during the reign of Gälawdewos, a force of 400 Portuguese armed with firearms managed to help turn the tide of the war against the Muslims. The Ethiopia-Adal War is a landmark in the traditional explanation of the loss of so much ancient church property, as a result of the destruction of churches and the looting of church treasures that took place.

Not all destruction is on such an epic scale: libraries have perished due to accident and neglect: as recently as 1996, the library at the monastery of Däbrä Dammo was destroyed by a fire due to careless monks storing quantities of gasoline in the library. Even where there is no fire or flood, treasure houses (used for storing manuscripts alongside all other church valuables) are neither weather-proofed nor well-insulated buildings. Books often lack shelving and, unless enclosed in a mahdär (section 6.7), lack any kind of insulation from environmental changes. Rodents are a severe problem, and I have seen many manuscripts nibbled by hungry rodents, even to the point of destruction. Manuscripts may be loaned to individual priests or monks who will store them in their homes, with all of the dangers of smoke and flame and damp and children that are attendant. There are many factors which contribute to this very low rate of survival.

Sergew posited about 200,000 surviving Ethiopian manuscripts, a number which Nosnitsin as well as Uhlig and Bausi find reasonable. Bausi entertains, as reliable, estimate figures ranging

141. ከሆቁ ምስፋ, regnal name እኔፋት ከዕፋ: ኡፋስፋ Sägäd b. 1521/2 d. 1559. Solomonid ruler from 1540–1559.

142. Note that I have never been allowed inside one, but it is apparent from looking in that the general state of care and storage is decidedly sub-optimal.

143. No method is given for how he arrives at this number, but it is attached to the amount of work anticipated for the EMML. Sergew Hable Selassie, Bookmaking in Ethiopia, 35.

144. “In the early 1980’s, the number of manuscripts in Ethiopia was estimated at ca. 200,000 ...
from 100,000 to one million.\textsuperscript{145} Precise numbers are not likely to be forthcoming; as Nosnitsin has said: “Due to political turbulence and difficult conditions in the country, attempts at registering manuscripts in different regions undertaken by the Church and State administrations were not done in a consistent way and have not contributed much to our knowledge of the Ethiopian manuscript culture.”\textsuperscript{146}

which appears realistic in light of the large number of Ethiopian parish churches and monasteries: 12,596 and 800 resp.” (in 1970). Nosnitsin, “Ethiopian Manuscripts and Ethiopian Manuscript Studies,” 3; Bausi and Uhlig: “The estimate that there should be 200,000 ... seems realistic if one considers the minimum number of M. necessary for every church for religious and liturgical practice (the number of parishes ranging from at least 13,000 to 32,350), and the occasionally large M. collections still preserved in monastic libraries.” Uhlig and Bausi, \textit{Encyclopaedia Aethiopica}, s. v. “Manuscripts.”

\textsuperscript{145} Bausi, “Die äthiopische Manuskriptkultur / The Ethiopian Manuscript Culture,” 54.

\textsuperscript{146} Nosnitsin, “Ethiopian Manuscripts and Ethiopian Manuscript Studies,” 4; for similar reasons, the number of 15,000 posited by Buringh must be seen as much too low, since it is based only on published catalogues, and the vast majority of works are in monasteries and church libraries in the countryside. His number also only counts works up to and including the nineteenth century, and is not therefore directly comparable. He acknowledges these problems, but it is nevertheless interesting, as the upward revision of the number of Ethiopian manuscripts represents more than a 6% increase in the estimated total number of extant manuscripts (all regions) by his reckoning. Eltjo Buringh, \textit{Medieval Manuscript Production in the Latin West: Explorations with a Global Database}, Global Economic History Series 6 (Leiden: Brill, 2011), 98–102, esp. tab. 3.1 on p. 99.
Chapter 3

Parchmenting

3.1 Parchmenters

Parchmenting is both a distinct craft and an adjunct to the work of the Ethiopian scribe. Though many or most active craftsmen are both parchmenters and scribes, some parchmenters only practice the one craft, whether they sell their work to a variety of customers or fill orders for one particular client. Parchmenters generally work alone, although some are assisted by children, relatives, or students; sometimes, but not always, such assistants are in training to be scribes themselves. Among the interviewed manuscript producers, only two parchmenters did not take on any additional scribal role: Mämhǝr Yohannes (Axum), who works for a variety of clients in the Axum area, and Woleta Şanbet, a nun on Mount Asheton (Lalibāla), who produces parchment and other crafts as a (speculative) sale item for tourists. Others were known of, but unavailable for interview: both Keši Mengistu Eyesus and Marigeta Ḥaylā Šallase (both of Mäq̲älä) acquired their parchment from others, the former from a man in his home village whom he had trained in the production of parchment. As noted above, children and relatives of scribes participate in the making of parchment: so, for example, did Qes Mogas’ son (Andabet) clean the parchment for his father to scribe, and Marigeta Birhane (Mäq̲älä) turned over much of the work of parchmenting to his older son, who was in turn helped by his younger brother. Craftsmen engaged only in parchment production clearly exist, and there
is only more reason to believe that specialized parchmenters were more common in the past. For example, see the following quote from the fifteenth century:

And Gämalayal abused the book of the miracles of Mary, the Queen of Heaven and earth. (Once) when he was walking in the street, he met a certain deacon called Tätämqä Mädhom. The former asked the latter saying to him, “Where are you going?” He replied to him, saying, “I am going to the scribes carrying this parchment so that they may copy on it the miracles of Our Lady Mary.”

Of interest here, Gämalayal’s conveyance of blank parchment indicates that the scribes who are to write on it are separate from the parchmenters and that the parchment and scribing might have been commissioned separately: he has neither commissioned the work from the scribes, who then ordered the parchment, nor were the scribes expected to produce their own parchment. The passage is strongly suggestive of a more specialized role for parchmenters in the past, supported by the larger demand for books. Though the passage does not clearly establish that parchment was produced by full-time parchmenters or even scribed by full-time scribes, in the context of the greater historical need for manuscripts, it suggests that there was enough work to keep specialist scribes busy with scribing and specialist parchmenters employed with parchmenting.

Specialist parchmenters need not imply that all parchment was produced by such; just as modern practice tends towards one craftsman telling most or all of the roles in the production process, so is it likely that many historical parchmenters were also scribes: parchmenting is a normal part of scribal training and parchmenting tools are commonly owned by scribes and usually only by scribes. Though specialized, the tools are relatively simple, easy to make, and often loaned, as evidenced by


2. The writing of the *Miracles of Mary* is a substantial project, and would keep a scribe busy part-time for several months (see discussion in scribing chapter). Another example of reference to separate parchmenters, “bless the makers of parchment, because they laboured much,” is discussed in Bausi, “Writing, Copying, Translating,” 42–43.
several manuscript producers who had loaned their tools to others at the time of interview. Specialized parchmenters seem to have existed in the past and it is likely the highly depressed demand and the marginal remunerative status of the craft (coupled with new opportunities opened up by modernization of the highlands), which keep the labor largely unseparated.

Though manuscript production itself is a laudable occupation in Ethiopian society, associated with clerics, and suffers none of the negative social stigmatization of other craftsmanly occupations (e.g. ironworkers and potters), nevertheless parchmenting, due to the manual nature, smell and waste, is a lower-status activity than scribing, and does not seem to carry all of the spiritual benefits of that latter task. On the other hand, a parchmenter who is not a scribe avoids suspicion of being a magician, which follows the ability to write in traditional Ethiopia. At least one scribe, Marigeta Shawan Gezaumelku (Lalibela), said that his family had expressed that parchmenting was unbefitting work for someone from a prestigious family like his. Whatever its merit or demerit, it is an activity which is unlikely to bring wealth to its practitioner, given depressed demand and low prices for parchment, coupled with rising prices for hides.\(^3\)

### 3.2 Parchmenting

The basic process of making parchment in an Ethiopian context is simple. It will be covered at more length later, but a précis of the process will prove instructive in clarifying the material in this chapter.\(^4\) Parchment starts as flayed animal skins, which must be cleaned of both flesh and hair and stretched in order to create the final product. To this end, the skin is pierced, small rods are put through the edges, and it is attached to a frame which serves to make the skin taut for cleaning and to put pressure on it to create the necessary tension, resulting in the production of parchment

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3. Hides, in recent decades, are much in demand for a growing leather export industry.

4. A wealth of detail on the process in a modern and ancient context, primarily European and Middle-Eastern, along with a more precise account of the physical changes undergone in the parchment process may be found in Reed, *Ancient Skins, Parchments, and Leathers.*
rather than leather. Skins may be, and are, stretched fresh, but it is common to soak them in water in order to promote removal of the hair, and, in the case of dry skins, to rehydrate them and restore their suppleness. Once stretched on the frame, the flesh is removed with the parchment-knife, a pumice-stone, and, optionally, an abrasive powder, then washed and left to dry. When dry, the hair and epidermis is scraped off with the parchment-adze, and the surface is finished with knife and pumice-stone. Washed again, it is left to dry, and, when dry, cut off the frame, either as a whole sheet or in sheets of a size according to a model.

Sources regarding historical Ethiopian manuscript production are rare, and the literature on modern production is far from vast. John Mellors and Anne Parsons have conducted many interviews with parchmenters as part of their project to study Ethiopian crafts, but these interviews are unpublished, and relatively little of their work has been made available in a formal way. Eric Godet’s article on the preparation of parchment, published in 1982, contains some interesting points of comparison.

5. As covered in Reed, drying the skin at normal temperatures under tension is fundamental to creating parchment, as opposed to leather: “The essence of the parchment process, which subjects [the highly expanded system of dermal fibres from the soaking or liming process] to the simultaneous action of stretching and drying, is to bring about peculiar changes quite different from those applying when making leather. These are: (1) reorganization of the dermal fibre network by stretching and (2) permanently setting this new and highly stretched form of fibre network by drying the pelt fluid to a hard, glue-like consistency. In other words, the pelt fibres are fixed in a stretched condition so that they cannot revert to their original relaxed state. The result is a process that is a taut, highly stressed sheet, relatively inelastic and having a stiff handle.” Reed, Ancient Skins, Parchments, and Leathers, 120.

6. Note that lime or other caustic agents are not used in Ethiopian production, as opposed to European production. Bausi, among others, attributes this to “the dry, healthy climate of the Abyssinian highlands which makes use of chemical treatment unnecessary,” though it is unclear that chemical treatment is ever necessary, and this may be a take-away from this research that informs our study of other traditions. Bausi, “Writing, Copying, Translating,” 41. The lack of a liming stage may be an important distinction in why the process never seems to have been centralized, but is largely carried out on an individual basis by generalist manuscript-producers, not specialist percamenarii. There are doubtless many social factors which similarly contribute to this difference, but it is an interesting point, nonetheless.
comparison which will be addressed in the descriptions of tools and process. Sergew Hable Selassie’s *Bookmaking in Ethiopia* is highly dependent upon Assefa Liban’s 1958 article in the *Ethnological Society Bulletin*, “Preparation of Parchment Manuscripts,” and it is this article (alongside the testimony of my informants) that I am most interested in engaging with in this chapter. His article is as early a scholarly witness to the techniques of parchment production as we have and he specifically tries to address issues of regional variation with his informants. 1958 represents a period of significantly more continuity with past practices: the older parchmenters would have trained when printing was still relatively limited in Ethiopia and have benefitted from the necessity of their work. The long decline of manuscript production as a craft was a consistent theme in interviews with modern practitioners, and, especially due to the drastic interruption in Ethiopian society pre- and post-Dàrg, some privileging of earlier sources must occur, as historical practice, even as recently as the mid-twentieth century, was more robust and more essential to the functioning of church and society than current practice, which has been rendered marginal by paper and print. Given the drastic interruption imposed upon the long continuation of imperial and church institutions, it is telling, in emphasizing the importance of the article, that Assefa interviewed the workers at the old imperial scriptorium, a highly traditional institution and a relic of the medieval order of Ethiopian society.

Though regular in abstract, the tradition is not highly formalized, and the specifics of individual practice vary significantly: the length of time that the skin was left soaking in water, for example, varied from person to person even within the same geographical area, and I could find none of the standardization implied in Assefa’s article, where he claims that the process regionally varied and had been superseded by shorter soak times, in the style he associates with Šəwa. Soaking times varied within a region, with the only constant being longer recommended soaking times for dried skins.

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8. Sergew Hable Selassie, *Bookmaking in Ethiopia*.


all of which were longer than the three days cited by Assefa in his article. None of my informants indicated a preference for long soaking times for fresh skins, as Assefa reports was a method in the past, though one scribe interviewed, Mämhǝr Yohannes, prone to producing low-quality parchments (partly as a consequence of age, largely due to indifference) was aware that longer soaking made the process easier and produced a better result, but nevertheless did not use long soak times nor did he desire to do so. While the changes reported by Assefa may be accurate, nevertheless, without additional sources, they will remain obscure.

### 3.3 Tools

Rather than take a more structural approach, I have confined myself here to a discussion of the use of tools in parchmenting.

#### 3.3.1 The Parchment Knife

The parchment knife, mäqad⁷¹ or ሡትሉ ካራ mêfäfyia kara⁷² is a purpose-made or modified knife with a curved end, which is specialized for separating fatty subcutaneous tissue from the actual skin layer on the flesh side, and sees some use in a variety of other tasks.⁷³ When removing flesh, it is used at an angle of perhaps 30 degrees from the plane of the skin, as illustrated in fig. 3.13d. Assefa

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13. Though it need not have a particularly curved end, as in fig. 3.1c, and may have no straight, as in fig. 3.2a.
Figure 3.1: Three parchment knives, showing shape variations. Mämhǝr Yohannes, Axum.
says that “the ringed tip of the knife serves to clear the flesh along the edges of the skin,”\textsuperscript{14} but in actual practice the curved end of the knife is used not just along the edges (though it does service in finishing areas that are too close to the edge to be dealt with by the parchment adze) but on the whole skin to separate the flesh layer. It is curved in order to remove the point from contact with the skin, which might result in the latter being inadvertently pierced, as the curved end is where the force is concentrated. The knife is pushed with force parallel to its length when it is used to remove tissue from the flesh side, which accounts for extreme curvature in some parchment knives, such as that of Marigeta Halawi (Adigrat) fig. 3.2a. The straight of the blade is used to scrape off the oily secretions\textsuperscript{15} that are forced out of the skin during rubbing with the pumice-stone, and also when the knife is used more conventionally to cut off excess bits of the skin that hang outside the läbäkoč\textsuperscript{16}. An alternative method of holding the knife, depicted in Godet’s article,\textsuperscript{17} is similar to the way the boy in Figure 3.13a holds the knife, using it to open a space in the flesh in order to get the blade under and start the separation of flesh and skin. There, the knife is held in an overhand grip, with the left hand holding the blunt back edge of the knife in such a way that the thumb is towards the handle, and the right hand is only partially on said handle. The right hand directs the blade, while the left changes the angle, creating more of a scraping movement than the pushing grip in Fig. 3.13d. Liqä Kahonat Ajugu switches freely between the two grips, scraping towards himself near the edges and away from himself towards the centre of the skin.

Sergew mentions the use of the lunette knife or lunellum (also known as a “half-moon knife”

\textsuperscript{14} Assefa Liban, “Preparation of Parchment Manuscripts,” 255.


\textsuperscript{16} See below.

\textsuperscript{17} Godet, “La préparation du parchemin en Ethiopie,” fig. 2.
or “head knife,” commonly used by leather-workers) in conjunction with the parchment knife for removing the subcutaneous tissue from the flesh side, but this was not observed among my informants. It appears to have been used for the same purpose as the parchment-knife and is not normal for the Ethiopian context, being used because they are mass-produced for saddling and other leatherworking trades. A similar knife was used by medieval European parchmenters (thus the identification as lunellum) but it seems likely that its Ethiopian use was indistinguishable from the local use of the parchment-knife, though there is always the possibility that it may have been used more analogously with the parchment-adze, for the removal of hair.

3.3.2 The Parchment Adze

The parchment adze, የብራና፡መፋኪያ (described by Assefa as a “hatchet” and by Sergew as an “axe,” but having a cutting surface perpendicular to the handle, rather than in-line with it, so more properly an adze) is a modified version of an adze used for woodworking which is commonly available in markets in rural Ethiopia. The parchment version of the adze generally has a wider blade which is curved away from the cutting surface, the curve of the edges, like that of the tip of the parchment knife, serving to remove the point from contact with the skin, and increasing the amount of blade (see Fig. 3.5). The handle for this adze, as all others available in the market, is made of forking pieces of wood, such that one branch is carved short to sit in the head and the other branch, cut longer, forms the handle (Fig. 3.3). The head of the adze exhibits limited variation, some appearing to be unmodified versions of the basic adze available in the market, while others had an extremely broad, flared blade with edges that curve back upon themselves.

18. Sergew Hable Selassie, Bookmaking in Ethiopia, 10.
20. Ibid.
21. Sergew Hable Selassie, Bookmaking in Ethiopia, 11–12.
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Figure 3.2: Parchment knives.

(a) Marigeta Halawi, Adigrat.

(b) Qes Felege, Bahor Dar.
Figure 3.3: A parchment adze. Liqä Kahənat Ajugu, Gälawdiwos. The revealed portion of the tape measures out 20cm.

Most of the examples observed were somewhere in the middle, having a flared blade with edges that recede, creating curved edges, the sides of which were used as much as the centre (though care had to be taken to avoid puncturing the skin with the points of the edges when they were in use, if they did not curl back out of the way). The adze is used in two hand, with a dragging/scraping movement, described in more detail in section 3.5.1.

3.3.3 The Hand-Stone

The hand-stone or “pumice-stone,”[^22] märamämiya,[^22] märamämiya dǝngay[^23] or märamämiya[^24] and Tigrinya, máramen (Marigeta Birhane, Mäqālā) is used on both sides of the parch-


Figure 3.4: Head of the same parchment adze as Fig. 3.3. *Liqä Kahənat* Ajugu, Gälawiwos. The revealed portion of the tape measures out 14cm.

Figure 3.5: Three parchment adze heads. *Mämhǝr* Yohannes, Axum. The revealed portion of the tape measures 27cm.
Figure 3.6: Vascular basalt hand-stone, Liqä Kahənat Asnak, Gälawdiwos. The revealed portion of the tape measures out 20cm.

ment, as a finishing step to remove connective tissue on the flesh side or epidermis on the hair side that had been missed by the adze or knife, and to smooth the surface and give it an evenness. In Tigray, it is used in conjunction with hoşä, a type of abrasive, on the flesh side, and was likely used so throughout the highlands in the past. Though often identified as a pumice-stone, individual scribes used stones which exhibited no vascular character: Keş Daniel (Mägällä) and Keş Hardera (Adiet) both used a rock of a different consistency. The use of the hand-stone with hoşä had been displaced in Lalibäla by a local innovation in the form of a pierced piece of a flattened metal can which served as a scraper, which was acceptable locally, but would surely not provide the fineness of abrasion of an actual hand-stone. In a well-cleaned sheet of parchment, the skin would be scraped and abraded until all of the epidermis and papillary layer, and some portion of the grain layer was removed, leaving a smooth surface free of connective tissues and most hair follicles. Some scribes did not finish their parchment to this consistency, rubbing only lightly with the hand-stone, and leaving finish scraping (achieved with the pen-knife) until the preparation of the page for writing.

Hand-stones, like the medmes, come from a variety of sources, and were particular to areas, even
if sourced from far away.

3.3.4 Abrasives

The use or disuse of the companion powdered stone as an abrasive during the scrubbing of the flesh side of the skin was the most significant variance in practice among those interviewed. Referred to by my informants as ለን: የብራና čo brana or መንኩወ ያወ ያና (Liqa Birhanat Hadgu, Axum) and also known as የወ ከመ, (Assefa), the companion abrasive was used exclusively by informants in Tigray, though its use outside Tigray is attested by Assefa and Godet, and it was known by at least some practitioners in Amhara, Goğğam, and Wollo; at least two Tigrayan informants, in Adigrat and Axum, chose not to make use of it (said informants produced very low-quality parchments). In Mäqälä and Axum, a form of calcite was being used for this purpose, the crystals ground fine into an abrasive powder that was then used in conjunction with the pumice-stone during the washing and smoothing of the skin. Keši Mengistu Eyesus in Mäqälä used plaster powder in the stead of ground calcite. Mercier cites “marble dust needed for making highly polished, white parchment,” but does not provide a source for his observation. Marble was indeed being used for the this purpose by Mămḥor Yohannes (Axum) and Keši Hadera, the latter the only scribe I was able to interview in the district of Adiet, near Axum. Assefa describes “a fine powdered sand,” and though it is unclear, the description would seem to fit the product of grinding either calcite (Fig. 3.7) or marble.

Assefa describes the use of ከመ as “well known...in the past, especially in Gondär and Säwa,” and gives a couple of lines of verse relating to its use:

What are you going to write, you children of trouble,
Since you have made beautiful the skin of Thomas with hosa?

He describes it being applied with the hand or with a cloth, but when I observed it being used


and asked about it, it was used (only) in conjunction with the hand-stone. The apparent retreat of 
hoṣä use to the North seems to be a modern variation, based on the testimony of Assefa’s informants, 
and not reflective of the time when parchmenting was more vital and such variation would be less 
pronounced.27

27. I previously reported these research findings relating to the use and disuse of hoṣä, among 
other factors, in a paper entitled: “Modernization and Variation in the Production of Ethiopic 
Manuscripts” for the 17th International Conference on Ethiopian Studies, Addis Abāba University, 
2009.
3.4 Skins for Parchmenting

Skins of goats and sheep are generally used for parchmenting in Ethiopia, with goatskin being the preferred medium for books and sheepskin more widely used in the production of scrolls. Goat skins are strong and make a reasonably thick product, with a firm and compact grain layer which
stands up to vigorous processing. The skins of hair sheep in comparison to goatskins, are thinner, more prone to tearing, and easily become translucent with improper preparation. Sheepskin does produce a whiter final product, and it is little wonder that, according to Godet, it is “apprécié pour sa blancheur et sa finesse.”

28. “Compared with sheepskins [goatskins] are far more suitable for leather-making purposes. Like the hair sheep, goats carry fairly stout and strong bristly hairs which enter deeply into the dermal fibre network and often penetrate to half the total depth of the skin. Unlike the sheep, however, the course bristly fibres are straight in form although they still emerge at an oblique angle. ... Compared with sheepskins the course goat hairs are associated with far fewer bulky glandular structures such as fat or sweat glands, whilst generally the fibre network is deeper in extent and more tightly textured, being less infiltrated by fatty tissue. This explains why goatskins are superior to sheepskins in general tightness and toughness. Its grain layer is extremely firm and compact, allowing intensive mechanical action ... The stout dermal fibre network also permits more vigorous processing...” Reed, *Ancient Skins, Parchments, and Leathers*, 43–44; There are two main breeds of goats in the areas studied: the Central Highland breed is dominant in Tigray, Wollo, and Shewa and the Western Highland breed is dominant in Goğgâm, South Gondär, and part of North Gondär. Western Lowland breed goats are dominant in the Western part of North Gondär, and may be traded in Gondär or Tigray. The Abergelle breed is dominant in parts of South Tigray, and may be available in Mäq̲älä, as may the Afar breed, dominant in the Afar region. Central and Western Highland breeds and the Western Lowlands breed are part of the Small East African family of goats. Abergelle and Afar breeds are part of the Rift Valley family. The goats of the three Small East African breeds tend to be larger than those of the two Rift Valley breeds. Solomon Gizaw, *Sheep Breeds of Ethiopia: A Guide for Identification and Utilization*, Technical Bulletin 28 (Ethiopia Sheep and Goat Productivity Improvement Program, 2009), http://www.esgpip.net/PDF/Technical%20bulletin%20No.28.pdf.

29. “Hair sheep” have a coat of course hairs with limited smaller, wooly hairs between them. “Wool sheep” have large amounts of these smaller hairs, which gives them both a wooly coat and a weaker skin, less fit for parchmenting. The predominant breeds of the highlands, of the Short-Fat-Tailed type, including the Sekota/Tigray (Tigray), Farta (Amhara South of the Simiens), Tikur (Wollo, including Lalibāla), and Menz (North Shewa) breeds and the Simien type, represented by the Simien breed (the Simien region, covering much of North and South Gondär) are all wool sheep. The Long-Fat-Tailed type, represented by the Horro and Arsi breeds (Oromia, including Addis Abäba) and the Fat-Rumped type of the Afar breed (Afar region, which possibly has strong trade contacts with Mäq̲älä) are of the hair type. All the informants for this study represented areas where wool-type sheep predominated. Solomon Gizaw, *Sheep Breeds of Ethiopia: A Guide for Identification and Utilization*, Technical Bulletin 28 (Ethiopia Sheep and Goat Productivity Improvement Program, 2009), http://www.esgpip.net/PDF/Technical%20bulletin%20No.28.pdf.

though approved by the church in his case), cited the thinness of sheep parchment as beneficial in the production of scrolls, since a longer scroll may be rolled into less space. Keši Teklay G/Kristos, among others, stated that sheep skin is used for scrolls because it is thinner. Godet additionally reports that “livres importants ont été écrits sur du parchemin de veau, de vache,” and Assefa says that “the skin of a calf is quite good for parchment, although it is a little bluish and dull.” Among my informants I found little concern with or evidence of the use of the hides of cattle, and, though all were aware of the potential use of cattle hides in parchmenting, the goat was universally preferred for bookmaking. Specifically, church books were to be made out of goatskin parchment. Various other species are attested as having been used in the past, namely the horse (see below) and the gazelle, the latter “as good as the skin of a goat” according to Assefa. Jacques Mercier has reported the use of skins of panthers, and other skins have no doubt been used on an as-available basis, but, as a rule, only däbtäras producing magical scrolls and amulets are said to be interested in using non-standard types of skin.

Most notable among other types of skins used is that of the horse. I was shown certain large


33. Keši Teklay G/Kristos, others.


36. I saw, in the tourist shop of Ato Hailemariam Zerue, in Axum, a cured snakeskin which was intended to be turned into a magical scroll, but I was assured by the owner that this was exceptional and an innovation of his own; in any case, he was having trouble getting writing to adhere to the prepared skin. Interview with Hailemariam Zerue, Axum, 2009.

37. Horses are less common in Ethiopia than donkeys and mules. Though neither animal is mentioned, it seems reasonable to assume that the smaller equines are equally suitable to the processes below.
books at the Maryam Ṣion Church which are reputed to have been produced on parchment made from horse hides, a practice which does not seem to have survived to the present day, though some scribes were aware of it. Keši Teklay G/Kristos (Axum), for example, was aware that horses had been used in the past for making parchment, and said that making parchment out of horse skin took a long time, since it (the skin) is so thick. Given the lack of contemporary sources with first-hand experience, I will quote Assefa here at length concerning horse-parchment:

In the old days, horse skin was used for writing such large books as Gyorgis Wäldä Amid (a universal history named after its author) and Hawi (an ecclesiastic encyclopaedia.)

According to my informants from Säwa, the use of horse skin was common in the 18th and 19th centuries. Although they have seen and read books in monasteries which were written on horse skin, they have not see[n] it used in the last 50 years. On the other hand, Mārīgeta Gābrä Maryam of Amara Saynt said that he saw horse skin used when he was young. According to his information, the skin of a fat and strong horse does not produce good parchment as it is too fatty. Thus, parchment from horse skin is prepared only in January, February and March during the driest season when many horses become weak and die of hunger.

The skin of a horse was sought for three reasons. Firstly, its size. One horse skin could produce a tǝraz (quire) of sixteen pages of the largest size book. Secondly, its quality, which was very white and thick. The third reason was economic or financial. In those days selling of skins was not so common; hence, a person would buy a sheep or goat and eat the flesh if he wanted to use the skin. Since a poor scribe could not afford this

38. ይጊዮርጊስ፡ ለልደ፡ ዐሚድ
39. ክሑዊ
40. ከም, ሉዋ, also transliterated as Shewa, Säwa, or Shoa, is one of the old provinces of Ethiopia, centred around Addis Abäba. It contained that city plus parts of modern Oromiya and Amhara regions. He only explicitly identifies one informant, ከም ከርዳያ፡ ይግራይ Ato Ar'aya Salasse, “a learned scholar from Säwa” as being from ሉዋ, but the majority of his informants are in Addis Abäba which is historically part of ሉዋ, and they may be included.
41. Small district situated between the Blue Nile and Magdala (Mäkdälä).
42. የራን-
43. This seems problematic, given the great number of skins used in scribing. A copy of the Miracles of Mary might take the skins of fifty-two goats (for more on the number of skins per book,
purchase, he would seek out the weakest horses during the dry season and secure these useless animals from their owners.

Since the flesh of a horse was considered unclean, the scribe would not dare to skin the dead horse during the day under the disapproving eyes of the villagers. While it was alive, he would make a certain magical prayer over the body of the horse to protect it from hyenas. When the horse died, he skinned it before dawn and put the skin into water—a river or large pond. The treatment of the skin was the same as discussed above.

I was curious to know how a book written on horse skin, which is considered unclean, is kept in the church. Marigeta Asfaw said, “The word of God which is written on it will make it holy.”

One of Mellors and Parsons’ informants “had seen a large old manuscript made from horse skin ... and said that it had a rosy colour.” I was able to examine a number of large books in the treasury of the church of Maryam Šion, Axum which were supposedly made using horse parchment; while the time constraints of my access only allowed brief examination, the parchment was well-prepared and clean and there was nothing in terms of whiteness, thickness, or other identifying features which see the chapter on scribing), and a poor scribe could hardly be expected to eat so many goats in the four months to a year that book would take to write, so one must assume that there was significant trade in skins; they are, after all, by-products in the agricultural economy. Several scribes indicated that people used to give skins to the scribes or sell them for very small amounts of money, to allow the production of manuscripts. The Imperial Scriptorium may have been a significant exception to this, as it was apparently supported with live goats, which were eaten by the scribes as their skins were turned into parchment. See Haile Gabriel Dagne, “The Scriptorium at the Imperial Palace and the Manuscripts of Addis Ababa Churches.” That said, there is no reason to think that a poor scribe might not suffer from lack of skins for parchmenting, making the prospect of large amounts of material afforded by horse-hides appealing.

44. Assefa Liban, “Preparation of Parchment Manuscripts,” 258–259; Given that people in highland Ethiopia generally live in villages or hamlets, clustered near each other, I am somewhat skeptical that a scribe could skin horses for parchment entirely unknown to his neighbours, especially if doing so next to a water-source. Granted, the population could have been as small as only ten million people at the turn of the twentieth century, as opposed to 42 million in 1984 and more than 70 million in 2003. David Hamilton Shinn, Thomas P. Ofcansky, and Chris Prouty, Historical Dictionary of Ethiopia (Lanham, MD: Scarecrow, 2004), s. v. “Population.”

45. I suspect from my own investigation and after discussing the issue with Mellors and Parsons that the identification of the colour as “rosy” may have been a translation/word choice error, but it is unclear. Mellors and Parsons, “Manuscript and Book Production in South Gondar in the Twenty-First Century,” 186–187.
obviously distinguished the parchment as horse-derived. A manuscript in the Juel-Jensen collection of the Bodleian Library is identified (by Juel-Jensen) as being made of horse parchment, as was a copy of the Haymanotä Äbäw that I examined at Čeläqwoq Sälasse (fig. 3.9). My examination could find no particular distinguishing features except that all of the manuscripts were large and had a distinctly yellowish tone to the leaves. Microscopy⁴⁶ or other identification methods⁴⁷ may prove useful in distinguishing horse-derived from goat-derived parchment, indicating periods or localities which were more prone to the production of parchment from horse hides; specifically interesting is the question of whether such books are exclusively horse-hide parchment or composed of parchments from varying sources. Given the limited resources of rural scribes and the catch-as-catch-can nature of the process described by Assefa’s informant, above, it seems likely that any work on horse-derived parchment would be mixed with goat-derived parchment, but the conditions under which a glut of horses would die suggests that enough parchment could conceivably be made of them to complete entire books without recourse to filler parchment, and the issue merits further investigation.

Sergew lists four criteria which can be used to determine quality of a skin:⁴⁸

a. The animal whose skin is going to be manufactured as vellum should never be fattened. The more meagre is the animal, the better the vellum.

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⁴⁸ Sergew Hable Selassie, Bookmaking in Ethiopia, 10.
Figure 3.9: Opening page of a copy of the Haymanotä Ābäw from Čelāqwot Salasse. AM 1785.
b. It should not be beaten at least a week or so before it is slaughtered, otherwise it will leave dark-colored markings in the final parchment.

c. During the process of flaying the skin, one should be very careful not to cut the skin with the knife.

d. After flaying the skin, the best way is to fold it flesh side together, until it is immersed in water.

There was general agreement on these issues, but others were not so uniform: specifically, preferences for colours and ages of animals for skins were varied, and in some cases contradictory. Reed says that “if whiteness is needed in the final product, only the skins of animals with white hair should be chosen; animals with black, brown, or variegated hair colour tend to produce darker parchments with uneven shades.” Mellors and Parsons reported similarly that: “Goats of a uniform hair colour are preferred as there are no pigmented areas on parchment; a white goat is especially valuable.”

Several informants agreed, including Marigeta Shawan Gezaumelku (Adigrat), who said that skins of white goats are easier to clean and Liqä Kahonat Asnak (Gälawdiwos), who asserted that they make whiter parchment. Keši Mengistu Eyesus (Mäq̲älä) partially agreed, preferring skins of light-coloured goats in general as easier to clean. In contrast, Marigeta Birhane (Mäq̲älä) preferred black goats because they “make a whiter skin/parchment.” Marigeta Haile Selassie (Mäq̲älä) said that the skins of black and white goats are easier to clean, but that the skin of a red goat is harder to clean (spotting/mottling, however, raised no additional problems). In contrast with these examples, many parchmenters expressed no concern over hair colour for church books, agreeing with Qes Fente (Gälawdiwos) that the colour of skins is only a concern of the däbtära, who might select various colours of skin for magical purposes; they agreed that dark, light, or mottled goats did not


51. Interview with Marigeta Birhane (Mäq̲älä), 2009.

52. Interview with Marigeta Ḥaylā Šellase (Mäq̲älä), 2009.
produce any differently colored parchment when properly cleaned. Indeed, since the colour does not fully penetrate the grain layer of the skin, it is not clear that there is any actual difference in the colour of the finished product (assuming it is wholly scraped) based on the colour of the hair, supporting the assertion that it does not matter. One speculates that the difference between cleaning a black and a light-coloured goatskin would be residual hair or epidermis, but a properly prepared parchment is sufficiently bare of the outer skin layers that this problem would seem to be rendered moot. Parchments with a less-thoroughly removed grain layer may prove easier to write on, which might suggest that white skins, being thought easier to clean, may in fact be cleaned less-thoroughly, producing a higher-quality product with less work.

Qes Getenet Anelay said that the health of the goat was the most important consideration in the quality of the parchment; a young and healthy goat is best. Though most informants agreed, preferring younger animals for parchment-making, due to the better quality of the skin, Liqä Bǝrhanat Hadgu (Axum) sought out larger goats, and Keši Mengistu Eyesus (Mäqälä) preferred fatter goats, as making larger skins, contrary to the criteria of Sergew (above) or others, who marked fat goats as producing parchment marred by residual fatty deposits. Marigeta Qäläm Werq (Baḥǝr Dar) explained that these fatty deposits are undesirable because the parchment will not take (water-based) ink. Qes Yohannes (Andabet) preferred the skin of goats who had previously been pregnant, thus providing larger skins; Mellors and Parsons report that “young male goats or young female goats who have had only one litter are said to have good quality skins, while old females provide large skins but the quality is inferior.” One informant sought out especially large “supergoats” for skins, as they

53. For a fuller discussion of the various layers of skins used in leather-working, and their characteristics, see Reed, *Ancient Skins, Parchments, and Leathers*, chap. 2 and 5.

54. Interview with Marigeta Qälăm Werq (Baḥǝr Dar), 2009.


56. Whether these are of a specific breed or simply abnormally large goats was and remains unclear.
made a larger amount of parchment for similar effort. Marigeta Ḥaylā Šallase (Mäqäšāl) identified animals from hot, lowland areas as producing better skins than those from the highlands. The better diet of lowland goats produced thicker skins, as opposed to thinner highland goats raised in drier areas. Animals which were skinned after death, rather than as part of the slaughtering process are of a poor quality, and are to be avoided.

Prices for skins varied by region and season and it is particularly difficult to accurately establish the price of skins historically.

3.5 The Process

Abba Ėṣṭifanos is recorded as describing the parchmenting process thusly:

Furthermore, the saint made a parable for them from (the preparation of) goatskins needed for bookmaking (saying), “You bought the goatskin from the markets; it having been brought, did you soak (it) in water? It having been soaked was it beaten up with a stick? After it was beaten up, was it hanged? Was it flattened (with pumice stone) and scrubbed? Having been scrubbed, was it washed and made clean?”

The beating of the skin is somewhat obscure as a part of the process: it is presumably a means of dehairing, and has ancient precedents in that capacity, but none of my informants employed this process; it survives as a step in leather-making, where it serves to promote suppleness.

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57. Mellors and Parsons made a similar observation: “Goats grazing at a low altitude of about 1,800 metres have access to better food supplies than those at higher elevations and therefore also produce better skins.” Mellors and Parsons, “Manuscript and Book Production in South Gondar in the Twenty-First Century,” 187.

58. Ṣāḥibī wašfī ca. 1397/8-1444, the leader of the Stephanite movement, and himself apparently a copyist of manuscripts. Uhlig and Bausi, Encyclopaedia Aethiopica s. v. “Ĕṣṭifanos.”

59. HMML 17, fol. 64v. Text and translation after Getatchew Haile, The Epistle of Humanity of Emperor Zär’a Ya’eqob.

60. Reed, Ancient Skins, Parchments, and Leathers, 95.
Mämhǝr Yohannes (Axum) working on a skin which had undergone a particularly long soak; the hair
was so loosened by the great time in the water that it could be removed by scraping with the hand,
and fell off easily with minimal pressure from a knife.\textsuperscript{61} It could be that beating served to remove
loosened hair before stretching on the frame, but it was not indicated as part of the process followed
by the scribes interviewed. Much of the rest of the process is the same as in the fifteenth century,
and will be further described, step-by-step, below.

Parchmenting generally occurs during the dry season just after Easter. Before then, Ethiopian
Christians fast (no meat or animal products) for 56 days, and there are few or no animals slaughtered
for meat.\textsuperscript{62} Some parchmenters, such as Marigeta Eshete Afewerk (Lalibǝla), will not touch meat at
all during the fasting season, precluding any work with skins, whereas others will handle skins, but
have additional church duties which keep them busy.

3.5.1 Soaking

A skin may be immediately put on a frame and cleaned if it is fresh (Goedd’s informants did this, and
Assefa associates cleaning fresh skins with Šǝwa,\textsuperscript{63} whereas he associates soaking with the North), but it was normal practice among my informants, as in the fifteenth-century quotation from Abba
Ǝstifanos, above, to soak skins for a number of days before beginning the process of putting them
on the frame. A wetter skin swells up more and will stretch more; since the fundamental process in
making parchment is drying a skin under tension, this will likely produce a better finished product.

\textsuperscript{61} Interestingly, parchmenters working in the European tradition use a dehairing liquor (usu-
ally lime-based), and remove the hair before the scraping step, by dragging a large, blunt knife along
the hair side of the skin. Long immersion in plain water under normal or warm conditions would
tend to promote bacterial growth and result in a weakened structure, however, and it may be unde-
sirable to use long soaks in warm conditions.

\textsuperscript{62} Alternatively, Sergew says the dry season is preferred because “the sun shines all day.” Sergew
Hable Selassie, Bookmaking in Ethiopia, 11.

\textsuperscript{63} Though I tried, I was only able to get one Šǝwan scribe to show up for an interview, but he
was not producing parchment at the time.
Skins are soaked in clean water, which is changed occasionally, for a number of days which varies by the scribe. Sergew mentions the potential use of salt during cold weather to speed the loosening of the hair. This was not indicated by any of my informants. Both Sergew and Assefa mention the potential to soak skins in rivers or other bodies of water, but Sergew suggests that this may result in holes from being nibbled by fish, and indicates that it is safer, though smellier, to soak skins in clay or wooden bowls, which may be kept in a protected area near the parchmenter’s house. I observed traditional bowls and clay pots of the kind used for brewing beer and hauling water being used for this part of the process, alongside modern plastic buckets, cheaply imported from China. Sergew indicates that three days is enough for a fresh skin, but that more than a week is needed for a dry skin. Water is changed periodically during the soaking process (unless, of course, the soak was performed in a river or lake). The actual soak times employed by informants, as well as the periods between changes of water, varied: for example, Marigeta Birhane (Mäqälä–depicted in many of the photos accompanying this chapter) soaks fresh skins for three days and dry skins for five days, with a change of water after three days.

With the aid of a small piece of wood to cut against, the parchmenter cuts small holes at regular intervals along the edge of the skin (see fig. 3.11a), for the insertion of thin sticks, called, according to Assefa, “läbäkoč in Šawa and gäräbe in Gondär,” and činbar wäyom läbäq by Mellors and Parsons. They are used to provide an interface between the skin and the frame, itself called mäwat ǝr (Assefa), ቡመወጠርያ mäwät’ärǝya (Mellors and Parsons). Frames observed in the field were generally made of eucalyptus, the most commonly available wood in much of Ethiopia, though Mellors and

64. Sergew Hable Selassie, Bookmaking in Ethiopia, 10.


67. Much of Ethiopia is deforested, and native woods have ben replaced by stands of fast-growing eucalyptus, which provides straight poles suitable for building and a variety of other tasks. Slower-growing native species cannot out-compete the eucalyptus in the areas that are planted with
Figure 3.10: Goat skins. Mäqälä. (a) Skins for sale on the street corner. (b) The skin chosen by Marigeta Birhane for demonstration of the parchmenting process. (c) The skin straight from soaking, ready to be prepared for the frame.
Parsons cite the use of juniper for the same purpose. Mellors and Parsons cite the use of reeds in place of sticks, and both Marigeta Birhane (Mägälä) and Woleta Ṣänbet (Lalibäla) used thin pieces of rebar for the same purpose. As has been previously remarked by Mellors and Parsons, this style of stretching, with sticks forming the interface between skin and frame, might be unique to Ethiopia.

The tail and ears, if present on the skin, may be cut off at this stage or once the skin has been stretched on the frame. The nape or nucha should be removed if it is going to be outside the läbäkoč, but some craftsmen worked the sticks in such a manner that it was part of the workable area, and thus not removed.

Once the rods are attached to the skin, the frame is set upon risers and rope is attached at one end to the frame and wound around both frame and rods; the rope is selectively tightened to ensure an even tension, as uneven tension can pull the skin too thin (resulting in translucent areas) or create ripples and folds in the parchment. The tension will be increased throughout the process, with care being taken to maintain the evenness, for the reason stated.

Once the skin is stretched on the frame, the curved parchment-knife is used to remove the layer of fat and connective tissue, neatly separating it from the skin with a modicum of force. The fatty tissue is easily distinguished from the skin, and comes off of the latter with no special care being needed in the application of the force, though the craftsman must be careful not to score the parchment, as that would result in holes later in the process. The rope is adjusted so that it is again tense, and it, and most easily obtainable straight wood is, as a consequence, eucalyptus.


69. The use of small sticks to secure the edges of parchment is attested in European practice, but the sticks serve only to make some place to hold the rope, as opposed to the läbäkoč, which go the entire length of each side of the parchment, and pass in and out of the skin. Alexis Hagadorn, trans., “‘Parchment Maker,’” in The Encyclopedia of Diderot & d’Alembert Collaborative Translation Project, Originally published as “Parcheminier,” Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers, vol. 8 (plates) (Paris, 1771). (Ann Arbor: Michigan Publishing, University of Michigan Library), fig. 15, accessed March 15, 2015, http://hdl.handle.net/2027/spo.did2222.0001.582.
Figure 3.11: Cutting holes along the edge of the skin with a knife and piece of wood. Māqālā.
(a) Inserting a thin rod (here, of rebar) through the holes.

(b) Attaching the rods to the frame.

(c) Wrapping rope around rod and frame.

(d) Adjusting tension before tying off.

Figure 3.12: Attaching the skin to the frame. Mäqälä.
the cleaning of the skin continues. Once the fatty layer has been removed, water is poured over it as a rinse, and the čo brana is used, in conjunction with the pumice-stone and water, to clean the remainder of the fatty tissue from the skin, a process requiring enough pressure to slightly bend the stretched skin. Once it is clean and white, which can easily be distinguished by the eye, the frame is leaned against a vertical surface and the rope is once again tightened. At this point, those bits of skin which are outside the rods may be cut from the edges, a bit of touch-up scraping may be done, and the rope is once again tightened.

After some period, varying by local conditions, of drying, but perhaps two days in dry conditions, and not less than one⁷⁰, the skin is entirely dry and ready to be scraped by the parchment-adze. The adze must be sharp, but not extremely sharp (as such would promote cutting the surface). A file is used for sharpening, and to keep the edge straight, a nail or needle is run along it for the purposes of honing. With the parchment-frame leaning against a vertical surface, the adze is held so that the blade is almost perpendicular to the surface of the skin, and pulled parallel to the surface while applying a moderate pressure against the skin. Initial work tends to be vertical downstrokes, but when approaching edges, the adze is turned towards the edge and pulled from the centre to the edge. The first removal of the hair produces a greyish surface, and more scraping is necessary to more fully remove the hair and coloured portions of the grain layer. According to Godet, this can only be accomplished when the skin is very dry, and a parchmenter will leave a skin for additional drying if it is not totally dry upon the first removal of the hair with the adze.⁷¹ To remove those loose scrapings which build up on the surface, the parchmenter will regularly strike the skin with the hand (banging the taut surface like a drum), dislodging the shavings and hair.⁷² Whether the work is finished may be judged by texture: the surface should be white and smooth, free of hanging bits of epidermis, as indicated in Fig. 3.17; additionally, by moving the frame to face the light, one might look through it,

⁷⁰ Marigeta Birhane, Mäqälä.


⁷² Apparently, the shavings may be used as mattress-stuffing. ibid.
(a) Scraping meat and fat off the flesh side.

(b) The use of the parchment knife. Note the placement of the second hand.

(c) The angle of the parchment knife.

(d) Loosening fat and flesh.
using the translucency of the skin to gauge which areas are thicker and require more cleaning.

When he is satisfied with how much has been removed, the frame is returned to the ground, the parchment-knife is used to remove hair too near to the edges for the adze, and the skin is thoroughly scrubbed with the pumice-stone and water; čo brana is not used on the hair side, as it is on the flesh side. Sergew indicates the use of soap during this step of the process, and “in the old days with āndod” and Mellors and Parsons report occasional use of soap, but it seems to be the case that most modern parchmenters use only clean water (Assefa does not indicate whether his informants are using any form of soap during the washing steps). Soap would have a positive effect in removing fats and oils from the finished product, and one would expect that there would be less yellowing due to oxidation of fats in a parchment cleaned by soap. Liqä Kahənat Ajugu does not use soap, and says

73. Sergew identifies āndod as Phytolacca dodecandra. Sergew Hable Selassie, Bookmaking in Ethiopia, 11.

74. Mellors and Parsons, Ethiopian Bookmaking, 9.
that he feels that the final product does not accept ink as well when it is used.\textsuperscript{75}

Assefa attests to the use of hoṣä as a finishing step in the past:

In order to remove the last dirt and make the parchment perfectly white, a wet handful of hoṣa was put on a wet skin lying on the ground. Then the skin was rubbed either with the hand or with a piece of cloth and washed with water. This process was repeated on both sides of the skin. By this process a very fine, white, and smooth parchment could be obtained.\textsuperscript{76}

This is the only source attesting to the use of abrasives on the hair side, as other sources cite it only in the context of its use on the flesh side, and I only observed its use earlier in the process, as described above.

At this point in the process, with the skin under tension and lacking the additional structure provided by the recently removed epidermis, any holes which have been made during the butchering or parchmenting will express themselves, and may be repaired. Though holes are sometimes left unsewn, and such beholed parchment is even used in the preparation of manuscripts, they should be sewn shut while the parchment is wet and pliable, and before further tension expands small holes to large ones. A variety of different materials [slides under preparation] have been used to sew holes shut: traditionally, gut, sinew, or thread made by rolling thin strips of parchment have been used, but any material suitable for sewing can be, and is used; in contemporary practice, a waxed thread of the type used in leather repair is popular, and I have even observed the use of thin pieces of plastic burlap bags in this capacity.\textsuperscript{77} After sewing, the parchment is subject to a final rinse, the tension is increased, and it is set out in the sun to dry (fig. 3.21).

Sergew says of the preferred location:

After the flesh side has been properly cleaned, the stretching frame is put up high, supported against a wall or fence and exposed to the sun to dry. According to the Ethiopi-

\textsuperscript{75} This was mentioned in the context of another Gälawdiwos scribe, who was observing our interview, mentioning that he, in fact, used soap. On a later visit, when I made a video record of Liqä Kahanat Ajugu producing parchment, he was using soap during the process.

\textsuperscript{76} Assefa Liban, “Preparation of Parchment Manuscripts,” 257.

\textsuperscript{77} The use of plastic burlap was by Mämhǝr Yohannes, Axum.
(a) Removing hair with the parchment adze.

(b) The angle of the parchment adze.

Figure 3.15: The use of the parchment adze. Māqālā.
Figure 3.16: Horizontal use up to the edges for finishing. Māqālā.

Figure 3.17: Indicating the correct finished texture for the surface. Māqālā.
(a) Use of the pumice-stone.

(b) Water is regularly added to the process.

Figure 3.18: Scouring the hair side with the pumice-stone and cleaning it with water. Māqālā.
ans it is believed that the sun has a beneficial effect on the brightness of the vellum. For this reason they prefer vellum to be made during the dry season, when the sun shines all day. Whenever circumstances force them to manufacture vellum during the rainy season, when the sun rarely shines, they try to create artificial brightness by putting white cloth around the stretched frame.\textsuperscript{78}

I did not observe the use of white cloth by any of my informants. \textit{Liqä Kahənat} Ajugu said that he preferred to leave the skin in the sun for only long enough to be mostly free of water, and would then move it to the shade to finish drying. This shade-drying creates a better product, as slower drying (within reason) allows the tension to better even out. Though I observed parchment left to dry during the rainy season, it might be of lower quality, since incompletely dry parchment will not fully keep its form, and the residual damp may promote cockling and warping, among other problems. The parchmenter will check the ropes, to maintain or increase the tension on the sheet, making sure that it is taut, but not so tightly drawn that it develops thin spots, and not unevenly, which would produce ripples or folds in the final product.

\subsection*{3.5.2 Cutting and Preparing}

When dry, the parchment is ready to be cut out of the frame: those who are preparing material for their own scribing generally use a model sheet to lay out the size of sheets directly onto the parchment in the frame, ruling or scoring the target dimensions of their bifolia using an awl or knife, piercing the corners of the traced sheet with the same, and cutting along the lines with either a knife or a pair of scissors. Parchment that is being prepared for others or for later use is generally not ruled or scored, and is cut out of the frame as close to the edge as possible (fig. 3.22), to provide the most useable material.

\textsuperscript{78} Sergew Hable Selassie, \textit{Bookmaking in Ethiopia}, 11.
Figure 3.19: A hole from the preparation process. Māqālā.
(a) Sewing a hole shut.

(b) The thread is pulled through the hole before being reinserted to the other side.

(c) Finishing the sewing.

Figure 3.20: Repair of holes. Māqālā.
Figure 3.21: Drying in the sun. Māqālā.
Figure 3.22: Cutting the dry parchment out of the frame. Mäqälä.
Figure 3.23: The skin before and after cleaning. Note that the blood stain in the centre of the hide from the slaughtering is maintained on the final product. Memhir Yohannes, Axum.
Chapter 4

Scribing

The practice of writing makes the scribe, but before the page is written upon, it must be cut, prepared, ruled, and organized into quires. Ink must be mixed and pens cut. These skills are those of the scribe qua scribe, and I will approach them here in this chapter, as the proper skills of the scribe performing his occupation, not as the allied but separate endeavours of parchmenting, binding, or painting, all of which may be found in their respective chapters. This chapter starts with a prepared sheet of parchment, the end of the parchmenting process discussed elsewhere, and ends with a collated but unbound stack of quires (or other format, as appropriate) which is then ready for the binding process, to be discussed next.

4.1 Before Writing

Parchment, as discussed in the preceding chapter, may be produced by a specialist parchmenter or by the scribe and his students. When produced by the scribe or his assistants, it may be cut directly into pages, if there is need, or cut out and stored for later, if he is producing excess.1 If produced by another, or for later use, it is cut out of the skin as close to the edge as possible, and may be delivered

or sold just as it was when removed from the parchment-frame. Finished parchment which is not intended for immediate use is rolled with a piece of muslin, to protect it, and multiple pieces stored together may be wrapped in another piece of cloth. Tournerie reports that: “Great care is taken with good parchment; it is always kept wrapped in shash, fine handwoven cotton muslin, to prevent dust or dirt getting to it.”\(^2\) I saw it stored like this in the house of Marigeta Birhane (Mäqälä). If the skin is insufficiently cleaned and smoothed (as may happen when it has been produced by an indifferent craftsman) such that there are bits of dermis or fat remaining, the scribe may improve the surface by scraping it with the blade of a knife or a rough stone, either before or after cutting.

All of the area of the sheet of parchment is used, without cutting around the spine or other portions. The spine may be observed as a slight discolouration in the pages of many Ethiopian manuscripts, and is used without any particular attention to its location, though practically it is too stiff to go into the gutter;\(^3\) and the arrangement of the cut should place the spine on the part of a sheet that will not have the fold. Many scribes showed a certain indifference to lesser-quality pieces of parchment, and did not discriminate against including discoloured, lightly torn, heavily repaired, or incompletely depilated parchment in their work. Even manuscripts of an otherwise “deluxe” character generally have their share of flaws in the cleaning of parchment, though generally distinguished by “brightness,” a highly desirable parchment attribute in the Ethiopian context. A particularly discoloured or rough piece may be saved for a lesser commission or to be used in the production of endleaves, though there is hardly standardization in this practice, as many works show endleaves of equal or better quality to the body folia, just as many others are of a quality that makes them little suited to any other use than as waste leaves. Since endleaves are added during the binding process, they may not come from the same pool of available parchment as the leaves for the body of the text. Major tears, holes, or repairs may be no barrier to inclusion. One frequently sees repairs and holes of

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all sizes in manuscripts, even those which are clearly intended to be deluxe in their character. See, for example fig. 4.9.

Having determined the size of the sheets needed for the book, a model-sheet is used to locate the corners, which are indicated by a prick from an awl or bodkin (fig. 4.1a). This model is often used for different books, resulting in consistent sizes for a scribe, but it need not be a specialized template; manuscripts or even printed books may be held up to the sheet to serve as models for newly started books. The simplest model for a book, assuming that a scribe wishes to copy it in the same size and with the same inclusions, is the exemplar itself. When a different size is chosen, scribes often exhibit a good intuitive grasp of the ratio of how much of the exemplar's page will fit into a page, which informs estimates of costs and decisions about the size of the page. For example, Liqä Kahonat Ajugu (Gälawdiwos) said that one column of text in a printed version of a book will generally take up a full page in a similarly sized manuscript, given the size and spacing of his writing relative to the print. After as many sheets are laid out as will fit in the skin, a knife or scissors is used to cut between the awl-holes, with the aid of a line scored into the parchment by an awl drawn along a straightedge (in modern times often of metal, but, as attested by Sergew, cane was used in the past). The parchment remainder, depending upon its size, may be cut into half-sheets (singletons) which may then be tipped in to quires, or may be cut into smaller bifolia to be used in making “small books” like the Lǝfǝfǝ Śǝdq. Singleton must be cut larger than half of the bifolium, in order to provide a stub which can go into the fold, allowing the singleton to be incorporated into the sewing. If a scribe makes scrolls, longer narrow pieces may be reserved for scrollmaking (sheep-parchment is often preferred for scrolls, however). Though willing to make use of any excess in this way, scribes will not


5. “The final operation before removing the vellum from the stretching-frame is to put in some marks by pricking with the awl and by using the reed ruler the size suitable for the intended manuscript is marked out.” Sergew Hable Selassie, Bookmaking in Ethiopia, 12.

(a) Marking size with template and awl.

(b) After ruling the outlines of the sheets, the whole piece is cut from the frame.

Figure 4.1: Preparing the parchment to be cut into sheets.
hesitate, when making small books, to cut full sheets of parchment to size, instead of waiting until enough scrap is generated from the production of larger books. In any case, the scribe endeavours to have as little scrap as possible in the cutting of the sheets, and does not cut the sheet with scrap in mind, but the production of as many bifolia (or singletons) of the size of book he is setting out to produce. Scraps too small for use as singletons or scrolls may be cut into very narrow bands and twisted for use as a kind of string for tacketing quires or burnt to produce carbon for the production of ink.

4.1.1 Constructing the Quire

The resulting sheets are stacked, with flesh-side facing flesh-side and hair-side facing hair-side; hair-sides are preferred on the outside of the quire. The number of sheets in a quire varies from three to six (with outliers), based on personal preference and the size of the book, such that larger books tend to have more sheets per quire and smaller books have fewer per quire. Scribes generally have a preference for four or five sheets, and some claim that one or the other is the rule (as it may well be for them). Marigeta Birhane Abadi (Axum) asserted that quires of five were an older style; he himself used quires of four. Uhlig suggests that there are clear but varying trends, such that quires of four dominate from the 14th into the 17th century, whereas quires of five dominate from the middle of the 17th to the second half of the 18th century. The end of the 18th and the first half of the 19th centuries, in his reckoning, are dominated by four, whereas the rest of the 19th and the whole of the 20th are marked by an overwhelming preference for quires of five. These preferences may serve to obscure

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7. Marigeta Qälälm Werq, Bahor Dar.

8. While I cannot put numbers to this preference, it is consistent across time and origin.

9. "Auch die Zahl der bifolia schwankt, wenngleich im Falle dieses Merkmals einschränkend notiert werden muß, daß durch die wenig einfühl same Arbeit europäischer Restauroren für die ersten Perioden nicht immer sichere Angaben möglich sind:
the data more than they illuminate it, as both ways of forming quires are in evidence in interviews and in manuscripts. Mäzämmar Bazăbəh Matku (Andabet) uses four, and says that his instructors “always warn us not to use more than four” but, when asked if other sizes may be used, said: “There is no problem [with other numbers], but that [referring to four sheets in a quire] is how it is done.” Liqä Kahonat Ajugu (Gälawdiwos) prefers four sheets in a quire and insists that there should not be more than six. Historically, quires of four and five clearly predominate: Delamarter analyzed 2,398 quires in 189 Ethiopic manuscripts in North America; excluding protection and end-quires, he found that 48.8% of quires were in five sheets (ten folia), 33% of quires were in four sheets (eight folia), 9.8% were in six sheets (twelve folia), 4.2% were in three sheets (six folia), and the remainder (2.56%) were in quires of one, two, seven, eight, nine, or eleven sheets. The preference for a particular quire structure is just that: a preference. Of the whole books catalogued, only 27% had quires in consistent or nearly consistent numbering: 7% had four-sheet quires, 19% five-sheet quires, and 1% six-sheet quires. Where singletons are used, they are placed anywhere in the quire except in the innermost or outermost position, and another singleton should be inserted on the other side of the fold to make up the number of folia of a normal quire, which is to say, one lacking singletons. In practice, Delamarter’s samples showed a slight predominance of what he refers to as “unbalanced” quires (having one singleton, making for an odd number of folia) over “adjusted balanced” quires (having


two singletons placed on opposite sides of the fold, restoring an even number of folia). Practice seems to dictate the more frequent use of odd quires, even when there is a stated preference for even.

Once assembled, quires are often tacketed together: a hole or holes are made in the gutter near the head and/or foot of the quire and a thread made of a thin strip of parchment is used to tie the quire together (fig. 4.2). Quire tacketing keeps quires from falling apart during writing and tidies storage. Since signatures (where present) only appear on the outer bifolium, it is important to keep the inner bifolia attached to it. Tacketed quires remain so until the sewing is complete, when the tackets are removed.

### 4.1.2 Preparing the Page

The sheets may be laid out and pricked for ruling before or after being folded into quires. The actual pricking is accomplished on a bifolium-by-bifolium basis with either the aid of a model-sheet (likely the same as was used for sheet size) or by folding and pricking with the aid of a thin strip of prick-holes (fig. 4.3) or a small piece of parchment with two holes in it (fig. 4.4).

A model-sheet will act as a template for the whole bifolium, but with the strips, a separate strip

12. 14.3%, or 172 of the 1201 “normal” quires (excluding terminal quires and endleaf quires) in Delamarter’s study used singletons. For each quire size, the number of “unbalanced” and “adjusted balanced” quires was as follows: 1: 1, 0; 2: 3, 3; 3: 7, 4; 4: 28, 33; 5: 34, 33; 6: 11, 7; 7: 7, 0; 8: 0, 1. Delamarter, “Introduction to the Collection and its Codicology,” xxix–xxx; Steve Delamarter and Melaku Terefe, *Ethiopian Scribal Practice 1: Plates for the Catalogue of the Ethiopic Manuscript Imaging Project*, Ethiopic Manuscripts, Texts, and Studies 2 (Eugene, OR: Pickwick Publications, 2009), 139.

13. One assumes that material availability may have something to do with this preference, as it may be that half-sized sheets are being put into quires on an as-available basis, rather than the scribe waiting for a matched singleton to become available. My informants consistently stated that the use of singletons was entirely motivated by the desire not to waste parchment.


Figure 4.2: A tacketed quire. Sample in the author's personal collection.
Figure 4.3: A template for pricking, held against a finished page for demonstration purposes. Andabet. Note the ink-balls in the lower left, as well as the pre-cut quires.
Figure 4.4: Use of the two-holed piece of parchment as a pricking measure. Illustration by Mélanie Brunet.
is used for the horizontal elements (columns and intercolumnar spacing) and vertical elements (line height). The two-holed piece of parchment (demonstrated by Marigeta Birhane (Mäqlälä) and Misganew (Andabet)) is only used for laying out line heights, and is used with two awls or bodkins (see fig. 4.5), one remaining in the just-pricked hole while the other swings around to the location of the next hole, as per the illustration (fig. 4.4); due to the fixed distance between the holes, each prick will be a consistent distance from the last. In some cases, as with Abba Bizwallo and Misganew (Andabet), the scribe eschews a guide, and pricks freeform, trusting in his experience to judge the proper distance between them (in the case of the aforementioned Misganew, this predictably produced uneven and irregular lines).

Though the measurements of margins can and do vary, there are practical considerations that have led to the development of a system of measurement by hand and thumb that is explicitly followed by many scribes, and may be implicit in the work of others for reasons of practicality. The system varies with the size of the book, and is a starting-place for final decisions about size, not a hard-and-fast rule. One scribe who did not formally use such a system, Marigeta Birhanu (Mäqlälä) said that there were no rules for margins, but that they had to be large enough to comfortably handle the book without touching the text block. This basic, practical consideration underlies the systems in use by other scribes: use of the manuscript in the hands directly suggests the systems of anthropic measure that come to be used, as the measurement of the margins is by the very digits that interact with them.

The top margin is called የለስ ይስ “heading”. Though it may vary in size, as a general rule, it should be large enough so that when the book is held from underneath, the fingers of the hand may wrap about and onto the page without touching the text. On a small book, this may be just enough

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16. A helpful introduction to Ethiopian measurement systems can be found in Uhlig and Bausi, *Encyclopaedia Aethiopica*.

17. According to Solomon Woldegabriel.
room for the pad of the finger, and on a larger work, will be as long as the last two segments of the finger (from the tip to the proximal inter-phalangeal joint). The lower margin, called እግለት gleat, will be significantly larger, and may be measured with the thumb: on a large book, it may be measured by the full length of the thumb, whereas a smaller book may be measured by the length of only the last joint of the thumb, if it is small enough that one could hold the book with the pad of the thumb on the page and the fingers underneath the spine. The outside margin እወዳግ, hadag “margin” may be measured with the width of the thumb, the width of two fingers, or made to match the size of the top margin. Intercolumnar space, እምድ amd “column, pillar”, may be measured with the width of the finger (more generously, the thumb) as a guide. The gutter, እስመክ masmak, is measured similarly to the outside margin; as “Coptic stitch” bound books open flat, there is no need for extra space to accommodate incomplete opening.

One formulization that was used by several scribes establishes that the base margin must be as long as the thumb from tip to joint, the side margins as wide as the thumb or two fingers held together, the gutter twice the side marginal distance, and the top margin as deep as the last joint of the finger. Scribes who used fingers for measurement of margins often used them to measure intercolumnar space as well, such that one inter-column would be the width of a finger. Mulugeta Araya Găbăyăhu (Gălawdiwos) followed this system, measuring the lower margin by the full length of the thumb from the crotch to the tip, two finger-widths for the top margin on a medium-sized book, and three for a large book; the outside margin and gutter are measured by the same measurement as the top margin. Misganew measured by his fingers: on a Synaxarium or other large book, the bottom margin was to be the full length of his middle finger, the side margin the full length of the index finger, and the top two finger-widths. Abba Bizwallo (Andabet) had a similar measurement, where the full length of his index finger determined both bottom and outside margin. Line-height varies with the size of the manuscript, its character (and cost); scribes tend to write in one or more fixed sizes, with a large character most generally used in current work. More interlinear space is provided in musical

18. እግለት in Leslau, Concise Amharic Dictionary.
manuscripts, to accommodate notation.

### 4.1.3 Awls

![Awl and bodkin. Andabet.](image)

Pages are ruled in hard point, specifically using an awl (*wäsfe* or *mäkfᶠäča*)\(^\text{19}\), usually with a wooden handle, or the use of a pin called *መስፌ* (*mesfe*)\(^\text{20}\) manufactured for use in women's hairstyles as a bodkin (fig. 4.5). Care must be taken not to rule too hard or with too sharp an implement, as the page might be cut.\(^\text{21}\) Awls have been found in phase-one (seventh-century BCE) and late-Aksumite contexts at Seglamen, although their utility leather working does not constitute specific evidence for

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20. The word means “needle.” Solomon Woldegabriel further specified the name as *ለማስመርያ፡የሚያግዝ፡መስፌ* (*lämasmärya yämiyagǝz*).

21. For an example of a ruling-induced cut which was then repaired, see Delamarter and Melaku Terefe, *Ethiopian Scribes Practice*, pl. 74.
4.2 Layout and Organization

Quire signatures are used in Ethiopia, but not consistently. When they appear, they most commonly are placed in the top left corner of the first verso of the quire, and marked by some decoration, often paired or trebled lines on top, bottom, left, and right (in a manner that recalls the full-stop symbol ⋯) (See fig. 4.6). End-of-quire signatures (fig. 4.6) are uncommon, and are placed in such a way as to face the next quire's signature across the gutter. The first quire, as a rule, is not marked (the beginning of the text sufficiently marks it). Some quires additionally have catch-words, duplicating


23. Note that I have seen an unbound Sənkəssar written by Mäzämmar Bäzabəh Mətku (And-
the last word of one quire at the start of the first column of the following one. Delamarter notes: “the normal practice is to begin the first major work on the first full quire and begin numbering the quires on the second quire and following.” Indeed, the scribe takes up work with a full quire on his knee, and starts writing at the beginning of the page, leaving room only for a haräg at the top of the page if such is planned. The space for the haräg may be lined out (fig. 4.7) or may be left blank. There seems to be little concern with paintings falling in ruled space and the ruling patterns for pages which are to be painted are not changed to accommodate the painting. This is hardly surprising, given that scribes do not concern themselves with elaborate pre-visualization or calculation of how many words will fit on a page; rather, they begin writing at the beginning, and cease writing at the end. Along the way, certain decisions are made to accommodate the text and potential images, but these, for the most part, do not seem to be planned in advance or in a systematic way. While writing, if a scribe comes to a line edge, he writes the next letter of the word on the line below, with no mark to indicate that it is a continuation (this is possible because the ‚ between words is observed even at line ends. Indeed, words straddling lines would be difficult to follow were this not the case.). In some cases (such as the Psalter, where verses are normally written one to a line without returning), special rules for exceeding lines may be needed. Delamarter, who has paid particular attention to this in the context of the Psalter, lays it out as follows:

Scribes then have one of four options to choose from. The first has to do with whether or not to observe the right margin as laid out in the column scoring. If they have just a few too many letters, most scribes will write in the margin. … The second and third options for scribes are to place the extra text above or below the end of the line. When

abed (abet) which had a quire-mark in the upper-left of the first page, so this rule is not without exceptions.

24. He goes on to note that “Besides their abnormal size (i.e. only one or two sheets) two things make it clear that protection quires are not to be considered in the same category as the rest of the quires. First, the content of the first major work of the codex never begins in these quires. Second, and more telling, is that when the scribes employed quire numbers, their numbering systems never include the protection quire(s). In such cases, the normal practice is to begin the first major work on the first full quire and begin numbering the quires at the second quire and following.” Delamarter, “Introduction to the Collection and its Codicology,” xxix. In all observed manuscript production, as well as all questioning, such quires are not added until the binding process and are not integral to the block of the book during the time it is being written (and therefore numbered or signed).
they do this they usually mark the stray letters with black and red lines that partially surround the text. ... In general, scribes prefer to complete the text above the line they are working on rather than below, unless there is no room above and there is room below. It is the rare Psalter, produced by the skillful scribe, that avoids ever having to put text on another line by varying the size of the script.  

Individual books have their own rules, which are transferred in the copying of the book. The rules are taken for granted as self-evident in the text, such that scribes generally have very little to

say about their specifics or reason; this may, as Veronika Six has said, indicate "slavish" reproduction. Many of the scribes indicated that the correct rule for a manuscript was revealed by copying it, and noted similarly that one would be able to know the placement of images by the placement of images in the exemplar. Such a one was Qes Getenet Anelay, who said that one should copy features from the exemplar just as they appear. Others, however, asserted that their knowledge of the rules of the books were independent of the exemplar, allowing for correction and modification (such as in the number and placement of images). Many rules are functional: Dawit (Psalter) texts tend to have a squarer aspect ratio than other categories of texts, presumably to better fit the one-verse-per-line organization which is specific to the Psalter. In the Dawit (Psalter), the Psalms, the Biblical Canticles, and the Song of Songs are written out with each verse of the text taking only one line on the page, to reflect the structure of the text and as an aid to recitation. The remaining two texts, the Praises of Mary and the Gate of Light, are laid out in two columns. A study of large numbers of Psalters by Delamarter has established the near-universality of this rule. Others seem largely decorative: Delamarter has established the near-universality of this rule.


27. This aspect varies with time, however, and there has been a long-term regularization of the Dawit aspect ratio towards the more rectangular. Presentation by Steve Delamarter, International Conference on Ethiopian Studies, November 2009. Also, note there the consistent arrangement of the responsory phrase in Psalm 135. Delamarter and Melaku Terefe, Ethiopian Scribal Practice 1, 85.

28. “Ethiopic Psalters not only have standard content (the 151 Psalms of David, the 15 Biblical Canticles, the Song of Songs, the Praises of Mary, and the Gate of Light), the content is always laid out on the page in a standard way. The texts of the first three works are laid out in one column with each verse given its own line. Thus, the left-margin is justified; and the right margin is uneven and marked by a full-stop symbol at the end. The last two works in the Psalter are devoted to Mary and are always laid out in two columns, both of which are evenly justified.” ibid., 25.

29. “Having studied over 1,500 Psalters, I have encountered only two, both copied very badly, which lay the praises of Mary out in one column.” ibid., 25, n. 6.
lamarter has pointed out a number of uses of alternating red-and-black ink for parts of the Psalter, which have been copied consistently across large numbers of manuscripts, pointing to the continuation of specific rules for the Dawit. When asked about these features, the scribes interviewed indicated that they served no purpose other than decoration; the consensus on the continuation of these features was that they were usual to manuscript of those works, and nothing more. One scribe criticized the printed version of the Psalter for leaving out some of these decorative features, after conceding that they were non-essential to the text. One should not take the prescription of slavishness too seriously, though, as there are clearly decisions that remain to individual scribes, to suit their use: thus, see the variant arrangement of the Psalter and the Gospel of John divided into readings for each day of the week, a clear modification for the needs of the reader or the service environment of the book.

As a scribe starts to work on each page, he will rub it (and sometimes its neighbour in the opening at the same time) with the medmes (section 4.5.2) in order to improve the surface’s ability to receive ink. Without so raising the nap of the page, the ink is less likely to adhere strongly. Carbon-based inks sit on top of the page, do not cause extensive chemical change to the underlying parchment, so a rougher surface helps prevent flaking and increases the amount of hold the dried ink has on the page. It also serves to remove small blemishes and improve the look of the surface.

Scribes work in a generally linear fashion, starting at the beginning of the first verso of a blank quire and letting words and letters fall as they will, with little pre-organization of the page: when a word goes over the end of a line, the next letter is written on the following line—there is no hyphenation mark. Words are split across pages and even quires, just as the letters fall. There are some considerations that prompt space to be left for material to be inserted later: a scribe will leave

30. Delamarter notes that it is very common to see alternating decoration of text in red and black letters in specific patterns in Psalm 150 and the tenth Biblical Canticle. There are other areas in the Psalter that may receive the same treatment, such as a small section of Psalm 148, where consistent text is marked out to show the similarity across multiple lines. Delamarter and Melaku Terefe, Ethiopian Scribal Practice 1, 47, 83.

31. Ibid., 113.
space for *harâgs* (as many as have been agreed when deciding the price of the commission) at the beginning of books or in set divisions (one such division is before every ten psalms, for example), as appropriate to the original work. Space for illustrations is left where they are to be inserted, based on the type of work (and its constituent illustrations) and the price of the work (which may determine size and number). The space for *harâgs* and images is not blocked out or otherwise indicated, nor is it decided in advance and ruling omitted; it is ruled space which is simply left blank. No indication is left for the painter as to which image is appropriate for the space; they are expected to know the appropriate image to be inserted from the surrounding text and type of book. When a scribe encounters an obstacle in a text, whether a hole, the seam of a repair, or a blemish in the material that makes it unreceptive to ink, he allows some space for the obstacle and continues writing on the other side (fig. 4.9). Occasionally, when marking a repair or a defect in the parchment, lines may be drawn in it, presumably to give decorative value to what would otherwise have been a flaw. (fig. 4.8)

![Figure 4.8: Decorative lines marking a repair. Dawit owned by Keši Teklay, Axum.](image)

Scribes differ in practice on whether they write red at the same time as black: many scribes, like Abba Bizwallo, wrote both at the same time, switching pens (or even wiping then dipping the same pen) to write the next word in its appropriate colour. Others, like *Maríjeta* Halwai (Adigrat) wrote
Figure 4.9: Working around obstacles. MS Bichen Gyorgis 001.
in black, leaving an appropriate amount of space, then wrote again in red. Qes Yohannes (Andabet) used a hybrid system, skipping small sections in red, such as a single word, intending to come back later, but immediately switching for longer sections, such as two lines. Mezab Medduku (Andabet), who generally writes in both colours at the same time, notes that he will leave space for the red if he lacks for red ink. Inks are sometimes not immediately available once mixed or refreshed, as they are left to sit in the sun to warm the gum and to dissolve before use. It appears that, as a rule, scribes do the rubrication themselves, and do not give the work to an assistant.\textsuperscript{32} This procedure is confirmed not only from interviews with scribes, but with the frequent association of scribes in imagery with both black and red ink, showing that both were considered integral aspects of the scribe’s task (see, for example, fig. 4.25b). Qes Yohannes Melese (Andabet) notes that scribes might clean a pen on their hair when switching between black and red ink, whereas Qes Bito (Axum) holds the black pen in his mouth then writes with a separate red pen. Mulugeta Araya Gābāyāhu said that he will write in red if the red has been prepared, but will skip it and fill it in later if he only has black ink prepared. The use of separate pens for red and black ink was commonly observed, though the use of the same pen for both colours, whether on the same nib (wiping off one colour before dipping it in the other), or cut with a nib on both ends (fig. 4.24) was also observed.

### 4.3 Rubrication

Red ink is the only commonly used colour other than black, and, though it is not in all manuscripts, where present it serves a variety of distinguishing functions in Ethiopic texts: it marks text divisions, 32. The assumption of separate rubricators seems to come from analogy with European practices, not from any confirmed habit of Ethiopian scribes. Delamarter, for example, implicitly assumes the presence of separate rubricators in his description of some omitted rubrications: “This small oversight [the omission] indicates once again either the division of steps in the work process for the scribe who performs all of the steps himself, or, more likely, the division of labor between the scribe, who inserts the four black dots of the full-stop symbol as he writes the text, and his assistant, who adds four (or five) more dots in red ink to complete the full-stop symbols.” Delamarter and Melaku Terefe, \textit{Ethiopian Scribal Practice 1}, 125.
Figure 4.10: Rubrics. Bodleian Library MS Aeth. B. 5 f. 4r. Synxar. First quarter of the 18th c. Courtesy of the Bodleian Library.
accentuates punctuation and numbers, ornaments patterns and decorates holy names. Patterns of red lines are used to mark the beginning of new works and may also mark chapter divisions, section divisions, and significant text throughout the work. On an incipit page, the initial red rows will be consistent across the columns, regardless of the content of the sections in red. In religious works, scribes make an effort to fit the Trinitarian Formula ከሮም፡ እሬ፡ ወወልድ፡ ወመንፈስ፡ ቅዱስ፡ ወወልድ፡ ወመንፈስ፡ ቅዱስ፡ ወወልድ፡ ወመንፈስ፡ ቅዱስ፡ ወወልድ፡ ወመንፈስ፡ ቅዱስ፡ ወወልድ፡ ወመንፈስ፡ ቅዱስ፡ “In the name of the Father, the Son, and the Holy Spirit, one God...”, into the first two lines of red at the beginning of the first column (see fig. 4.11), but in general, the colouring of the Trinitarian formula follows from the rubrication scheme of the page (see fig. 4.10) and if the Formula goes on to the next line the overflow will be black as will the rest of that line. The text of the first lines of the neighbouring column, which will also be red or black according to their neighbours, is determined by whatever is there based on the size of the writing and size of the space, with no

apparent attention paid to content, or even starting with whole words, rather than running a word over from the bottom of the column to the top of the next. The incipit page often has extra lines of red at irregular intervals (like 2 red, 7 black, 2 red, 7 black, 2 red, 6 black); there appears to be no attempt to make these correspond with anything in the text itself. When a section or chapter ends, the next section or chapter may pick up immediately, marked often by red lines in lesser numbers than at the start of the work. When a work ends, where there is another work in the same codex, it will be given a new page upon which to start (preferring rectos). In this way, a hierarchy is created by the rubrics which allows navigation in the text, even if the rules are not consistent across different manuscripts.

The names of God, Jesus, Mary, and the saints to whom the book is dedicated (as, for example, St. Michael the Archangel in the *Dersana Mik’ael*) are written in red ink, or sometimes in other colours (e.g. gold: see 5.3), to distinguish and honour the name. This rule is not entirely consistent, however, and there is disagreement. *Liqä Kahomat* Asnak (Gälawdiwos) always writes the holy names in red, saying “Who writes his name in black has no love for God. He should be always honoured.” *Qes Ṭagbhu Yərsäw* and *Diyaqon Abraham Yərsäw* suggested that not writing the name of God in red is stingy, and that scribes do it because they do not wish to waste colors. The name of Mary is most consistently marked out in red (or in gold or other colours, as below), receiving this treatment even when names of the godhead are written in black. Major saints other than those who are the subject of the book may or may not have names written in red. Delamarter notes that there is inconsistency in whether the word *እግዚአብሔር* Ṣgziäbḥer is written in black or red ink, and shows an interesting example of Ṣgziäbḥer written in alternating black and red letters.³⁴ Other words may be written in red, such as * sälam* “peace,” the opening of a repetitive prayer/hymn.

An example of these various strategies for marking divisions in the manuscript may be seen in Bodleian Library *MS AETH. B. 5 f*. (fig. 4.10). This exceptional manuscript from the Juel-Jensen collection shows multiple types of text divisions, and is a convenient example for illustration purposes.

³⁴ Delamarter and Melaku Terefe, *Ethiopian Scribal Practice 1*, 68–69.
Quire-marks are present in the gutter at head and foot, the word ሸሆኔ ም.rotation “quire” is written at the foot, and the division of the work, for the month of መስከረም maskäräm is written at the head. Three lines of red alternate with lines of black to mark the beginning of the work as well as two lines of red further down the page. Numbers and punctuation are additionally highlighted by rubrication, as are personal names relevant to the production of the manuscript, such as the scribe’s name at the bottom of the page.

Other organizational strategies are also used to mark important portions of the text. The first work in a text, new works in the same volume, and divisions of ten Psalms are often marked by a type of vinework known as a ከርጊ (see, for example, the excellent haräg marking the beginning of the Gospel of John, fig. 4.25a, or the ruled space for a haräg in fig. 4.7.). Major text divisions or noteworthy miniatures may be marked by bits of string (often silken) sewn into the upper fore-edge of the page.

4.4 Scribal Habits

The traditional manner of the Ethiopian scribe when writing is to sit with a blank quire on the knees (not on a table, desk, or other writing surface, though such may be used by those writing in a modern manner and with modern tools, such as those working as secretaries or trained in the Western system; I observed Aläqa Gard (Axum) writing on a table and Marigeta Zalaläm (Lalibälä) writing on a book as a surface on his knees) and to write either out of doors or in the light of a doorway, as Sergew relates:

The scribe has no fixed place to sit and write, he sits either in the court yard of his house or, if the weather is good, under the shade of a tree....The reason he prefers to sit outside in the open air while he writes is to protect his eyesight. In the old days glasses were not known in Ethiopia. The scribe has to protect his eyesight by writing only in the day time, when there is still day light, still sunshine and in the open air. Writing in a dim place is believed to cause eye trouble. For this reason a scribe never writes during the evening hours using lamp light. He does not even read during the evening except when he is asked during a night church service.

Another way to protect his eyesight is to put, as frequently as possible, fresh butter on his head under his headband. The problem is when it is during the fasting period. (Ethiopia fasts for more than one third of the year.) In that case he has to use a sort of margarine extracted from grain. Any other nourishment, except fat and flesh, is not
considered to be breaking the fast.\textsuperscript{35}

Here Sergew explicitly identifies the location as outside, and other sources often cite writing as a traditionally outdoors occupation: for example, a note in Ullendorf's \textit{Catalogue} reads: “This book with four others was taken by Hassan Bey from an Abyssinian who was found writing under a tree near the British Army in Upper Egypt and given by Hassan Bey to Col. Murray Qr M'r Gen and given by him to me. Sep. 1801 at Rosetta. J. N. Turner.”\textsuperscript{36} Contrary to this, as may be seen in Table 4.1, most of the scribes I was able to observe working wrote in the light coming from the door of their home. Scribes work in some kind of shade (else the brightness of the page would be very hard on the eyes, and it would be hot as well), whether it be of a tree (as in the Ullendorf quote and as I observed on the Zäge Peninsula), a building (observed in Gälawdiwos, Baḥar Dar, Zäge), or in the shade of their house, using the light from the door (observed in all locations). Scribes generally work exclusively by natural light; not only due to the (very real) concern over eye strain, but because artificial light is still rare in rural areas of Ethiopia, and often dim when present.\textsuperscript{37}

The buildings used by scribes varied, but few had a dedicated working space. \textit{Marigeta Ḥaylā Śəllase} (Mäqālā) sat on a stool by the large window at the front of his church goods shop. \textit{Keši Mengistu Eyesus} (Mäqālā), in the neighboring shop, worked amidst his woodworking workshop, in window light. \textit{Keši Bito} (Axum) was unusual for both the volume he produced and the dedicated workspace he used in its production. \textit{Liqä Kahənat Asnak} (Gälawdiwos) worked in an old \textit{tukul} next to his home, an abandoned outbuilding now primarily used for storage and as a workspace. \textit{Qes Teubo} (Lalibāla) worked at his home, but also in a sparse common-area shared by other members of the Lalibāla

\textsuperscript{35} I have no further information or corroborating source on the use of butter or margarine in the way that Sergew describes here. Sergew Hable Selassie, \textit{Bookmaking in Ethiopia}, 20–21.


\textsuperscript{37} Scribes in Mäqālā and Axum may have access to electric light on days when there is electricity, which frequently is unavailable due to shortages. Even with power, bulbs are often dim, and 5W bulbs are not uncommon.
clergy.

Figure 4.12: Qes Yohannis working by door-light. Andabet.

Table 4.1: List of scribes by the type of open shade used for writing.

<table>
<thead>
<tr>
<th>Scribe</th>
<th>Location</th>
<th>Source of Light/Shade</th>
<th>Location of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keši Hadera</td>
<td>Adiet</td>
<td>door/shade of house</td>
<td>seated in house or on step</td>
</tr>
<tr>
<td>Marigeta Halawi</td>
<td>Adigrat</td>
<td>door</td>
<td>seated in house</td>
</tr>
<tr>
<td>Qes Yohannis Melese Dubale</td>
<td>Andabet</td>
<td>door</td>
<td>sitting in house (Fig. 4.12)</td>
</tr>
<tr>
<td>Qes Getenet Anelay</td>
<td>Andabet</td>
<td>door</td>
<td>seated in house</td>
</tr>
<tr>
<td>Misganew</td>
<td>Andabet</td>
<td>door</td>
<td>seated in house</td>
</tr>
<tr>
<td>Mäzämmǝr Bä zabǝh Mǝtku</td>
<td>Andabet</td>
<td>door</td>
<td>seated in house</td>
</tr>
<tr>
<td>Mäl-akä Gännät Yoala</td>
<td>Andabet</td>
<td>door/window</td>
<td>seated in barn</td>
</tr>
</tbody>
</table>

(Continued on next page)
<table>
<thead>
<tr>
<th>Scribe</th>
<th>Location</th>
<th>Source of Light/Shade</th>
<th>Location of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashmelas WoldeGabriel</td>
<td>Axum</td>
<td>door</td>
<td>stool in workshop</td>
</tr>
<tr>
<td>Ḥalāqa WoldeGabreal GebreṢadkan</td>
<td>Axum</td>
<td>door</td>
<td>seated in house or workshop</td>
</tr>
<tr>
<td>Liqā Bǝrhanat Hadgu</td>
<td>Axum</td>
<td>door</td>
<td>seated in workshop</td>
</tr>
<tr>
<td>Qes Bito</td>
<td>Axum</td>
<td>door</td>
<td>seated in workshop</td>
</tr>
<tr>
<td>Qes Hailu W/Giorgis</td>
<td>Axum</td>
<td>door</td>
<td>seated in house</td>
</tr>
<tr>
<td>Keši Teklay G/Kristos</td>
<td>Axum</td>
<td>door</td>
<td>seated in workshop</td>
</tr>
<tr>
<td>Mäl-akä Ṣehai Keflemaryam Abbay</td>
<td>Axum</td>
<td>outdoors, shade of building</td>
<td>at market or under eaves of house</td>
</tr>
<tr>
<td>Qes Felege</td>
<td>Bahǝr Dar</td>
<td>shade of tree or house</td>
<td>courtyard of house or bench in front of house</td>
</tr>
<tr>
<td>Liqā Haruñan Tesfa</td>
<td>Bahǝr Dar</td>
<td>window</td>
<td>seated on couch in home</td>
</tr>
<tr>
<td>Marigeta Melak Hiwot Tsegaw</td>
<td>Gälawdiwos</td>
<td>door/shade of house</td>
<td>just inside or between buildings</td>
</tr>
<tr>
<td>Qes Mogas</td>
<td>Gälawdiwos</td>
<td>door</td>
<td>seated in house</td>
</tr>
<tr>
<td>Qes Fente</td>
<td>Gälawdiwos</td>
<td>door</td>
<td>seated in house</td>
</tr>
<tr>
<td>Liqā Kahǝnát Ajugu</td>
<td>Gälawdiwos</td>
<td>door</td>
<td>seated in house</td>
</tr>
<tr>
<td>Liqā Kahǝnát Asnak</td>
<td>Gälawdiwos</td>
<td>door</td>
<td>seated in derelict outbuilding</td>
</tr>
<tr>
<td>Marigeta Bahǝr Ṭǝbäb</td>
<td>Gondār</td>
<td>shade-cloths</td>
<td>work area surrounded by tarps</td>
</tr>
<tr>
<td>Qes Abebaw Kebede</td>
<td>Imreha</td>
<td>door</td>
<td>sitting in house</td>
</tr>
<tr>
<td>Marigeta Zalalām</td>
<td>Lalibela</td>
<td>shade of building/umbrella</td>
<td>sitting in shade of outbuilding, with umbrella</td>
</tr>
<tr>
<td>Marigeta Eshete Afewerk</td>
<td>Lalibela</td>
<td>door</td>
<td>at table in house</td>
</tr>
<tr>
<td>Qes Tečubo</td>
<td>Lalibela</td>
<td>door/window</td>
<td>seated in house or common workshop</td>
</tr>
<tr>
<td>Marigeta Halie Selassie</td>
<td>Māqīlā</td>
<td>door/window</td>
<td>stool in corner of shop</td>
</tr>
<tr>
<td>Keši Mengistu Eyesus</td>
<td>Māqīlā</td>
<td>door/window</td>
<td>chair in workshop</td>
</tr>
<tr>
<td>Keši Daniel</td>
<td>Māqīlā</td>
<td>shade of house</td>
<td>on bench in front of house</td>
</tr>
<tr>
<td>Marigeta Birhane</td>
<td>Māqīlā</td>
<td>door</td>
<td>sitting in house</td>
</tr>
</tbody>
</table>

(Continued on next page)
### 4.4.1 Hours and Holidays

Tournerie says that “Good calligraphers do not work on Saturdays and Sundays, and on Mondays are forbidden to continue with any important task they may be engaged upon. They have to spend the day practising, starting work again on the Tuesday.”³⁸ Mezab Medduku (Andabet) follows this pattern, and does not work on Sundays, Mondays, or the feasts of saints celebrated locally. Sergew agrees that “the scribe does not work on a weekend,” but makes no mention of Mondays.³⁹ Liqä Kahonat Ajugu (Gälawdiwos) writes on days that are not holidays or the sabbath. Marigeta Halwai (Adigrat) works about nine hours a day, from seven in the morning until noon, then from two in the afternoon until six. Diyaqon GebreSelassie (Axum) works from six to eight in the morning, from nine to eleven-thirty, then, in the afternoon, he works from two until five-thirty and in the evening from eight to eleven. As an urban (by Ethiopian scribal standards) scribe, he has access to light in the evening. Many scribes are clergymen and farmers and must fit their scribing schedule around their obligations to church and land, while still only using daylight to work in. Though some parchmenters will not work in the fasting season (see section 3.5), scribing is a frequent during that time.⁴⁰

<table>
<thead>
<tr>
<th>Scribe</th>
<th>Location</th>
<th>Source of Light/Shade</th>
<th>Location of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beza Adamu</td>
<td>Zäge</td>
<td>door</td>
<td>seated in house</td>
</tr>
</tbody>
</table>


³⁹. Sergew Hable Selassie, *Bookmaking in Ethiopia*.

⁴⁰. EMIP 183 (Weiner Codex 70), a copy of the *Dawit* has the following note:

This Psalter was finished during the year of Mark, the Evangelist, in the fasting season, with much suffering, on the twenty-first night, fourteenth day.

4.5 Tools

4.5.1 The Pen

Ethiopian pens, called እትር በር, are usually made out of the dried stalk of the giant cane (*Arundo donax*), known as ወምበቆ *shəmbäqo*. Stands of cane are not uncommon; predictably, they are specifically common in the vicinity of churches, where they would have been planted to provide writing equipment in the past. Scribes generally agreed that a “hard” cane was desirable. *Marigeta Ḥaylä Śəllase (Mäq̲älä)* specifically identified stands growing in dry, sunny places as producing this characteristic, and thus being the most desirable, whereas *Qes Felege (Baḥar Dar)* said the hardest and most desirable cane came from the lowlands regions. Sergew says:

> The straight and medium size of plants are cut in abundance and stored in a place where there is no smoke. When the bunch dries the scribe takes one piece and cuts it into pen size. In comparison with the Middle East, the Ethiopian pens are generally short: only about 12cm long. They are scraped only on one side using the curved sharp knife. It entirely depends upon the scribe whether he wants his pen straight or a little bit curved. When he finishes scraping, he splits the nib with the same knife. He lays the pen on a smooth rib bone from a goat or a sheep and cuts it. The scribe prepares five or six such pens at a time and puts them aside to use whenever he needs them.

12 cm as an average and normative length for pens matches my experience in the field, though I would note that pens are very often significantly shorter than this, with several scribes using very short pens of around half that length (see, for example, the pens of *Liqä Kahənat Ajugu*, depicted in fig. 4.36a). Longer pens were also very much in evidence, and longer pens seem to be preferred in the depiction of scribes, where the pen is usually longer in length than the hand, and therefore easily in excess of 12cm. Those photographed ranged in length from 5.5 to 21.5 cm (see fig. 4.15). I was able to observe cane stored as pre-cut blanks for pens (fig. 4.17) in the house of *Qes Mogas (Galäwdiwos)*. Thickness of the cane cut for pens varied greatly. Pens clearly vary in size, with no definitive thickness

41. Identification after Tournerie, Colour and Dye.

42. Sergew is here referring to the parchment-knife. See section 3.3.1.

43. Sergew Hable Selassie, Bookmaking in Ethiopia, 18.
(a) Evangelist Portrait of Mark showing scribal tools.

(b) Detail of the Evangelist Portrait of Luke showing scribal tools.

Figure 4.13: Bichena Gyorgis MS 1 Gospels.
Figure 4.14: Tools of Keši Daniel, at his feet while he works. Māqālā.
of cane used in the making. Collected pens varied in diameter from 8 to 15mm, with some larger and smaller pens encountered in the field.

Pens may be made out of other materials, but less commonly. Sergew relates the following couplet concerning qästänǝčča:

The student fetches qästänicha to write something, because the reed pen is no good and spoils the ink.\footnote{44}

The names qäst yäset qästanye qästänǝčča (Asparagus sp.) are generally attested.\footnote{45} Marigeta Te’ubo reported making pens out of misrich, and said that non-shǝmbǝqo pens are mainly for use in writing magical texts. Sergew reports pens may also be made of tämbäläl (Jasminium abyssinicum).\footnote{46} One scribe, Aläqa Woldegabriel Gebreṣadkan, used metal nibs attached to small sticks (fig. 4.19), whereas others used ballpoint pens for some of their work, supplementing their traditional tools. Writers using paper, specifically those who make livings as secretaries or clerks, have largely adopted commercial ballpoint pens, and seem to use ballpoint pens almost exclusively. Marks from ballpoint pens are occasionally seen in glosses, additions, and scribbles in parchment manuscripts, and scribes who may produce manuscripts will often write with a modern pen when not working on parchment.

The pen has to be sharpened more often when used on the hair side than when it is used on the flesh side, as the follicles on the hair side render it harder on the nib and wears it down more. Liqä Kahonat Ajugu (Gälawdiwos) uses a broader/harder pen on the hair side than which he uses on the flesh side.

\footnote{44} The reason for the reed pen spoiling the ink is obscure, but the point of the quotation is to establish awareness of the use of qästänǝčča as an alternative to cane, not to explicate differences in their use. Sergew Hable Selassie, Bookmaking in Ethiopia, 18.

\footnote{45} While visiting the Church of Däbrä Barhan Selassie in Gondär, it was reported to me that all of the yäset qäst in the area had been cleared out in order to stop the making of love charms by the church students, clearly indicating its importance as a component of magical production.

\footnote{46} Sergew Hable Selassie, Bookmaking in Ethiopia, 18.
Figure 4.15: Distribution of pen lengths in cm. Average: 10.94 cm.
Figure 4.16: Raw materials for pens. (a) Niagara Botanical Gardens, Ontario, Canada. (b) Andabet, Ethiopia.

(a) A stand of *Arundo donax*.

(b) *Asparagus* sp.
Figure 4.17: Pen-blanks. Gälawdiwos.

Figure 4.18: (top) Scissors. (lower) Bone used as a support for cutting pen-nibs. Gälawdiwos.
Cutting the Pen

A piece of cane of the desired size and length, having been dried, is cut between the nodes (the hard “joints” of the stalk). Generally, the cut will be near the node at one end and further from it at the other end, as the node itself is unsuitable for being carved into a nib and some space should be allowed for the inevitable shortening of the pen as it is sharpened. The node at the non-nib end provides structure for the pen, and keeps the end from splitting or fraying. Occasionally pens are cut into nibs at both ends (fig. 4.24). While observed in disparate locations, such pens constituted a small fraction of those observed in the field. When the pen was cut at both ends, the choice of colour used for each end was not regularized: black-black, red-red, and black-red examples were all


48. The process of cutting the pen is called ኀጆን መቃርስ. ibid.
observed.

The pen having been prepared, it is common to test it on a scrap piece of parchment or even on the back of the hand; these pen trials are sometimes found on the fly-leaves of manuscripts or their inside covers, preserving evidence of the practice.

**Holding the Pen**

There is regularized variation in the way that the pen is held when writing. Scribes predominantly held their pens to the right of or in-line with the downstroke, though some scribes wrote with the pen held to the left of the downstroke. On the right, three different pen-angles were in evidence, effecting changes in both the holding of the pen and the cutting of the nib. The first, with a nib cut flat, is held at no angle to the downstroke, and produces a very straight and upright form of writing. The second, with the pen held at approximately thirty to forty-five degrees, produces a slightly more rounded text. The last, with the hand held at an extreme angle, perhaps seventy degrees, produced a more pronouncedly round text. Two scribes were observed to hold the nib “upside-down,” writing with the top-surface, rather than the normal bottom surface. Pen angle clearly has some effect on the character of the text, but whether or not an understanding of the ductus implications is useful in palaeographical localization of scripts is a matter of conjecture at best. Due to individual differences in training and the mobile nature of church students, there was no discernible regional pattern to this practice.

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49. የወርቅ የተለመ የውዘውጌ እና የወርቅ ይለመ ያትኔ በር, both “pen trial” or የወርቅ የተለመ የውዘውጌ እና የወርቅ ይለመ ያትኔ በር “he who tried the pen and started (writing) with the ink of gold.” Mersha Alehegne, “Towards a Glossary of Ethiopian Manuscript Culture and Practice,” 150.

50. See table 4.2.

51. Marigeta Gera Werq Alameyu, trained as a scribe in Gondär, and Aläqa Gard Geday, a painter with some scribal training in Axum. In neither case was it clear why they adopted the “upside-down” form, but both were able to write clearly in that manner.
Figure 4.20: Cutting the pen. Marigeta Hayla Šollase, Magila.

(a) Narrowing the nib
(b) shaving the top
(a) The primary cut.

(b) Thinning the nib after cutting the reservoir.

(c) Narrowing and smoothing.

(d) Cutting the angle of the nib.

Figure 4.21: Cutting the pen. Keši Daniel. Mäqālá.
Figure 4.22: Progression of cuts. Illustration by Mélanie Brunet.
Figure 4.23: The finished pen. Marigeta Ḥaylā Šellase. Māqālā.

Figure 4.24: Pen with nib at each end. Qes Hailu. Axum.
(a) The Evangelist John at work and the beginning of the *Gospel of John*.

(b) Detail of tools from (a). (l) From top: knife, pen-knife(?), pen, black and red ink-horns. (r) Pot.

Figure 4.25: MS Gundä Gunde 40 ff. 175v–176r. (Early 15th century).
Table 4.2: Approximate angle of writing.

<table>
<thead>
<tr>
<th>Scribe Location</th>
<th>Location</th>
<th>Angle of writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keši Hadera</td>
<td>Adiet</td>
<td>45° to the right</td>
</tr>
<tr>
<td>Misganew</td>
<td>Andabet</td>
<td>45° to the right</td>
</tr>
<tr>
<td>Mäzämmǝr Bäzǝbǝh Mǝtku</td>
<td>Andabet</td>
<td>45° to the right and down</td>
</tr>
<tr>
<td>Mül’akä Gänñät Yoala</td>
<td>Andabet</td>
<td>45° to the right and slightly down</td>
</tr>
<tr>
<td>Ashmelas WoldeGabriel</td>
<td>Axum</td>
<td>55° to the right or more</td>
</tr>
<tr>
<td>Ḫaläqa WoldeGabreal GebreṢadkan</td>
<td>Axum</td>
<td>(uses metal-nibbed pens)</td>
</tr>
<tr>
<td>Liqä Borhanat Hadgu</td>
<td>Axum</td>
<td>30° to the right and down</td>
</tr>
<tr>
<td>Qes Hailu W/Giorgis</td>
<td>Axum</td>
<td>45° to the right, slightly down</td>
</tr>
<tr>
<td>Keši Teklay G/Kristos</td>
<td>Axum</td>
<td>(uses a brush)</td>
</tr>
</tbody>
</table>

(Continued on next page)
Table 4.2: Approximate angle of writing.

<table>
<thead>
<tr>
<th>Scribe Location</th>
<th>Scribe</th>
<th>Location</th>
<th>Angle of writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aläqa Gard Geday</td>
<td>Qes Fente</td>
<td>Gälawdiwos</td>
<td>45° to the right</td>
</tr>
<tr>
<td>Liqä Kahonat Ajugu</td>
<td>Liqä Kahonat Ajugu</td>
<td>Gälawdiwos</td>
<td>55° to the right or more</td>
</tr>
<tr>
<td>Marigeta Gera Werq Alameyu</td>
<td>Qes Abebaw Kebede</td>
<td>Imreha</td>
<td>45° to the right and down</td>
</tr>
<tr>
<td>Keši Mengistu Eyesus</td>
<td>Keši Mengistu Eyesus</td>
<td>Mäqālā</td>
<td>45° to the right, slightly down</td>
</tr>
</tbody>
</table>

The scribe dips the pen in the inkwell and then gives a small shake to rid the pen of excess ink (fig. 4.27b). This excess may also be removed, as I observed Marigeta Melak Hiwot Tsegaw (Gälawdiwos) does, by rubbing the nib lightly on the beard, which wicks up the excess.

4.5.2 The napping stone

Table 4.3: Type of medmeṣ.

<table>
<thead>
<tr>
<th>Scribe</th>
<th>Location</th>
<th>Medmeṣ Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marigeta Halawi</td>
<td>Adigrat</td>
<td>piece of modern tile. (Fig. 4.36c)</td>
</tr>
<tr>
<td>Qes Yohannis Melese Dubale</td>
<td>Andabet</td>
<td>piece of modern tile. (Fig. 4.35)</td>
</tr>
<tr>
<td>Qes Getenet Anelay</td>
<td>Andabet</td>
<td>shards of traditional ceramic and modern tile</td>
</tr>
<tr>
<td>Misganew</td>
<td>Andabet</td>
<td>local stones</td>
</tr>
<tr>
<td>Māl‘akä Gänäät Yoala</td>
<td>Andabet</td>
<td>piece of ceramic</td>
</tr>
<tr>
<td>Ashmelas WoldeGabriel</td>
<td>Axum</td>
<td>piece of modern tile</td>
</tr>
<tr>
<td>Qes Hailu W/Giorgis</td>
<td>Axum</td>
<td>piece of modern tile</td>
</tr>
</tbody>
</table>

(Continued on next page)
Type of medmeṣ. (continued)

<table>
<thead>
<tr>
<th>Scribe</th>
<th>Location</th>
<th>Medmeṣ Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qes Fente</td>
<td>Gālawdiwos</td>
<td>piece of plaster moulding(?) (Fig. 4.28c)</td>
</tr>
<tr>
<td>Liqä Kahanat Asnak</td>
<td>Gālawdiwos</td>
<td>fine-grained stone</td>
</tr>
<tr>
<td>Qes Abebaw Kebede</td>
<td>Imreha</td>
<td>piece of modern tile</td>
</tr>
<tr>
<td>Marigeta Zalaläm</td>
<td>Lalibela</td>
<td>piece of modern tile. (Fig. 4.28d)</td>
</tr>
<tr>
<td>Qes Te‘ubo</td>
<td>Lalibela</td>
<td>fine-grained stone</td>
</tr>
<tr>
<td>Marigeta Halie Selassie</td>
<td>Mäqälä</td>
<td>fine-grained stone</td>
</tr>
<tr>
<td>Keši Mengistu Eyesus</td>
<td>Mäqälä</td>
<td>fine-grained stone</td>
</tr>
<tr>
<td>Keši Daniel</td>
<td>Mäqälä</td>
<td>fine-grained stone</td>
</tr>
<tr>
<td>Marigeta Birhane</td>
<td>Mäqälä</td>
<td>fine-grained stone</td>
</tr>
</tbody>
</table>

The medmeṣ is a smooth-grained stone or ceramic (often, in modern use a bit of porcelain or tile) which is rubbed on the page to raise the nap of the parchment and allow ink to seep in. Without this preparation, the parchment would not take up ink as easily, promoting running and flaking. Scribes generally only rub the writing area with the medmeṣ, without raising the nap in the margins. If an area is resisting taking ink while writing is ongoing, the medmeṣ may be used to work on that area selectively, to promote the taking of ink. Qes Getenet Anelay (Andabet) used both a modern piece of tile (fig. 4.28, left) and an older piece of broken pottery (fig. 4.28, right) made from the clay of a pit which existed at Narga Selassie (Lake Tana) in the past, which was acquired by his grandfather. Holes were observed drilled in several medmeṣ (fig. 4.28), apparently for a thong or cord, but none was observed equipped with such an accessory.

4.5.3 The Pen-Knife

In contemporary use, most scribes use some form of folding-blade, commercial pocket-knife for cutting and maintaining their pens (see fig. 4.31, including an example of a straight-razor being used as a pen-knife). Safety-razor blades supplement the knife in the fine sharpening and thinning of the nib,
(a) *Qes* Fente stirs the ink before dipping his pen.

(b) *Qes* Yohannes Melese. Note the red pen held in the mouth while the black pen is used.

Figure 4.27: Writing. Gälawdiwos.
(a) Tile: *Qes* Getenet Anelay (Andabet). The revealed portion of the tape measures 19cm.

(b) Tile: *Abba* Bizwallo (Andabet). The revealed portion of the tape measures 8cm.

(c) Plaster(?): *Qes* Fente (Gälawdiwos).

(d) Tile: *Marigeta* Zalaläm (Lalibäla).

Figure 4.28: Ceramic *medmes*.
(a) Tile: Top view. The revealed portion of the tape measures 11cm.

(b) Tile: side view of (a) right.

(c) Tile: side view of (a) left.

Figure 4.29: Ceramic medmes of Mulugeta Araya Gābāyāhu. Gālawdiwos.
(a) Marigeta Ḥaylā Šallase (Mäqälä).

(b) Liqä Kahanat Asnak (Gälawdiwos). The revealed portion of the tape measures 8cm.

(c) Misganew (Andabet)

(d) Marigeta Birhane (Mäqälä).

Figure 4.30: Stone medmeṣ.
Figure 4.31: Various knives used as pen-knives. Qes Yohannes, Andabet. The revealed portion of the tape measures 26cm.

cutting of the reservoir, and occasionally in cutting the angle of the tip. Abba Bizwallo (Andabet) used the razor to supplement the medmes on the hair side, and additionally to remove fatty deposits on the parchment from fat goats on the flesh side of the parchment. Historically, a peculiarly shaped knife (see fig. 4.13) seems to have been used. I have not found an extant version of this knife, which is attested in manuscript images from the 15th to the 19th centuries. In MS Gundä Gunde 40, f. 145v (fig. 4.25b), it is shown in the company of a straight-lamed knife of a more familiar style. The historical depictions of this knife do not resemble any that I saw produced in contemporary Ethiopia, and may be entirely lost in the archaeological record. Johnston writes of the knife in his description of the scribe’s work:

A pen being formed, it is carefully examined by thumb-nail and eye, and is then either nibbled, to make it soft, or if it be too soft already, it is made finer by means of a large dinner-knife, which is generally carried in a small slip, in the scabbard of the crooked sword that curls its point nearly up to the shoulder of the right side, on which it is worn.52

52. Charles Johnston, *Travels in Southern Abyssinia: through the Country of Adal to the Kingdom*
Figure 4.32: Walters MS W. 840, Single leaf with St Luke. 14th/15th c. Image courtesy of the Walters Art Museum, licensed CC BY-SA 3.0
The knife here may be analogous with the straight-lamed knife in fig. 4.25b.

### 4.5.4 Inkhorns

Inkhorns are characteristic of the scribe, and among the primary identifiers of scribes in manuscript illuminations, whether depicted with just the black ink horn (as in fig. 4.13) or with both horns for black and for red ink (as in fig. 4.25a). Made from a readily available agricultural waste-product, horns of sheep, goats, or oxen are cleaned to remove the natural grease that would foul the ink and shaped (though not in all cases) to be more easily accommodated to the intended use, tapering to a point so that it may be pushed into the ground beside the scribe, and with a ring that marks the depth of the well. In modern use, scribes increasingly repurpose containers from modern ink to store traditionally made ink, but I was able to observe a variety of traditional horns.

Sergew describes the inkhorn in these terms:

> The inkhorn is made as follows: The horn is buried in mud or cattle dung for seven days. During this time the horn becomes soft, so very easy to cut and shape. Around the middle a projecting circle is curved (carved) to be used as a handle. The lower part is curved (carved) to a point so that it can be stuck into the ground which suits the scribe. Unless it is very rough the inside part is not touched. Otherwise it may open up a hole for the grease which can spoil the ink. The circumference of the upper top is cut and shaped. Usually black colour horn for black ink and white colour horn for red ink are assigned. The size of the ink horn varies according to the horn. If it is cattle horn the ink horn is larger and longer. If the ink horn is of goat or antilope (sic) the size is smaller, about 12 cm. long. This latter size is most used. When the horn is made a wood lid is cut to fit or else a piece of vellum is prepared and bound with a slice of vellum around the handle. Usually there is a clay or wooden frame with two holes for two ink horns to fit. This is recommended because the scribe has no fixed place to write, he sits either in the court yard of his house or, if the weather is good, under the shade of a tree. If he has such a frame he can easily move the ink horns. In the absence of a frame he has to press the ink horns into the earth.\(^{53}\)

Sergew refers to the practice of burying inkhorns to soften them for working, but Qes Felege, who

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\(^{53}\) Sergew Hable Selassie, *Bookmaking in Ethiopia*, 20.
(a) The revealed portion of the tape measures 23 cm.

(b) Tops of the inkhorns in (a). The revealed portion of the tape measures 6 cm.

Figure 4.33: Inkhorns and black ink of Qes Felege. Bahår Dar.
makes his own inkhorns (see examples in fig. 4.33) says that the horn only needs to be cleaned out (not buried), and that it should be made out of goat horn. According to him, the ring carved on the side represents the depth of the inkwell, and thus how far he should dip his pen. Qes Getenet (Andabet) says that the horn must be carved by a hot knife, and says that the main consideration in choosing the horn is its straightness. I observed inkhorns made of the large horns of oxen as well as the smaller horns of goats and sheep. The latter were prevalently carved, the former not.

Inkhorns are commonly used for black ink, but in contemporary use, red ink is more usually held in modern jars, often ink-jars repurposed from commercial inks (see, for example, fig. 4.36c). Whether held in a horn or in a modern jar, a small stick (መውገጫ mäwgäça) or nail will be left in it or next to it, for the purpose of breaking the film that develops on the top of the inks as it dries, and to mix additional water into the ink as it is added. This stirrer is often depicted in images of inkhorns, as in fig. 4.13 and 4.25a, and may also be seen in fig. 4.35 and 4.36. In order to protect the ink from fouling or over-drying, the inkhorn may be covered with a cap made of wood, cloth (fig. 4.34, 4.35), or a mixture of dried mud, dung, and straw, as in fig. 4.34; modern materials, such as plastic from plastic bags have also been observed in this capacity.

4.5.5 The inkstand

Horns may be pressed directly to the ground, but often, especially when the scribe writes inside his own house (with a tightly packed earthen floor) it would be difficult or impractical to do so. For this reason, and to make their tools more readily portable as they move them into and out of use, scribes make use of a variety of materials as inkstands. (This is the “clay or wooden frame with two holes for two ink horns to fit” referred to by Sergew in the quote above, section 4.5.4.) I observed stands made of mud/dung (fig. 4.34, fig. 4.35, fig. 4.36a), clay pot remnants (fig. 4.36d), wood (fig. 4.36b, fig. 4.36c), and other materials (a metal tray as in fig. 4.14, a metal dish, etc...).
4.5.6 The pen-case

Budge, in his *History of Ethiopia* gives the following information, with no source: “PEN-CASES, with rounded ends and a sliding drawer, similar to those used in India, Persia and Egypt, have been used in Ethiopia for centuries.” Sergew is dubious of this claim, and I did not observe anything exactly analogous to what Budge described in use by Ethiopian scribes, the closest being a type of leather case with a sliding drawer, but without the rounded ends or lacquered shell distinctive in Arab pen-cases; it was used by Liqä Kahonat Ajugu to store writing materials, and may be seen in fig. 4.37a. Johnston writes of “a small leathern case, in which he [the scribe] generally carries a sup-

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Figure 4.35: Inkhorns, one with a cloth cover, scribal implements, and inkstand of Qes Yohannis. Andabet.
(a) Mud, dung, and straw stand of Liqä Kahənat Ajugu, Gälawdiwos.

(b) A wooden inkstand. Andabet

(c) Marigeta Halawi’s wooden writing stand. Adigrat.

(d) The mouth of a broken pot repurposed as an inkstand. Andabet.

Figure 4.36: Inkstands.
ply of parchment, a few reed pens, and a large pair of scissors...”\textsuperscript{56} which might be similar to that which was observed. Modern metal pencil-cases, which resemble some older (hinged) Arab models, were used by several scribes to hold pens and razor blades but their presence, as a common modern industrial product cannot be construed as indicative of any support for Budge’s claim, for which there is no clear evidence.\textsuperscript{57}

4.5.7 Pots

A pot, \textit{ěnš ġābāna}, is used for the \textit{harur} liquid of roasted barley (\textit{gebs}) soaked in water, or sometimes just water. The solution is used to rehydrate dried ink, and the barley is said to lend strength and shine to the ink which is hydrated with it. It frequently appears in depictions of Ethiopian scribes (see, for example, fig. 4.25b) and can easily be recognized as being of the same form as the current Ethiopian coffee-pot. The pot does not seem to be currently in use for the storing of water for ink, having been replaced by more modern containers, as in fig. 5.5d. Another type of pot is also associated with scribes in images, as in the Dābrā Maryam Gospels (figs. 4.38a and 4.38b.) and in the Kebran 1 Manuscript (figs. 4.38c and 4.38d). The specific purpose of these pots is somewhat obscure, though the juxtaposition of them with the more pouring-focused ġābāna suggests that they have a storage purpose, whereas the latter would be used to refresh the ink. Scribes were variously observed using a metal container (Gondär), plastic cup (Ǝste), plastic jar, and glass jar (Gālawdiwos). Though Evangelist portraits in the Ethiopic tradition share similarities with other Oriental Christian and Latin depictions, these pots do not appear in comparable Evangelist images from the Latin or Syriac traditions and are thus doubly likely to be an association unique to Ethiopia, pointing to their actual use, rather than their iconographic character.

\textsuperscript{56} Johnston, \textit{Travels in Southern Abyssinia}, 292.

\textsuperscript{57} He also states that ink “was made, like the ink used in the monasteries of Egypt, of Sudānī gum and water, gallnuts and a strong acid” but I cannot find any evidence that gallnuts were used in ink in Ethiopia, and I believe he may be reasoning from examples taken from outside the Christian highlands. Budge, \textit{A History of Ethiopia, Nubia and Abyssinia}, 558.
Figure 4.37: Pen-cases. (a) Gälawdiwos. (b) Axum.

(a) Pen-case of Liqa Kahənat Ajugu.

(b) Pens and modern case of Keṣī Bito.
(a) Detail of (b) showing pots.  
(b) Evangelist Portrait of Luke.

(c) Detail of (d) showing pots.  
(d) Evangelist Portrait of Mark.

Figure 4.38: (a)–(b) Debrä Maryam, Gospels. (c)–(d) Kebran Gabriel, Gospels.
Chapter 5

Inkmaking

Ethiopian inks, generally black and various reds, are known as ከለም qäläm after Arabic قلم qalam, Greek κάλαμος kalamos, or Latin calamus, all “reed pen.” The Ethiopic word, though presumably derived from Greek or Arabic, through a garbled process of transmission refers to the ink, rather than the pen. Reed pens (made out of ከያምናክሮ shəmbäqo, giant cane) are always ለዕር ዋር.

5.1 Black Ink

Black ink in Ethiopia is exclusively carbon ink (though the use of manganese from batteries is attested in some modern contexts). It is made through a process of cooking to blend the ingredients,

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1. “For ‘ink’ is attested also māya ḥemmat, literally ‘water of soot,’ an ancient expression attested (la si riscontra già nel the New Testament, 2 Cor 3, 3; 2 Gv 12; 3 Gv 13) a riprova che la modalità della preparazione dell’inchiostro in antico (cioè in età aksumita, a partire almeno dal IV sec. d.C.) era quella a base di carbone.”

Bausi, “La tradizione scrittoria etiopica,” 523. citing L. Van Rompay:

“At first sight it may be surprising that no other methods are mentioned. Indeed, W. Wright, in the introduction to his Catalogue of the Ethiopic Manuscripts in the British Museum (p. IX), was inclined to think that the ink was manufactured from the ordinary ingredients, gallnuts, green vitriol, and gum arabic (this preparation, simpler and quicker than the one with soot, is found for example in recipes preserved in Syriac mss. from the 9th c. onwards). Nevertheless, the Ge’ez word for ‘ink’ (besides qalam, which is mentioned by [Sergew] on p. 8) is māya ḥemmat ‘water (or juice) of soot’ and this occurs already in in the Ge’ez translation of the New Testament (2 Cor. 3,3; 2 Joh. 12; 3 Joh. 13). This points, I think, if not to the exclusiveness of the preparation with soot, at least to its
then resting to allow the solution to ferment, accompanied by frequent stirring and grinding to increase the fineness of the suspension in the liquid. Once finished, it is formed into balls, of which bits may be broken off for dissolution and use. Blackness and shine are considered the most important characteristics, whereas thinness and stickiness are the most prevalent flaws to be avoided.

Tournerie describes the inkmaking process:

There are many recipes, but most of the good inks are a combination of the three classic blacks: ivory black, vine black and lamp-black mixed with various other ingredients. The making of fine inks is an extremely lengthy and laborious process, taking anything up to six months. As all inks are sun-dried the ingredients are sometimes transported to the lowlands in order to hasten the process a little in a warmer climate.²

Indeed, the time that ink had to be let sit, to ferment and to be ground and re-ground could be as much as a year. Abba Bizwallo (Andabet), who left it for this long said that ink which had been left for a lesser time might cause pages to stick one to another. Scribes said that ink could be used after a few weeks, but cited longer periods of time, three months to a year, as producing a better ink. A variety of sources are used for the carbon: soot from lamps or from the bottom of injera pans are used, and grains, leaves, horns, bits of scrap parchment, and fur removed from the parchment are all carbonized and used as a base for the black. Other ingredients are possible: Godet records the optional use of clinker (yäberät ar), thorny creeper (qan-täƦfa), or black mineral dyes,³ which are added un-roasted to the source of black during the cooking process. These ingredients apparently do not affect the colour of the ink, but rather its thickness and ability to adhere to the page.

Some ink recipes contain a kind of insecticide to prevent flies from spoiling the page or disturbing the calligrapher while he works. Most contain a little resin or gum, the best being supposedly a sort of itan (incense, generally Boswellia papyrifera), which has itself predominance and its antiquity.”


2. Tournerie, Colour and Dye, 32.

### Table 5.1: Ingredients for inkmaking.

<table>
<thead>
<tr>
<th>Latin Name</th>
<th>Common Name</th>
<th>Local Name</th>
<th>Part</th>
<th>Purpose</th>
<th>Cite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acacia sp.</td>
<td>gerar, grar</td>
<td></td>
<td>gum</td>
<td>thickener?</td>
<td>Tournerie, 119, 120, 122, 123, 125, 126</td>
</tr>
<tr>
<td>Allium sativum</td>
<td>garlic</td>
<td>nech shunkurt</td>
<td>juice of bulb, seeds?</td>
<td>liquid for dissolving ink; additive</td>
<td>Tournerie, 105</td>
</tr>
<tr>
<td>Aloe sp.</td>
<td>eret</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arundinaria alpina</td>
<td>mountain bamboo</td>
<td>kerkeha</td>
<td>stems, bark</td>
<td>source of black</td>
<td>Tournerie, 105, 118, 119</td>
</tr>
<tr>
<td>Arundo donax</td>
<td>giant cane</td>
<td>shəmbäqo, shimboko</td>
<td>stems</td>
<td>source of black</td>
<td>Tournerie, 106, 120</td>
</tr>
<tr>
<td>Bersama abyssinica</td>
<td>azamer</td>
<td></td>
<td></td>
<td></td>
<td>Tournerie, 124</td>
</tr>
<tr>
<td>Calpurnia aurea</td>
<td>degetta</td>
<td></td>
<td>leaves, gum</td>
<td>source of black</td>
<td>Tournerie, 106, 125</td>
</tr>
<tr>
<td>Capparis tomentosa</td>
<td>gumero</td>
<td></td>
<td>roots, branches, leaves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clerodendron myricoides</td>
<td>meserech, misseritch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffea arabica</td>
<td>coffee</td>
<td>buna</td>
<td>beans?</td>
<td></td>
<td>Tournerie, 124</td>
</tr>
<tr>
<td>Datura stramonium</td>
<td>fruit</td>
<td>essefaris, este faris</td>
<td>seeds</td>
<td>source of black, fly-repellant</td>
<td>Tournerie, 121</td>
</tr>
<tr>
<td>Discopodium penninervium</td>
<td></td>
<td>ameraroo</td>
<td>(roasted)</td>
<td>source of black</td>
<td>Tournerie, 121</td>
</tr>
<tr>
<td>Dodonea viscosa</td>
<td>kitkitta, ketketa, kitketa, keteketa</td>
<td></td>
<td>leaves</td>
<td>source of black</td>
<td>Tournerie, 118, 121, 123, 124, 125, 126</td>
</tr>
<tr>
<td>Eleusine corocana</td>
<td>dagusa</td>
<td></td>
<td>grain</td>
<td>harur to give lustre</td>
<td>Tournerie, 119</td>
</tr>
<tr>
<td>Festuca sp.</td>
<td>grass</td>
<td>guassa, gewasa</td>
<td>grass</td>
<td>source of black</td>
<td>Tournerie, 121, 122, 124</td>
</tr>
<tr>
<td>Guizotia abyssinica</td>
<td>nugg</td>
<td></td>
<td>seeds</td>
<td>source of black</td>
<td>Tournerie, 119</td>
</tr>
<tr>
<td>Hordeum vulgare</td>
<td>barley</td>
<td>gebs</td>
<td>grain</td>
<td>harur to give lustre</td>
<td>Tournerie, 118, 120, 122, 123</td>
</tr>
<tr>
<td>Jasminum abyssinicum</td>
<td>tembelel</td>
<td></td>
<td>seeds, leaves</td>
<td>source of black</td>
<td>Tournerie, 109, 124</td>
</tr>
<tr>
<td>Juniperus procera</td>
<td>tender juniper?</td>
<td>ted, tedh</td>
<td>leaves, gum</td>
<td></td>
<td>Tournerie, 105, 125, 126</td>
</tr>
</tbody>
</table>

(Continued on next page)
<table>
<thead>
<tr>
<th>Latin Name</th>
<th>Common Name</th>
<th>Local Name</th>
<th>Part</th>
<th>Purpose</th>
<th>Cite</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Lolium temulentum</em></td>
<td>rye grass, darnel grass</td>
<td>inkerdat, enderdad, enkerdad</td>
<td>grain</td>
<td>source of black, harur to give lustre</td>
<td>Tournerie, 118, 121, 124</td>
</tr>
<tr>
<td><em>Olea africana</em></td>
<td>woiria, waira, wayra</td>
<td></td>
<td>green twigs and shoots, leaves</td>
<td>source of black, stick used to stir</td>
<td>Tournerie, 120, 123, 125</td>
</tr>
<tr>
<td><em>Ormocarpum muricatum</em></td>
<td>ankwa, anqa enchat</td>
<td></td>
<td>wood?</td>
<td>source of black</td>
<td>Tournerie, 122</td>
</tr>
<tr>
<td><em>Osiris abyssinica</em></td>
<td>qarat</td>
<td></td>
<td>leaves</td>
<td>source of black</td>
<td>Tournerie, 119</td>
</tr>
<tr>
<td><em>Pennisetum sp.</em></td>
<td>sindedo</td>
<td></td>
<td>stalks</td>
<td>source of black</td>
<td>Tournerie, 111, 126</td>
</tr>
<tr>
<td><em>Phytolacca dodecandra</em></td>
<td>gaber indod, endod</td>
<td></td>
<td>seeds, leaves</td>
<td>source of black</td>
<td>Tournerie, 119, 121, 123, 125</td>
</tr>
<tr>
<td><em>Pterolobium stellatum</em></td>
<td>knte¿fa, kentefa, qantafa</td>
<td></td>
<td>grain?, leaves</td>
<td>source of black</td>
<td>Tournerie, 111, 126</td>
</tr>
<tr>
<td><em>?Ricinus communis</em></td>
<td>gooloh</td>
<td></td>
<td>leaves</td>
<td>fly-repellant</td>
<td>Tournerie, 112, 121</td>
</tr>
<tr>
<td><em>Solanum sp. or S. marginatum</em></td>
<td>gabar embeway, geber-enbuyeh</td>
<td></td>
<td>fruit, seeds</td>
<td>fly-repellant</td>
<td>Tournerie, 124, 125</td>
</tr>
<tr>
<td><em>Strychnos innocua</em></td>
<td>marenz, marenj, mariz, metenz</td>
<td></td>
<td>leaves</td>
<td>source of black</td>
<td>Tournerie, 124</td>
</tr>
<tr>
<td><em>Syzygium guineense</em></td>
<td>dokema</td>
<td></td>
<td>seeds</td>
<td>thickener, source of black, harur to give lustre</td>
<td>Tournerie, 112, 118, 122, 126</td>
</tr>
<tr>
<td><em>Trigonella foenum-graecem</em></td>
<td>abesh</td>
<td></td>
<td>leaves</td>
<td>source of black</td>
<td>Tournerie, 123</td>
</tr>
<tr>
<td><em>Triticum aestivum</em></td>
<td>wheat</td>
<td>sindi, adjah, kamado</td>
<td>grain, stalks</td>
<td>source of black</td>
<td>Tournerie, 112, 118, 122, 126</td>
</tr>
<tr>
<td><em>Triticum aestivum</em></td>
<td>wheat</td>
<td>buqaya</td>
<td>green stalks</td>
<td>source of black</td>
<td>Godet 1982b, 211</td>
</tr>
<tr>
<td><em>Triticum sp.</em></td>
<td>white wheat</td>
<td>nach sine, sindi</td>
<td>green stalks</td>
<td>source of black</td>
<td>Tournerie, 124, 126</td>
</tr>
<tr>
<td><em>Verbascum sinaiticum</em></td>
<td>qetetena, katatena</td>
<td></td>
<td>green stalks</td>
<td>source of black</td>
<td>Tournerie, 124</td>
</tr>
<tr>
<td><em>Ximenia americana</em></td>
<td>ankwa, anqa enchat</td>
<td></td>
<td>wood?</td>
<td>source of black</td>
<td>Tournerie, 122</td>
</tr>
<tr>
<td><em>Zehneria scabra</em></td>
<td>areg resa, aregeresa, itsa abek</td>
<td></td>
<td>leaves</td>
<td>source of black</td>
<td>Tournerie, 122, 126</td>
</tr>
</tbody>
</table>
to be collected from a lowland area, ground and strained, so that it becomes white and completely free of impurities. Kept in tablet form, it is melted in the sun with a little water when needed. The quantity used in the ink has to be nicely judged; if there is too much the parchment pages may later stick together in wet weather. A finished ink of good quality is completely solid, shiny black and without the slightest crack. A noted calligrapher still living, whose ink was much sought after, used to charge one Maria Theresa dollar for a small cube. When ink is required a small piece of solid ink which must be dissolved before it can be used, is broken off, the dissolving process taking two or three days. The fluid ink is kept in a qālām kend, literally ink horn, a pointed horn vessel which can be stuck into the ground.4

Qes Getenet Anelay said that the three balls of black ink which appear in fig. 4.3 are sufficient to write three (half-year) copies of the Synaxarium, the largest book generally produced by the scribes.

The quality of being glossy black is called waz, and is the most desirable quality in an ink according to Godet’s informant:

Pour vérifier la qualité de la couleur, on délaye un peu du broyat dans un peu d’eau et on fait un essai d’écriture. L’encre bien préparée ne bave pas, l’intensité est égale et, une fois sèche, elle ne s’enlève pas en poudre si on la gratte avec l’ongle.5

To confirm the quality of the colour, one dissolves a little of the ground ink in a little water and makes a writing test. Well-prepared ink does not run, is even in intensity, and, once dried, it does not come off as a powder when scratched with the fingernail.

Black ink is generally made out of carbon, usually in the form of soot mixed with carbonized grains. Thickness, glossiness, and binding are provided by the liquid of boiled roasted grains and tree gum, known as muč̣č̣a or endadit, which can be gum arabic, frankincense, or, in modern times, eucalyptus gum. The inks do not change the page chemically (to the extent iron inks do), and the ink remains water-soluble, such that manuscripts damaged by water often show significant degradation or total obliteration of writing on water-affected areas (see, for example, Addis Abäba, Institute for Ethiopian Studies MS. 1038, ff. 5r, 12r, ...) or offset (e.g. ibid., ff. viiiv-1r, 4v-5r, 11v-12r, ...). Given the poor storage conditions and torrential rainy season endemic to Ethiopia, this is a significant concern for the preservation and stability of manuscripts.

4. Tournerie, Colour and Dye, 32.

Denis Nosnitsin has analysed the ink in a manuscript of Qäqäma Maryam Kidanä Məḥrät (Dägä Tämben, Təgray) and found that the chemical composition of the ink, though still of the carbon-type, differed significantly, suggesting different inputs to the process.6

**Insecticides**

As noted by Tournerie, above, "Some ink recipes contain a kind of insecticide to prevent flies from spoiling the page or disturbing the calligrapher while he works." The insecticide in this case is identified as the fruit7 or the seeds8 of the gäbär ǝmbwey, itself identified as the largest of the Solanum spp., possibly Solanum marginatum.9 Sergew similarly reports this practice, identifying the juice of

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6. Referring to Qäqäma Maryam Kidanä Məḥrät MS. 10, a 17th/18th c. copy of the Acts of the Apostles and the Apostolic Epistles, Nosnitsin writes: “an UV-VIS-NIR usb-microscope was used to establish the ink type in-situ ... the intensity of the black colour is not altered by the change of the light wavelength indicating, as expected, carbon ink. This rough typological identification was confirmed directly by Raman and indirectly by XRF spectroscopy: ... The black inks though of carbon type were found to contain large amounts of iron, zinc, and manganese. Since none of these contaminants were found in the original black ink of QDGM-010 it is likely that the modern recipe differs considerably from that of QDGM-010.” Denis Nosnitsin, “A ‘Study Manuscript’ from Qäqäma (Təgray, Ethiopia): Attempts at Ink and Parchment Analysis,” *Comparative Oriental Manuscript Studies Newsletter*, no. 7 (January 2014): 28–29; Elsewhere, he notes that elevated levels of Potassium were found using an ARTAX-spectrometer, suggesting that the source may be the salty well water characteristic of parts of Təgray. Denis Nosnitsin, “Ethiopian Manuscript Studies: Yesterday and Today,” November 2013, accessed March 17, 2014, http://www1.uni-hamburg.de/ethiostudies/ETHIOSPARSE/PPP-Nosnitsin%202013%20Brussels.pdf.

7. Add to the other ingredients at the end of the boil: “two fruits of GABAR EMBEWAY (Solanum sp., perhaps Solanum marginatum) cut in two halves. The EMBEWAY is added to prevent flies from entering the ink while one writes.” Recipe of Marigeta Tsege Tesfa Hunezu. Tournerie, *Colour and Dye*, 123–124.

8. Boil with other ingredients: “the seeds of GABAR EMBEWAY (Solanum sp., possibly Solanum marginatum, given by Moody as GEBER-EMBUYEH.” Recipe no. 3 of Abba Wubu Kindane Mariam. ibid., 125.

9. Ibid., 63–64, 124, 125.
the fruit of *Solanum campylacanthum* as the insecticide.\(^\text{10}\) Mellors and Parson also identify the use of the juice of the fruit of *Solanum spp.* in ink-making, but do not identify a particular species.\(^\text{11}\) Eric Godet specifies that “Des fruits mûrs ou verts de gâbär embeway (*Solanum marginatum*) coupés en quatre sont rajoutés dans la même eau et la préparation est portée sur le feu où elle bout un temps bref,” further clarifying that, according to Taye Wolde Medhin: “Le gâbär embeway sert à repousser les mouches mais empêche l’encre de sécher régulièrement: elle durcit en surface et reste liquide par dessous, de sorte que, si une mouche un peu forte s’y prend les pattes elle peut crever la pellicule

\(^{10}\) “When the scribe writes outside, it is obvious that the ink is exposed to insects, especially flies. To keep them away, he pours a drop of juice extracted from *ambio* (*Solanum campylacanthum*) fruit into the ink.” Sergew Hable Selassie, *Bookmaking in Ethiopia*, 21.

\(^{11}\) “The only other ingredient normally added is a natural insecticide to keep flies away; the juice of the fruit of certain *Solanum* species is frequently used.” Mellors and Parsons, *Ethiopian Bookmaking*, 12.
superficielle et entraîner l’encre sur la page.” To get rid of parasites, one can incorporate the sap of aloe or ḡābār ḍembway. This, however, is dangerous because it provokes cracks in the paint added on top.

Qes Meselaney (Andabet) adds Astanaga (*Datura stramonium*), whereas Qes Abebaw Kebede (Imreha) used instead the juice of the *gulo* leaf (see recipe, 5.1.1).

### 5.1.1 Recipes

**Melaka Ṣehai Keleşmaryam Abbay**

In a small pan on a charcoal stove, Melaka Ṣehai (Axum) roasts maize (a small handful, fig. 5.3a), then adds the leaves of *ku’alo* and *dashosh* (fig. 5.3b). The leaves are supposed to add shine to the black. Once they are thoroughly blackened, a palmful of wheat is added (fig. 5.3e), and once that has had time to blacken, split lentils are thrown in as well (see the ingredients in fig. 5.3d and the addition of the lentils in fig. 5.4a). *Endadit* (gum, fig. 5.3f), in five small chunks smaller than a fingertip, is thrown

12. “Ripe or green fruits of ḡābār ḍembway (*Solanum marginatum*), cut into quarters, are added to the [water for boiling the grain] and the preparation is placed upon a fire and allowed to boil for a short time.” Godet, “Une méthode traditionnelle de préparation de l’encre noir en Ethiopie,” 213; “Ḡābār ḍembway serves to repel flies but prevents the ink from drying evenly: it hardens on the surface and remains liquid below, such that, if a mildly-strong fly is caught by the feet, it is able to break this thin layer and trail ink on the page.” Godet, “Une méthode traditionnelle de préparation de l’encre noir en Ethiopie,” 213.

Figure 5.2: Fermenting Time Ranges.
Table 5.2: Recipes for Black Ink.

<table>
<thead>
<tr>
<th>Informant</th>
<th>Location</th>
<th>Source of Colour</th>
<th>Other Ingredients</th>
<th>Weeks</th>
<th>Cite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mäzämmǝr Wolde Kirkos</td>
<td>Gondär</td>
<td>charcoal, soot, wheat</td>
<td>water</td>
<td>8–12–24</td>
<td>Tournerie, 118</td>
</tr>
<tr>
<td>Mäzämmǝr Kirkos Wolde Mariam</td>
<td>Goğğam</td>
<td>soot, roasted leaves and bark</td>
<td>harur</td>
<td>20–24</td>
<td>Tournerie, 118</td>
</tr>
<tr>
<td>Liqä Sältanat Hapte Mariam</td>
<td>Gondär</td>
<td>soot, roasted leaves, bark, and</td>
<td>seeds, gum, harur/qitran</td>
<td>12–24</td>
<td>Tournerie, 118–119</td>
</tr>
<tr>
<td>Workeneh</td>
<td></td>
<td>sheep horn</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abba Kidane Maryam Getahun</td>
<td></td>
<td>soot, charcoal, wheat</td>
<td>harur, gum</td>
<td></td>
<td>Tournerie, 119–120</td>
</tr>
<tr>
<td>Ato Alemayehu Moges</td>
<td>Gondär/Addis Abāba</td>
<td>soot, roasted leaves, barley, shəm-bäqo</td>
<td>water, gum</td>
<td>24</td>
<td>Tournerie, 120</td>
</tr>
<tr>
<td>Ato Alemayehu Moges</td>
<td>Gondär/Addis Abāba</td>
<td>wood, soot</td>
<td>gum, harur</td>
<td>≤24</td>
<td>Tournerie, 120</td>
</tr>
<tr>
<td>Ato Alemayehu Moges</td>
<td>Gondär/Addis Abāba</td>
<td>grass soot, soot</td>
<td>harur</td>
<td></td>
<td>Tournerie, 121</td>
</tr>
<tr>
<td>Mekuria Degu</td>
<td>Šawa</td>
<td>grain, grass, seeds</td>
<td>water</td>
<td>4</td>
<td>Tournerie, 121</td>
</tr>
<tr>
<td>Aläqa Desta Teckle Wold</td>
<td></td>
<td>soot, roasted leaves, barley, wheat</td>
<td>harur, gum</td>
<td></td>
<td>Tournerie, 121–122</td>
</tr>
<tr>
<td>Mäzämmǝr Hailu Man Wasinot</td>
<td>Selale, Sire Medhane Alem</td>
<td>grass, wheat</td>
<td>harur</td>
<td>4+</td>
<td>Tournerie, 122</td>
</tr>
<tr>
<td>Mäzämmǝr Hailu Man Wasinot</td>
<td>Selale, Sire Medhane Alem</td>
<td>wheat, barley</td>
<td>harur</td>
<td>2</td>
<td>Tournerie, 122</td>
</tr>
<tr>
<td>Mäzämmǝr Hailu Man Wasinot</td>
<td>Selale, Sire Medhane Alem</td>
<td>wood, leaves, seeds</td>
<td>water</td>
<td>3</td>
<td>Tournerie, 122–123</td>
</tr>
</tbody>
</table>

(Continued on next page)
Recipes for Black Ink. *continued*

<table>
<thead>
<tr>
<th>Informant</th>
<th>Location</th>
<th>Source of Colour</th>
<th>Other Ingredients</th>
<th>Weeks</th>
<th>Cite</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Marigeta Tsege Tesfa Hunezu</em></td>
<td>Däbrä Tabor, Gondär</td>
<td>wood, barley, soot, seeds, fruit</td>
<td><em>harur</em>, gum</td>
<td>20</td>
<td>Tournerie, 123–124</td>
</tr>
<tr>
<td><em>Marigeta Tsege Tesfa Hunezu</em></td>
<td>Däbrä Tabor, Gondär</td>
<td>wood, soot</td>
<td>gum</td>
<td></td>
<td>Tournerie, 124</td>
</tr>
<tr>
<td><em>Abba Wudu Kidane Mariam</em></td>
<td></td>
<td>soot, grass, grain</td>
<td><em>harur</em></td>
<td></td>
<td>Tournerie, 124–125</td>
</tr>
<tr>
<td><em>Abba Wudu Kidane Mariam</em></td>
<td></td>
<td>soot, leaves</td>
<td><em>harur</em>, gum</td>
<td>12–24</td>
<td>Tournerie, 125</td>
</tr>
<tr>
<td><em>Abba Wudu Kidane Mariam</em></td>
<td></td>
<td>wood, roasted leaves, seeds, dried ox blood</td>
<td><em>harur</em>, gum</td>
<td></td>
<td>Tournerie, 125</td>
</tr>
<tr>
<td><em>Aläqa Gebre Salassie &amp; Aläqa</em></td>
<td>Selale and Menz</td>
<td>roots, branches, stalks, soot</td>
<td>gum</td>
<td></td>
<td>Tournerie, 126</td>
</tr>
<tr>
<td>Wolde Medhin</td>
<td></td>
<td>soot, metal rust, black sheep horn, black goat hair, leaves</td>
<td><em>zebeb</em> (dried grapes in water), <em>harur</em>, salt, butter</td>
<td>4+</td>
<td>Tournerie, 126</td>
</tr>
<tr>
<td>Jacques Mercier</td>
<td></td>
<td>roasted wheat stems, wheat, (mineral dyes, manganese)</td>
<td>garlic, myrrh, gum, <em>aräg</em></td>
<td>4–7</td>
<td>Godet 1982b,</td>
</tr>
<tr>
<td>Eric Godet</td>
<td>Addis Abäba</td>
<td></td>
<td><em>resa</em>, clinker, thorny creeper, <em>Solanum</em> fruits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sydney Cockerell</td>
<td>Addis Abäba</td>
<td>leaves</td>
<td></td>
<td>24+</td>
<td>Cockerell, 6</td>
</tr>
</tbody>
</table>
in once it has cooked somewhat longer. These ingredients seem to be added in order of how long they will take to become thoroughly carbonized, with the exception of the leaves and gum.

Once all of the contents of the pan are thoroughly carbonized (fig. 5.4a), but not all of the endadit has melted away into the mixture, as much of a white admixture of powdered leaves and soil (fig. 5.3c) is added to the pan as is already in it. This mixture is then carbonized along with the rest, and its presence leads to a “strong” ink. It was somewhat obscure what was in the mix, and no specifics were given. Once that has blackened, as much ground nug (an oil-seed, *Guizotia abyssinica*) is added as was the case with the white mixture. The oil from the nug starts to be extracted, and with a flaming piece of straw lit in the fire, Melaka Šehai sets the oil in the pan on fire, as with a flambé. It flames impressively for some time (fig. 5.4b, 5.4c), and after a few minutes have passed and it has not gone out, he douses the flame with some old black ink that is of inferior quality, recycling its colour for the new ink that he is making (fig. 5.4d). The mixture in the pan is ground into a paste over the fire. Water is added, and the mixture is left on the fire a bit longer. At this point, he says there are two options: one may boil it for an hour over the fire, which makes a sufficient, but inferior quality of ink, or one may leave it in the sun, stirring occasionally, for 10-14 days, or even up to a year (presumably adding more water, as needed, as per other recipes), with longer times making a better, blacker ink. The ink is strained through a cloth (fig. 5.4e) into a receptacle, and further heated on the fire (fig. 5.4f) before it is ready to use.

*Marigeta Birhane, Mäqīlā*

Birhane buys black ink from a contact in Tembien, but knows how to make it.

Burn grain, excess fat, and a local plant, put the resulting burned material in water for one month, stirring and adding water every day. Optionally one may add *tasses* to the mix (Birhane does not).
(a) The pan with maize in it.  
(b) Leaves (ku’alo or dadhosh).
(c) Mixture of leaves and white earth.  
(d) Maize, lentils, and nug.
(e) Wheat.  
(f) endadit (gum).

Figure 5.3: Materials ready for the inkmaking process. Melaka Šehai, Axum.
(a) Lentils added to carbonized grain.

(b) Melaka Šehai stirring.

(c) Burning off the *nug* oil.

(d) The quenched mixture.

(e) Straining the liquid through a cloth.

(f) Heating the strained liquid.

Figure 5.4: Finishing the cooking process. Axum.
Figure 5.5: Inkmaking. (a)–(b) Bahar Dar. (c) Andabet. (d) Gondar.

(a) Ink sitting in the sun.
(b) Dried skin and thick sludgy ink underneath.
(c) Dedicated ink pot and stirrer.
(d) Roasted barley in water, for rehydrating dried ink.
Marigeta Te’ubo, Lalibela

Te’ubo says that black ink may be made out of charred *kikita* (*Dodonea viscosa*\(^{15}\)) or oliveleaf, the internal components of batteries, or burnt tires.

Qes Abebaw Kebede

Qes Abebaw makes black ink from the leaves of *ayt arag* and the *gulo* tree, with roasted *enkurdat* (a type of crop). The leaves are juiced, the roasted crop is ground fine and mixed with water, and the mixture is left to sit. He prefers to wait three months for books that will see church use, but as little as a week for “small” books (referring to cheap popular texts such as the *Lefafa Tsedq*). The juice of the *gulo* leaf is added to protect from flies.

Solomon Woldegabriel

Solomon, a Mäq̲älä University student, and son of the Axum craftsman Woldegabriel GebreTsadkan, wrote out a recipe in English: “Different local leaves, sheep horns, ox foot, small pieces of from skin all this mixed after that to put on fire, after that to made by heavy things up to change to powder. After that at the clear material to put and add water to made by hand and also fire heat kind of food crope also mixed after two week mixed Grare plant to mixed by hand because it gets the colour pure and not feid.”\(^{16}\)

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15. Identification after Tournerie, *Colour and Dye*.

16. I believe the recipe is to be interpreted thus: “Different local leaves, horns of sheep, ox-foot, and small pieces of parchment or leather are mixed (in a heavy pan) and put on a fire. After blackening, the resulting carbon is ground to a powder in a mortar. The result is separated, and water is added to the powder. The solution is mixed by hand and heated over a fire. After two weeks, the liquid from roasted barley is added, as well as the *Grare* plant (*Acacia dolichocephala*?), which will make the color pure and not fade.”
5.2 Red Ink

Recipes for red ink were known by significantly fewer informants than black ink. Whereas the majority of scribes interviewed were using black ink made in the traditional way (even if from modern materials, in the case of battery black), the majority of the red ink used was commercial in origin, and even those who knew the methods of making red ink did not necessarily produce it for themselves. Those who produced red ink used three main inputs: soil or rock (ochre), roots, and red flowers. Of the inputs, ochre seemed to be the least-valued, used in greater quantity when there is a limited supply of the other inputs, but informants did say that the various components were useful in maintaining a consistent red color without fading over time, as various components contributed varying amounts of intensity and longevity. Virtually all the scribes stabilized their red inks, whatever the inputs, with a gum, ꥓ꥣꥣꥣ ꦶꥻ ꦸꥻꥣꥣ, much more consistently than for black ink. The inputs for red ink are comparatively harder to acquire than for the black; given the the relative availability of quality red inks and dyestuffs, inexpensive and needed in limited quantities, the preference for the purchase of red ink is easily understandable. It is also possible that the importation of red ink has been ongoing for a much longer historical period, coincident with the importation of vermillion and other colorants for painting, making the production of red a more marginal practice in a historical, as well as a modernization, context. Anaïs Wion, through the use of Raman microspectometry, has found cinnabar/vermillion used as a pigment and in rubrications in Paris B.N. Eth. Abb. 114, a 17th-century Miracles of Mary.17

Marigeta Birhane, Mäqäßä

Birhane makes red ink from a combination of two colours of dye from the marketplace, to which he adds water and ꧰ꥣꥣꥣ ꥣꥳ (gum).

Solomon Woldegabriel

Different plants (Enjory fruit, red flower) / to be made with mucha for one month to change as colour or within Ensosla/Hina (Amharic) / Sasla (Tigrinya), red soil, Enchurur (a plant) to be made.\(^{18}\)

5.3 Golden Ink

Golden ink is not to be found in many surviving manuscripts, and may not have been widely used in the past. It does, however, occupy a significant place in the thinking about manuscripts, specifically through its inclusion in the *ልፋፈ፡ጽድቅ* Lǝfafä Ṣǝdǝq known in English as the *Bandlet of Righteousness*, where it is the deluxe ink of Jesus himself, writing a book for his mother Mary. It is recorded in the *Bandlet*, about its origin: *ወጸሐ፲፡ኢየሱስ፡ክርስቶስ፡በቀለመ፡ወርቅ*: “Jesus Christ wrote [it] with ink of gold.”\(^{19}\) Other sources attest to the use and awareness of golden ink, specifically two miracles in the *Miracles of Mary*, a work translated from Arabic in the 15\(^{th}\) century but then expanded with local Ethiopian miracles. The first miracle below has a foreign source:

**MIRACLE IV: THE VIRGIN MARY AND THE SCRIBE DAMIANUS:**

Now there was a certain monk named Damianus who dwelt in the city of Philippi, and he loved our holy Lady, the VIRGIN MARY, from the depth of his heart, and he served her with all his power and strength, and he kept vigil in her church by day and by night. And that monk was a scribe, and it came to pass that, as he was copying the manuscripts [of her History], every time he had to make mention [of the name] of the Lady MARY he

\(^{18}\) My understanding is thus: various red parts of plants (roots and petals of red flowers are often mentioned) are ground and mixed with water and gum for one month, or until the freshness of the colour fades, and the colour is taken up by the liquid. Ground stones or red earth are also added to the mixture; I was informed by Qes Te’ubo that the earthen colours stay after the vegetable colours fade.

The translation of a miracle from Arabic from a collection which circulated in other languages cannot itself be evidence of the use of gold in manuscripts, but it may suggest that gold ink is considered appropriate to Ethiopian use, when read in the context of the deluxe status of golden ink in the Bandlet and, more specifically, the knowledge that the list of inks “…made of gold and silver, and with rose-coloured paint, and with divers splendid colours…” has been translated differently from the other versions. Other versions disagree about the colours:

...tribus coloribus, auro, minio, croco... \(^{21}\)  ...in three colours: gold, vermilion, saffron-yellow...

Another Latin version:

...sacratissime virginis nomen triplex colore pinge-bat. Quod scriptum auro, aduro, croco, vel tyro, et absque colore nigro... \(^{22}\)

The different colour-lists may be suggestive of different local prestige colours. *Crocus* does not seem to have the same cachet in Ethiopia as it did in the Latin West (though *nazward*, the “rosy...
colour" of Budge's translation, could refer to either red or the same Tyrian purple as the Latin source).

Problematically, silver as a colour is also not in evidence, and the source leaves much to be desired.

A specifically Ethiopian miracle in the Tääërämëræ Maryam or Miracles of Mary, referring to the time of Dawit I, which focuses on the use of gold ink is more explicitly helpful, as it directly attests to the use of gold ink in Ethiopia:

Listen carefully to what I have to tell you concerning the wonderful miracle which was performed for King Dawit. God's beloved one, (who is called Constantine) with the prayer of our Lady, the two-fold Virgin Mary, the Mother of God. Miracles used to occur to him since his childhood and if they had been written in a book, it would be as big as an Octateuch. There once was an intelligent young man engaged in translating books from Arabic into Ge'ez. He prepared gold ink for the palace, with which to write the names of our Lady, the two-fold Virgin Mary, the Mother of God, and for the illumination of her dress in miniature, because the heart of the king was burned with love for Her. So the king's book which was to have gold ink for our Lady's name was begun, but the gold ink which the man had prepared wanted. The king told the young man: “Prepare gold ink for the ornamentation of the dress of our lady, Holy two-fold Virgin Mary, the Mother of God.” He replied: “I have no utensils to prepare gold ink, my country is far away and it takes a long time to bring them.”

The king said: “Do it quickly because I long to see the completion of the book.” The young man, because he was afraid of the king, prepared gold ink in a utensil which was not the appropriate one. The colour of the ink became like earth. The young man was sad when he saw the colour of the gold ink. He said: “How can I face the king? Surely he would be grieved to see this gold ink.” Indeed when the king saw that the gold ink was wasted he was deeply grieved and he did not know what to do. He wept in front of (the picture)
of his Lady saying: “O my Lady is that because of my sins or do you not wish it?” The man who prepared the ink was also very depressed by the grief of the king and with a heavy heart he went to his bed to sleep. When it was midnight he saw in his dream a man in the image of a Roman who stood near him to comfort him. The Roman asked: “Why are you sad young man?” The man who had prepared the gold ink replied: “I am very sad because the gold ink is wasted and this is also why the king is very sad.” The image asked the painter: “Why is the king sad? Because he loves our Lady, Holy two-fold Virgin Mary the Mother of God very much, or because she loves him very much? No do not be sad anymore, but tell me whether you have a white stone to brighten the colour?” He replied: “I do not have one.” The Roman pulled from his cloth a bright white stone and ground it into a powder in a mortar, boiled the gold and put into it the dust of the stone. The dust disappeared and the gold ink became clear. At this point the young man awoke and wondered about what he had seen in his dream. He went to the bishop (to inquire) whether that stone he saw in his dream was to be found with him. He asked the bishop: “Do you have a bright white stone?” He described it. The bishop replied: “It does not exist here, but is found in the country of Zémat. If there is one here, they will fetch it for you.” When they opened the first chest, they found the stone in it just at the top. The young man took that stone, he ground it as he had seen in his dream and put it into the gold ink. Its rust colour disappeared and it became bright and shining. The young man was happy and he went leaping to the king to tell him about the miracle. The king rejoiced too and praised the God of Israel...
Mercier identifies the manuscript in question as an early 15th-century *Miracles of Mary* at the Church of Geshän (Geshän Maryam). The manuscript so identified does indeed have golden ink for the ornamentation of the dress of the Virgin (see image). This suggests we can take the original's identification of qālāmā wārq "gold ink" at face value, as actually representing ink made of gold, which makes the narrative problematic, as the intervention of the white stone seems unnecessary: Cennini says that one can simply grind gold with gum arabic to write on parchment, or use an egg tempera, with minimal preparation:

How to grind gold and silver for use as colors: If you want to work with gold on a panel, or on parchment, or on wall, or anywhere else, but not all solid like gold ground...take a number of leaves of fine gold according to the work which you want to do, or to write, with it; say, ten or twenty leaves. Put them on your porphyry slab, and work this gold up well with some well-beaten white of egg; and then put it into a little glazed dish. Put in enough tempera to make it flow from the quill or the brush; and you may do any work you want with it. You may likewise grind it with gum arabic, for use on parchment.

A similar recipe is attested in Abu'l-'Abbas Abmed ibn Muḥammed al Sufyani, *Art of Bookbinding and of Gilding* (1619):

Take a leaf of the gold with which they write, and rub it well until it is ready. If there is little gold or more, like one or two mithqals, rub it in a glass dish having a flat, deep bottom. When honey becomes doughlike, rub it with wood of a light type until it is well prepared. Pour water on it; stir it. Leave it for a short time. Pour water on it in another glass vessel; do so gently. Add other water to the gold; let it drip on thepreceding first water. Repeat the pouring of the water and the dripping until the good of the honey comes out so that no sweetness is left in it. Then raise the vessel containing the gold onto hot ashes until it is dry with no moistness remaining in it. Then remove it and protect it from dust and insects which eat all they find with the smell of honey.

Let us return to discussion of the water you clarified from the gold. Leave it in the vessel overnight. When morning comes, you find that the gold which flowed with the water,

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24. Translated by Sergew Hable Selassie, *Bookmaking in Ethiopia*, 16.


is stuck to the bottom of the vessel on the glass. The water of the honey floats on top. Decant the water from the gold which is stuck. It is not moved. When you decant the water from it, grasp it between your fingers and add other water to it. After an hour, clarify it and let it drip into the vessel from which you write. It is a small glass vessel, pretty in appearance. Add to it what you wish of that dry dissolved gold, more or less, in the amount necessary and desired for writing. Work gum arabic into it in a measure that satisfies you, or fish glue if it is available. Soak it in water; make a wool liq and stir it with the pen. When it is dry on the paper, rub it with an oyster shell.²⁷

Anita Chowdry has reported that an essentially similar recipe is still used by Islamic painters in the city of Jaipur, India.²⁸ In it, honey and gum are spread on a plate, and sheets of gold are ground in with the hand, until the desired consistency is reached, and the mixture is washed, making it ready to be mixed with a little gum and used as paint. Her experience suggests that “the particles which wear off the tools [when using a mortar and pestle] irretrievably adulterate the gold,” suggesting one possible interpretation for the assertion, in the story, that the scribe used the wrong vessel. Any such application of gold would require burnishing once on the page (this is what the oyster shell in the recipe above is being used for), but the stone in the story is ground, not used in rubbing, so the nature of the white stone remains mysterious in the context of a basic recipe for the production of ink out of gold.

Moving up in complexity, Al-Mu‘izz ibn Badis, in his Staff of the Scribes and Implements of the Discerning with a Description of the Line, the Pens, Soot Inks, Liq, Gall Inks, Dyeing, and Details of Book-binding (1671) lists, as his first recipe for gold inks:

Seventh Chapter: On the Writing Art with Gold, Silver, Copper, Tin, and their Substitutes: Section on solution of the gold: Pure gold is beaten to a thin leaf. It is then cut up into small pieces. On it is poured borax. The fire is then introduced and blown on it until melted. It is then rubbed with a stone until it becomes like butter. It is then gathered and pressed until the liquid comes out and the gold remains. It is then returned


to the rubbing stone and rubbed again with water of alum used for wool and Andardan salt, table salt, and Greek vitriol. If its color is pleasing, then it is completed. Write with it like ink. It is good.²⁹

This recipe satisfies many of the requirements of the story, as borax is a particularly white stone which would be foreign to highland Ethiopia. It falls down, however, in the added complexity of the recipe: not only does the recipe call for “water of alum used for wool and Andardan salt, table salt, and Greek vitriol,” but it also requires the mixing of borax as a precondition for the recipe, not as a remedy for a mis-preparation. It could be argued that the use of borax was to correct an ink of the first preparation spoiled by grit from an improper container, necessitating a different approach. This recipe, and the attendant use of borax, remain strong contenders for an explanation of the process described in the miracle story the making of an ink literally out of gold.

If we are willing to abandon the literal use of gold as a pigment, another explanation which quite fits the story, opens up for us. Orpiment, a bright yellow sulfide of arsenic (As₂S₃) has been referred to as gold by Romans and Persians equally: Latin *auripigmentum* “gold pigment” and Persian *zarnikh* “-gold.” Cennini refers to it as “a handsome yellow more closely resembling gold than any other color.”³⁰ The second recipe for gold presented by Al-Mu‘izz ibn Badis, is based upon orpiment (with additions of “yellow sulphur, white alum, and wax...saffron...gum, and dissolved mica”).³¹

**Examples of Golden Ink**

Very few manuscripts with golden ink are known and documented. Aside from the Golden Gospels of Geshän Maryam (discussed above), I am only aware of the following: Däbrä Marqos MS. 02, a copy of the *yä́däbrä werq mä́ızgä́b* from the 19th or 20th century uses golden ink for the name of Mary

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²⁹ Levey, “Mediaeval Arabic Bookmaking and Its Relation to Early Chemistry and Pharmacology,” 32.


(fig. 5.6). Interestingly, the ground of the gold ink varies, with green (fig. 5.6a), red (fig. 5.6b), and alternating green-and-red (fig. 5.6c) in evidence, as well as the name of Mary written in red without gold (fig. 5.6a).

Gold is used in Kebran Gabriel manuscripts:32 Kebran Gabriel MS. 1, a copy of the Gospels from the 14th/15th century, has gold leaf used for haloes (fig. 5.7).33 Keši Teklay G/Kristos (Axum) has a manuscript made by his father that uses gold paint in a haräg (fig. 5.8). He says that his father would use gold paint for some church paintings, but that he (Teklay) had never used gold paint. Other scribes had mentioned that gold paint had been imported from Italy in the past, but that it was no longer available on the market.

A typed note in Addis Abäba, IES MS. 1780, unattributed, states that “some words are written in golden ink, a practice of the medieval period but certainly quite rare.” It does not cite any sources for the assertion that golden ink is “a practice of the medieval period”; from images it is hard to identify the gold definitively at all. Upon inspection, it looks like a brownish or yellow ink on an orange ground, but gives no particular appearance of being metallic or golden at all.


(a) With a green ground.

(b) With a red ground and in red ink. Note also the insertion, entered above the line.

(c) With a green ground and in alternating red and green ink.

Figure 5.6: "አርዳም" written in gold ink. Däbrä Marqos MS 02.
Figure 5.7: Baptism of Christ, Kebran 1 Gospels.

Figure 5.8: A book by the father of Keši Teklay G/Kristos, with a harāg of golden ink. 20th century. (Axum)
Chapter 6

Binding

The binding of Ethiopian books appears to survive little-changed from the late Coptic context of its introduction to Ethiopia with Christianity.

6.1 Sewing

Szirmai’s discussion of the Ethiopian codex, modified by some aspects of his material on Late Coptic codices, remains the single most authoritative treatment of sewing and binding practices for Ethiopian manuscripts.1 The basic elements of his treatment will be summarized here, along with some additions.

As discussed in section 4.1.1, quires are tacketed together to keep them organized before sewing, and the complete work will often be bound together by a cord or string in the correct order while awaiting the binding process. The tackets are kept on the quire throughout the sewing process, and removed afterwards (see fig. 6.1).2

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2. Note, for example, that the holes identified as traces of endbands in EMIP 15, which “appear in virtually all quires (whether in leather bound or unbound books,” are more probably from quire tackets, which, unlike endbands, are “a standard part of the preparation of sheets into quires for books.” Delamarter and Melaku Terefe, *Ethiopian Scribal Practice 1*, 27: pl. 16; double holes would be
Figure 6.1: Cutting off the quire tackets after sewing. Marigeta Ḥaylā Sāllase, Māqālā.

Figure 6.2: Sewing pattern. Illustration by Mélanie Brunet.
Ethiopian books are sewn with a simple stitch, called the “link” or “chain” stitch (this style of binding is sometimes referred to as “coptic,” though there is a wider variety of coptic styles, as discussed by Szirmai). Figure 6.2 shows this basic pattern, comprising one pair of sewing stations (and assuming the lowest quire represents the boards). When setting up the quires for sewing, the boards (if available) and the quires are held up next to each other and marked for the sewing stations. A very small book will have one set of paired sewing stations (consisting of two chains), a moderate-sized book (roughly corresponding to octavo or quarto sizes) will have two paired stations (four chains), whereas a large book, such as the Sənkassar, may have three or more pairs (six to eight chains).

Certain small books may be sewn in a different pattern, with three stations, as in fig. 6.3, which may be seen to correspond to Szirmai’s discussion of similar binding styles, but note that fig. 6.3 shows both threads linking down, instead of just one, as in Szirmai’s fig. 2.4. Paterson, who investigated 103 bindings in North American collections, observed that 6.9% of bindings in the sample and 6.3% of 229 bindings digitally analysed in the SGD collection, were sewn on three stations, and characterized two distinct variants, which relate to whether both threads pass through the centre station or only one of them.

Threads for sewing are traditionally made of home-spun cotton, ox-tendon, or rolled strips of parchment. Linen is attested by Szirmai, and Lester Capon has reported that linen thread was used more characteristic of missing endbands.


4. Ibid., 22:fig 2.4.

5. “it is apparent the thread is coming out of station three originally hooked under the thread coming out of station two....I found that stations one and two were probably sewn in the tradition with needles at each end of the thread. Station three is sewn with a single needle that passes underneath the thread exiting the center hole. The needle then returns to the third sewing hole and exits, linking down with the previous section.” Dan Paterson, “An Investigation and Treatment of an Uncommon Ethiopian Binding and Consideration of its Historical Context,” *The Book and Paper Group Annual* 27 (2008): 58.

in the binding of the Gospels of Ţinda Abba Gärima. Many have identified the material of the sewing threads as “catgut,” but Szirmai has suggested that much of what is identified as catgut may be waxed vegetable-based thread. The literal use of intestines is attested by both Cockerell and Sergew, however. Mellors and Parsons, while noting that traditionally “sewing thread was made from animal tendons, typically from the thighs of cattle,” say that “Today, it is more common to use synthetic material such as thread picked from woven plastic sacking or cording stripped from the inside of car tyres. ... Opinions differed as to the relative merits of these different threads.” Cotton spinning is a usual domestic occupation of women, and would be available as a household product; spinning is not unknown to men, as evidenced by Marigeta Melaka Tadesse Tedlā (Čelāqwot Salasse) who produced his own cotton thread for binding on occasion. Ox tendon as a binding thread begins (as demonstrated by Marigeta Asnak, Gälawdiwos) by pounding thigh tendons of oxen between two wooden boards until they are reduced to fine strands. These strands are rolled against the thigh to make them into threads, which may then be twisted together. Ox tendon is still used by Marigeta As-

7. Szirmai, The Archaeology of Medieval Bookbinding, 48; Capon, “Extreme Bookbinding.”


nak (Gälawdiwos) but may not be preferred, due to the fact that rats apparently are more attracted to eat the tendon than other materials.\footnote{12} Many scribes used thin strips of waste parchment for tacketing quires together, but parchment may also be used as a primary binding material, as was observed being done by Marigeta Ḥaylä Šallase (Mägälä). Parchment is cut into very thin strips and then rolled, which transforms the flat strip into a twist (see figs. 6.1 and 6.4). Modern materials, such as threads sold in the market and much used by leatherworkers, are much favoured in recent use.

The tools of the binder\footnote{13} are simple: Ethiopian sewing may be accomplished solely with the use of awls (as demonstrated by Marigeta Ḥaylä Šallase) or with the additional use of needles (as demonstrated by Liqä Kahonat Ajugu). When the binder uses only awls, the holes are punched with the awl, and then the length of thread is doubled over and this bight is pushed through using the awls. In the case that needles are used, the hole is still punched with the awl, and the needle serves to guide the thread through the hole.

When boards are available at the beginning of the process, they may be sewn on first, using a bridle attachment to secure the thread to the wood, or lengths of thread may be left for later attachment of the boards, should they not be available at the time of sewing. A number of guardleaves,\footnote{14} (blank leaves, though sometimes recycled) are usually added to the text block to protect it. On more deluxe manuscripts, the number of these may be higher, as it is a common practice to write in the blank space at the beginning and ends of manuscripts; in this way, prayers, property transactions, death notices, and information relevant to the community that owned the manuscript is preserved.\footnote{15}

\footnote{12} Personal communication from John Mellors.

\footnote{13} “The person wholly or partially responsible for sewing a codex together and supplying it with covers” is called the ḥêtāč kätach. Mersha Alehegne, “Towards a Glossary of Ethiopian Manuscript Culture and Practice,” 153.

\footnote{14} የርጋር ገበር, የጯጎጉጉ ከጠበቂያ፡ብራና, የክተደንት ከጠበቂያ፡ልባስ. ibid., 150, 154, 159.

\footnote{15} A specific category of Gospel manuscript, known as a “Golden Gospel,” is defined by its status as a depository for such notations. Uhlig and Bausi, Encyclopaedia Aethiopica, s. v. “Wängelä wärq.”
Once the text block is sewn together, binders sometimes, but not always, trim the head and tail of the manuscript. Occasionally, clear marks of the passage of the knife survive to be seen on the edges of manuscripts. Since all of the pages have been cut from the same template (see section 3.5.2), there should be little need for trimming, and there are many manuscripts that show no evidence of trimming, as they have slight height variations between and within quires.

6.2 Boards

Boards for Ethiopian manuscripts are generally wood, and historically olive-wood (wayra) has been preferred. The wood for the boards is roughly prepared from split logs, in a manner similar to quartersawing, but apparently historically without the saw. As Ethiopia has become more deforested, olive-wood has become scarcer, and the wood of wanza (Cordia africana) has become favoured for use, as it is light and strong. Cedar was also valued for its insect-resistant properties. Mersha lists the following types of wood used for boards: “wanza, gätäm, koso, warka, girar bisanna.”


17. በፉ ግበታ. ibid., 151.

18. ድጉ, Cordia africana.

19. ድጉ

20. በባ ከሃንያስ እብይስ. See Uhlig and Bausi, Encyclopaedia Aethiopica, s. v. “Koso.”

21. ከጉ, a Ficus (various species).

22. ድራ እጉ, acacia (various species of Acacia), but እጉ grar in Thomas Leiper Kane, Amharic-English Dictionary (Wiesbaden: Harrassowitz, 1990), 1931.

23. ላባCroton macrostachyus.

(a) Spine and stitching.

(b) Interior of quire. Two threads on each side of the central hole.

Figure 6.3: Binding in three chains.
Mellors and Parsons have additionally documented that “acacia (Acacia spp.), cactus,\(^{25}\) eucalyptus (Eucalyptus sp.),\(^{26}\) haya (Salix subserrata), juniper (Juniperus spp.),\(^{27}\) lol (Ekebergia capensis)... and zagba (Podocarpus gracilior) have also been used.”\(^{28}\) Modern books occasionally use plywood

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25. By which is meant *Euphorbia*, an old-world species without leaves, but with a woodier body than a cactus. There are 99 species of *Euphorbia* in Ethiopia. M. G. Gilbert, “Six New Species of *Euphorbia* (Subgenus Esula) from Ethiopia,” *Kew Bulletin* 45, no. 2 (1990): Mellors clarified: “The scribes said that they didn’t really like to use it but if nothing else was available.” Personal communication, November 2013.

26. የባሸር፡ወቅ *bahr zaf*. See also Uhlig and Bausi, *Encyclopaedia Aethiopica*, s. v. “Eucalyptus.”

27. ከወድ *tad*. See also ibid., s. v. “Juniper.”

(a) *Marigeta* Asnak making holes in a board.  
(b) Holes for a bridle attachment.

Figure 6.5: Punching holes in boards. *Marigeta* Asnak, Gälawiwos.

Figure 6.6: Board attachment.
(a) Attachment and repair of boards. Note the vertical orientation of the grain.

(b) Parchment spine guard.

Figure 6.7: Manuscript in the possession of Keši Daniel, MÄqäälä.
or other modern, milled wood in place of the traditional, hand-carved pieces. It varies whether the binders harvest the wood themselves, but since there does not seem to be a dedicated lumber industry in most areas, it seems likely that this would be the case historically. The wood is shaped by axe or adze and then with a knife, according to Sergew with the assistance of softening in water, before being rubbed with wax on both sides of the board and polished with a cloth. This rough way of forming the boards may account for the general thickness of boards on Ethiopian codices, and certainly for their irregular appearance. Boards for manuscripts are almost always cut with the grain in a vertical position, as is readily evidenced by the frequent vertical splits which may be seen in the boards of uncovered manuscripts (see, for example, fig. 6.7a). These splits are generally remedied by the use of wire or thread and a pair of holes, which serve to keep the pieces together. Sergew says that in the case of large manuscripts, this same technique may be used to combine smaller pieces of wood into boards of suitable size, “connected with a gut string, sometimes but not often with a bar of iron.” Sergew states that in “over 10,000 manuscripts that have passed through my hands, I have

29. This has caused a departure from traditional board-attachment practices: “All woods are now very difficult to obtain so many books have to be bound in boards purchased from carpenters. Currently thin plywood is popular, but its use has necessitated a change in the traditional sewing technique. Instead of the sewing threads being passed through holes drilled in the edges of the boards the thread passes over a sharp edge onto the top surface of the board; it is likely that this will result in a weakening of the structural aspects of the binding as the sewing thread is more liable to fray or break.” Mellors and Parsons, “Manuscript and Book Production in South Gondar in the Twenty-First Century,” 194–5.

30. Sergew Hable Selassie, Bookmaking in Ethiopia, 24. There is more to be studied about the practice of making boards, regarding the way they are cut, how the choice of wood influences the thickness of the boards, etc. The current author is not very familiar with the Ethiopian lumbering and carpentry practices.

31. Delamarter states that “Well over 95 percent of all Ethiopian books employ standard practice when it comes to wooden covers: the traditional heavy and tight-grained wood with the grain running from top to bottom.” While the exact source of this percentage is unclear, it does reflect general observation of large collections of work. Delamarter and Melaku Terefe, Ethiopian Scribal Practice 1, 53.

32. Sergew Hable Selassie, Bookmaking in Ethiopia, 24. I have similarly noted iron pieces holding boards together in larger manuscripts.
not noticed one which bears a decoration on the surface of the boards.” Interestingly, Nosnitsin has documented a nineteenth-century Miracles of Jesus at Sâbâya Maryam where boards from an earlier manuscript have been re-used and re-covered as boards of the later manuscript, with the original covering evident on the inside of the boards, under the new leather.

Holes in boards are bored simply with with pressure and rotation from an awl (fig. 6.5). Sergew cites the use of a “glow awl” (from which I take him to mean that it is hot), but wanza, especially, is a soft enough wood that it yields with little resistance to the point of an awl, whether hot or cold.

Boards may also be made out of leather (fig. 6.8), specifically a stiff and hard leather, which d’Abbadie says is created by soaking in sour milk. Some manuscripts may be used consistently without any covers, usually as loose quires, sometimes protected by only a single bifolium of parchment. An interesting example of a manuscript with no boards is fig. 6.9, a copy of the Mäṣḥafä Seray

33. Sergew Hable Selassie, Bookmaking in Ethiopia, 24. I have in fact photographed two, a fifteenth-century Dawit with a simple cross pattern on the boards, and another manuscript with an elaborately carved cross in concentric-rectangles of knotwork, now in the cathedral museum in Mäq̲älä. His point, however, stands, as the one manuscript, while exceptional in having any decoration, is thoroughly unexceptional in its substance, whereas the other, exceptional in the substance of its decoration, is likely of no great antiquity, and had a very modern appearance to its colourful painted pattern. Note that Mersha identified “a carved board on which different types of ḥarāgat are engraved” as one of the three types of boards, but I have only seen the one example of elaborately carved boards referred to here. Mersha Alehegne, “Towards a Glossary of Ethiopian Manuscript Culture and Practice,” s. v. “gäbäta.”


35. Sergew Hable Selassie, Bookmaking in Ethiopia, 24. I have personally tested this use of the awl by boring holes in boards of wanza under the direction of Marigeta Asnak (Gälawdiwos).

36. d’Abbadie uses the Amharic word ṭ꙳ mas for tanned hide:

Par économie, les planches sont quelquefois en mas ou peau de vache épaisse, plutôt que tan-
née, par un long séjour dans le lait caillé. For economy, the boards are sometimes of tanned hide or cow-hide which is thickened—rather than tanned—by a long stay in sour milk.

d’Abbadie, Catalogue raisonné de manuscrits éthiopiens appartenant à Antoine d’Abbadie, xi–xii.
which has been folded to form a kind of *vademecum* or pocket-book.

![Dawit with boards of thickened leather](image)

*Figure 6.8: Dawit with boards of thickened leather. Collection of the author. 150 × 180 mm.*

A rare practice is covering the stitches on the spine with a wraparound piece of parchment, as in fig. 6.7. It may be best suited to protecting books which are intended to otherwise remain without boards and it is unclear why it would be used for a book that has them, as it would likely increase the wear on the threads connecting the text-block to the boards. Examples include EMIP 78 and the protective covering of Gärima 1, though the latter seems to have been a later intervention, as opposed to a deliberate binding choice.
Figure 6.9: Folded-quire version of the Māṣḥafā Seray.

6.3 Covering

d’Abbadie notes that “the binding is completed by covering the volume in leather from Arabia, called... bar ārāb, or from Ethiopia, called bar tāmben. The latter, less attractive at first, deteriorates less with age.” The distinction here is presumably that the leather from Tembien is thicker, and therefore sturdier, than fine leather from overseas. The insides of the boards are covered with a square of silken or cotton fabric, historically considered a luxury in Ethiopia, such that “what the Ethiopian kings...desired above all in their daily lives were fine textiles of all sorts, especially silks, from wher-

Figure 6.10: Covering the boards. Marigeta Ḥaylā Śallase, Māqālā
Figure 6.11: Covering the boards. (continued) Marigeta Ḥaylä Šəllase, Mäqālā
Figure 6.12: Decorating the covers on a modern printed book. Marigeta Birhane, Mäqälä
(a) *Marigeta* Birhane's wife assists with managing the tools and stove.

(b) Central cross stamped over the rules.  
(c) The finished cover.

Figure 6.13: Decorating the covers on a modern printed book. *Continued* *Marigeta* Birhane, Mäqälä.
ever they could get them.”

Fine fabrics historically played an important social role in Ethiopia, and the inclusion of fine imported fabrics (especially silk) on the insides of the boards may signal the status of the book.

Ethiopian books, when covered, are generally covered with wet “Morocco” leather, generally produced locally. A piece of leather significantly larger than the book is set down, and a paste made

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38. Gervers continues: “Gifts such as that mentioned by Lobo represented the ‘currency’ of the 17th-century traveller to Ethiopia; they were carried as goodwill offerings to be presented to local potentates in return for food, accommodation, transport, or the right to cross a territory. The more important the donor, and particularly the recipient, the greater the value of the offering.” Michael Gervers, “The Portuguese Import of Luxury Textiles to Ethiopia in the 16th and 17th Centuries and their Subsequent Artistic Influence,” chap. 11 in, 121; Referring to Jerónimo Lobo, The Itinerário of Jerónimo Lobo, ed. M. Gonçalves da Costa, trans. Donald M. Lockhart, Works issued by the Hakluyt Society 2nd series (London: Hakluyt Society, 1984); Cloth was more than just a traveller’s currency, though many travellers have commented on the prestigious role of cloth, especially silk, in Ethiopia. For example, Pearce: “all other districts throughout the kingdom pay the greater part of their tribute in cloths or gold. A carpet, a piece of silk, a matchlock, or any other article, brought into the country by the caravans, is valued and received as cloth or gold.” N. Pearce, J. J. Halls, and W. Coffin, The Life and Adventures of Nathaniel Pearce: Written by Himself, during a Residence in Abyssinia from the Years 1810–1819; Together with Mr Coffin’s Account of his First Visit to Gondar, vol. 1 (London: Colburn and Bentley, 1831), 340–341; Martha Henze expands upon the roles of silks and costly textiles in Martha H. Henze, "Imported Textiles in Ethiopian Traditions," chap. 12 in The Indigenous and the Foreign in Christian Ethiopian Art: on Portuguese-Ethiopian contacts in the 16th–17th centuries, Papers from the fifth International Conference on the History of Ethiopian Art (Arrábida, 26–30 November 1999), ed. Manuel João Ramos and Isabel Boavida (Aldershot: Ashgate, 2004), 135–145; Alvares mentions silken textiles on numerous occasions, and confirms Pearce’s assertion that it is a means of paying taxes. Francisco Alvares, The Prester John of the Indies: a true relation of the lands of the Prester John, being the narrative of the Portuguese embassy to Ethiopia in 1520 written by Father Francisco Alvares, The translation of Lord Stanley of Alderley (1881) revised and edited with additional material, ed. C. F. Beckingham and G. W. B. Huntingford, Works issued by the Hakluyt Society. Second Series, 104–105 (Cambridge: Cambridge University Press for the Hakluyt Society, 1961), 97, 131; Pankhurst writes about the exchange of silk among other types of imported goods used as mediums of exchange. Richard Pankhurst, “‘Primitive Money’ in Ethiopia,” Journal de la Société des Africanistes 32, no. 2 (1962): 213–248.


40. Sergew describes the local tanning process thusly: “The skin is flayed without splitting it
from tef (or other cereals) is spread out on it. The boards are pulled away from the text block (which is tied up) and are put onto the leather. The leather is then folded over, to form a square on the inside of the boards, which reveals the cloth that was laid down earlier, if present. Large turn-ins are a characteristic of the Ethiopian tradition. The leather is trimmed to get rid of excess, then the ruling tool may be used to add a decorative set of lines to the inside which also, due to the force involved, promote binding with the boards. Once the excess has all been discarded, a protective material is put in between the boards/covering and the text block, to prevent the text block from adhering to the boards while the paste dries. At this point, the leather may be polished with a cloth in order to promote adhesion and remove wrinkles (Sergew) or even tapped with a hammer, as demonstrated by Marigeta Ḥaylä Šallase in fig. 6.11b. The whole book is tied together while drying, or pressed under weights (see figs. 6.10 and 6.11).

41. It appears that gum may have been used in the past: “It appears that another type of adhesive was originally used on the binding of manuscript EAP526/1/48. Survey tests by Raman spectroscopy of a sample of the binding substance excluded starch glue and gums and confirmed the presence of elements characteristic of gum resins (tests were carried out by the Faculty of Chemistry of the Warsaw University of Technology). In the absence of relevant chemical samples, however, it was not possible to identify the binder.” Jacek Tomaszewski and Michael Gervers, “Technological Aspects of the Monastic Manuscript Collection at May Wäyni, Ethiopia,” chap. 4 in From Dust to Digital: Ten Years of the Endangered Archives Programme, ed. Maja Kominko (Cambridge: Open Book Publishers, 2015), n18.

42. Sergew Hable Selassie, Bookmaking in Ethiopia, 25.

43. Ibid.
6.4 Endbands

Endbands, *totan*, are sewn into the head and tail of the manuscript, attaching the leather covering more firmly and closing off the spine area of the book; they serve as a point of attachment between the text block and the covering material, since the spine of the book is not otherwise attached to the covering material, the paste only serving to attach the boards. In books without endbands, the cover will in fact separate at the spine, revealing the sewing underneath. Before the endbands are sewn on, the leather at the head and foot of the spine is folded over, such that the exposed leather at the top is a fold and not an edge which might more easily fray. The sewing goes through both thicknesses of leather.

When present in Ethiopian books, they are of the slit-braid style, made out of two small strips of leather by the simple method of puncturing one and inserting the other through it, then doing the same to the other one until there is no more material left, as discussed in Szirmai, though he cites BL Or. 719 as an example which might have had the “tying-down of coloured cords,” though due to age and restoration, the original endbands have been lost. The two pieces of leather to be passed through each other may be of different colours, as in fig. 6.14, but are usually of the same colour, as in fig. 6.16. They may even be made of the same piece of leather, passed back upon itself. The sewing of the endbands, as demonstrated by Keši Gābrā Mādhan (Axum) in fig. 6.15, consists of two staggered running stitches alternating from the endband to a lower part of the quire; it goes down the centre of the quire to the outside of the cover, goes in at the next quire, up to the endband, is passed outside the quire, and is passed into the next quire. The stitching pattern produced is of two running stitches

44. Szirmai, *The Archaeology of Medieval Bookbinding*, 49–50, also fig. 3.10, c–e. A rare alternate style is illustrated in Tomaszewski and Gervers, “Technological Aspects of the Monastic Manuscript Collection at May Wäyni, Ethiopia," fig. 4.22.

one above the other with alternating stitches. The ends of the attached endbands are generally left unsecured and allowed to rest between boards and endleaves. Small guards made of parchment may be used to reinforce the sewing inside the quire; one of these guards is shown in fig. 6.15d.

(a) Obverse.

(b) Reverse.

Figure 6.14: A slit-braid endband ready to be sewn into a book. Marigeta Ḥaylā Ṣallase, Māgālā

Figure 6.15: Sewing on the endbands. Keši Gäbrä Mädhǝn. Axum.
6.5 Decorating

Most books that take leather covers are then decorated\textsuperscript{47} using a variety of tools (see section 6.5.1), through the process known as blind-stamping. The covers are wetted evenly before the process begins, and periodically may be re-moisturized during the process.

A variety of metal tools, heated in the fire, are used to blind-tool designs into the covers. These tools are known as \textit{mädgʷas},\textsuperscript{48} and are generally of a limited number of geometric forms, chiefly the cross, lines, and circles, but with some more exotic examples enumerated below. Manuscripts with leather-covered boards are not generally considered to be complete without some level of tooling on the covers, even those which are destined to be covered with cloth jackets. There is remarkable

\begin{footnote}{47. \textit{madäggʷäs}. Mersha Alehegne, “Towards a Glossary of Ethiopian Manuscript Culture and Practice,” 153.}
\end{footnote}

\begin{footnote}{48. \textit{madäggʷäs}}
\end{footnote}
stability in the forms of cover decoration, as noted by Pankhurst (and Gardner and d'Abbadie before him).49 Two general schemes of decoration are common: crosses alone (as in fig. 6.17) and crosses in conjunction with triangular elements to suggest church roofs or Calvary (as in fig. 6.18).50 Pankhurst has indicated the general preference for the same pattern on both covers, but when both are present, the cross alone will generally be the front cover, the other the back cover.51 Any pattern is generally to be found in concentric frames of borders; where I was able to observe this, the frames and patterns were first outlined with the ruling tool (fig. 6.12b) and then filled in using the others (fig. 6.12d). Where possible, the same tool is not used in multiple frames, but each one is different. The ruling tool (with three or four lines) is pulled along a straight edge, whereas the other tools are placed following the rules so laid down, and by a rocking motion of the hand, lining up one edge before putting the stamp face-down and pressing, then quickly pulling it back up so as to not burn the leather (fig. 6.13b). For the least-ornamented covers and for spines and turn-ins, a variety of crossing or parallel lines will be drawn with the ruling tool.52

The tools are heated directly in the coals of a cooking-stove and come out red-hot (fig. 6.12a). An assistant (student or family member) is often employed in managing the tools (fig. 6.13a), in order to keep the stove hot and to avoid the handle burning (nevertheless, it is common to see tools with charring on the side facing the fire, as in figs. 6.21 and 6.30). Most decorators then quench the excess

49. “Decorative conventions established by the fifteenth or sixteenth century—or conceivably earlier—were rigidly prescribed...bookbinders had clearly defined rules to which they were expected to comply.” Richard Pankhurst, “Ethiopian Manuscript bindings and their Decoration,” Abbay 12 (1983): 14; K. B. Gardiner, “Oriental Bookbindings at the British Museum,” Oriental Art (1963): 136; d’Abbadie, Catalogue raisonné de manuscrits éthiopiens appartenant à Antoine d’Abbadie, xii–xiii.


52. In patterns similar to, but not necessarily related to, Byzantine codices; compare, for example, the patterns in C. Federici and K. Houlis, Legature byzantine vaticane (Rome: Istituto centrale per la patologia del libro, 1988), 66–68.
heat with water, cooling them to the desired temperature (moderately hot, but in no way glowing) by using quick little dips and listening to the sizzling sound of the water to help gauge its temperature (fig. 6.12c). In order to test the cooled tool, Mulugeta Araya Gābāyāhu (Gālawdiwos) uses a piece of scrap leather before pressing to the book. The leather of the cover is also moistened, to make the leather more pliable and less prone to burning. When the tooling is finished, a halved lime may be rubbed on the cover to aid the removal of charred bits. Complex patterns are generally reserved for the front and back of the book; spines and turn-ins receive simpler treatment, usually with only the ruling and double-circles tools.

The process of using the tool that produces lines is shown in fig. 6.12b, where Marigeta Birhane, having taken the tool from the fire and cooled it in water, is drawing it along a ruler to outline the decorative pattern for a printed book that he is covering in a traditional way.

### 6.5.1 Decorative Stamps

Ethiopian stamping tools bear limited relation to those known from other countries, and seem to form a largely distinctive set. While some patterns, such as the double-circle, are known elsewhere, others are unlikely to appear as tools in another regional tradition. Since all the tools are handmade, and there are no set standards, there can be a lot of variance. Within a single category, it is difficult to distinguish what is meant to be the same tool, which different, and whether that matters. The last well-known tool-maker, who lived in Axum, died before this work was begun, and there were obviously many other styles of tools in the past which did not appear in those who were

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53. Mäzämmǝr Bäzabǝh Mǝtku (Andabet) says that he does not need to use water because he does not put the tools so close to the fire, and they never get so hot that they can burn the leather, causing unsightly deformities.

54. One may be seen amongst the tools of Marigeta Birhane in fig. 6.12a.

55. Compare, for example, the numerous examples of the Double Circles tool which are similar in the Vatican Byzantine codices, but the limited crossover of the remaining sets, which are mostly limited to a few patterns similar to, but not identical with, the Rosette stamp. Federici and Houlis, *Legature byzantine vaticane*, 58–63.
Figure 6.17: Cover of a *Dawit* showing cross-pattern. Enda Mikael, Mäjälä.
Figure 6.18: Cover of a *Gospel of John* showing church-pattern. Qes Felege, Bahar Dar.
Figure 6.19: Binding materials and finished cover of Mämhǝr Yohannes Woldegabriel, Axum.

Figure 6.20: Covered books by Aläqa Bito, Axum.
interviewed for this work, and have to be reconstructed from their impressions in the covers of historical manuscripts. The following list can in no way be considered authoritative, but is meant to be a better starting place for the description of tools than has previously existed. It does not cover all possible variants, nor are the names authoritative. In some cases, names have been provided by various sources, but where they are not cited, I have assigned names for ease of reference.

In the list, I have used author’s names as shortcuts to specific articles: Fekade, Mersha, Pankhurst, Mellors and Parsons, and Tomaszewski.

In some cases, the identification of lost binding tools seems to have been erroneously conflated with other types of stamp, as in the reference to “maḥṭām — a stamp which typically indicates the owner’s name, that is, a person or monastery.” in Tomaszewski and Gervers, “Technological Aspects of the Monastic Manuscript Collection at May Wäyni, Ethiopia,” 123, footnote 67. Embossing-stamps and ink-stamps with identifying information are commonplace on the folios of monastic/church-held books.

56. It does bear mentioning that in some cases, the identification of lost binding tools seems to have been erroneously conflated with other types of stamp, as in the reference to “maḥṭām — a stamp which typically indicates the owner’s name, that is, a person or monastery.” in Tomaszewski and Gervers, “Technological Aspects of the Monastic Manuscript Collection at May Wäyni, Ethiopia,” 123, footnote 67. Embossing-stamps and ink-stamps with identifying information are commonplace on the folios of monastic/church-held books.

57. Fäqadä Śǝllase Täfärra, የብርኑ መጻሕፍት አዘገጃጀት.


59. Pankhurst, “Ethiopian Manuscript bindings and their Decoration.”

60. Mellors and Parsons, Ethiopian Bookmaking.

Corni-Form

Sergew refers to this tool as የላ}: የላይ ወላይ ወላይ ወላይ, or “goat’s hoof”.

Pankhurst reports that the tool is commonly called qärnä bə’a “ram’s horn”. Mersha gives የለ}: የለን ወላይ ወላይ ወላይ as an alternate name.

ማለያ}: የላይ ወላይ ወላይ is listed as number 10 in Fekade’s list, without picture.

See figs. 6.21c and 6.22h. It is named after and often used to form a type of cross also known as qärnä bə’a.a

a. “The expression qärnä bə’a or Horn of the Lamb (litt. ram) became the designation of a particular variety of cross, whose arms extend outwards into wide flaring ends with each tip bending downwards in a spiral. ... The Ethiopian Christians apparently related the expression ‘Horn of the Lamb’ to the well-known utterance of St. John the Baptist who, upon seeing Jesus coming towards him, said: ‘Look, there is the Lamb of God that takes away the sin of the world.’ (John 1, 29) and this, in turn, served to designate the cross in question.” Stanisław Chojnacki, Ethiopian Crosses: a Cultural History and Chronology (Milan: Skira editore, 2006), 33.

Three Lines

Sergew and Mersha: የለ’: የለን (የለን) masmäriya (mäsabiya)

Mellors and Parsons, የለ’: የለን

See figs. 6.21h and 6.22f.

Four Lines

Mellors and Parsons: four lines

Double Circles

Sergew/Fekade: የለ’: የለን የለን, ‘aynä የለን, “pigeon’s eye.”

Fekade also, የለ’: የለን የለን የለን, “pigeon’s eye.”

See figs. 6.21g and 6.22h.

Dotted Double Circle

A variant observed on manuscript Dima Giyorgis s. n., see fig. 6.39a

Palm

Sergew: የለ’: የለን

See fig. 6.21a
Mother of Water

Fekade number 9. yāwuḥa anat “mother of water,” named after a water insect of that name.

Sergew calls it “wave form” in English.

See fig. 6.24a.

X Cross

Sergew/Fekade: mārgāča

also Fekade: mārgāča “balā māṣqūl mādgwās”

Several variants, dotted and undotted in the inner lines. Compare figs. 6.21f and 6.22e, Tomaszewski 15–18.

Outlined X

Observed on a ca. 15th-/16th-century Gospel book of Sawne Maryam, Təgray. See fig. 6.26a.

See also Tomaszewski 13, and a dotted variant, 14.

Criss-Cross

Fekade (and Sergew): ra’asā mādgwās

See figs. 6.21b, 6.22a and 6.23a

See also Tomaszewski 23–25, 28.

Checker

After a tool in the author’s collection.

Compare to second from left in fig. 6.30a. See also Tomaszewski 27, 28.

Curved X

See fig. 6.22b

Turk’s Head

I am referring to it based on the knot of similar appearance.

See fig. 6.22c

Knotwork

See fig. 6.22d
Unknown

Only identified in the possession of Melaka Tsehai Keslemeryam Abbay, Axum. See fig. 6.27.

Rosette

Sergew, Mersha. Corresponds with Fekade number 12. **תְּפָרָה** “twisted”

See third tool from left in fig. 6.30a

A variant, Tomaszewski 48, has the petals, but not the surrounding circles or inset petals.

The rosette is a common pattern which may be found in bookbindings of diverse eras.\(^a\)


Square-Petalled Rosette Cross

Identified as a rosette in Tomaszewski, numbers 46 and 47, but contrast with Rosette, above.

Crescent

Sergew: **חַלְמִי**

Fekade lists the name of this tool as number 8 in his list, without depiction.

Depicted here is a version based on Sergew, but please see the variant, without the lower bar, in fig. 6.23c.

Dotted Line

This tool was observed with six bars in the collection of Qes Felege, Bahar Dar (fig. 6.26b) and with seven bars on the binding of a ca. 15th-/16th-c. manuscript of the Gospels at Sawne Maryam, Tagray (fig. 6.26a).

S-curve
Referred to as "crescent" by Mellors and Parsons.

A version with exactly 15 dots in the centre may be seen in fig. 6.30a (first from left).

An example of this tool photographed by John Mellors has ten dots and flat, rather than pointed ends.\textsuperscript{a}

Examples of this tool, 34 and 35 in Tomaszewski, identified as "Wavy lines" have fourteen dots and open ends and ten dots and closed flat ends, respectively. 32 in the same list, identified as “Straight strapwork elements," seems like an angular variant.

Has clear analogues in other traditions.\textsuperscript{b}

\textsuperscript{a} Mellors and Parsons, \textit{Ethiopian Bookmaking}, 17.

\textsuperscript{b} A remarkably similar tool may be found on the cover of a Milanese copy of Procopius' \textit{De bello Gottorum}, 1506. Mirjam Foot, \textit{A Catalogue of South European Bindings}, vol. 3 of \textit{The Henry Davis Gift: A Collection of Bookbindings} (London: British Library, 2010), 304–305:no. 254; see also the 15\textsuperscript{th}-c. Islamic binding from North Africa, Spain, or Egypt and a South Arabian binding of the 14\textsuperscript{th}-/15\textsuperscript{th}-c. in Haldane, \textit{Islamic Bookbindings in the Victoria and Albert Museum}, pl. 66, 68; and an Armenian binding of the 17\textsuperscript{th} c. in Kouymjian, “Armenian Bookbinding from Manuscript to Printed Book," fig. 1.

\textbf{Wave-Form}

See fig. 6.21d

A variant without the dots, and with all three lines connecting at both vertices, is number 36 on Tomaszewski’s list.

\textbf{Zig-Zag}

When referring to the tool in Fig. 6.21e, Sergew identifies it as \textit{qal\textsuperscript{a}m\textsuperscript{a}}, \textit{balägämädä} with the English name zigzag. In Fekade's table (which is otherwise deficient), this same name is associated with the slight curved tool with five dots. (Wave-form here, harag by Pankhurst's estimation?)

37 and 38 in Tomaszewski, identified as “Mother of Water," are variants of this tool.

\textbf{Knot Bend}
Observed on BG 001 (fig. 6.23e).

39–42 in Tomaszewski's list are variants.

**Twist**

Observed on a binding in Maryam Dengelat, ይgray.

**Wide Dotted Stripe**

Observed on a binding of the *Gospels* at Bichena Gyorgis, Goḡgam.

See fig. 6.23f.

33 in Tomaszewski is a variant.

**Double-X with Dot**

A doubled pattern may be achieved through repetition of the same tool with great regularity and may include secondary elements like the dot formed here by the intersection of the X-patterns, but double tools are not unknown (see for example, fig. 6.29) and this appears to be a similar tool. Observed on Oxford, Bodleian, Aeth. B. 3.

See fig. 6.25.

An example is 22 in Tomaszewski.

**Wedge**

Exists in dotted and un-dotted variants. Some simple wedges (like 8 in Tomaszewski) might be formed by using the dotted line tool twice.

Observed in Oxford, Bodleian, Aeth. F. 29

See fig. 6.24b

9 in Tomaszewski.

### 6.6 Deluxe Bindings

There are few examples of deluxe Ethiopian manuscript bindings, as most are simply made, covered in leather or bare boards. A few manuscripts with bosses or metal covers are known, and I have endeavoured to illustrate examples here. Pankhurst has described Munich, BSB Cod. aethiop. 127, an eighteenth-century copy of the *Nagärä Maryam* “Story of Mary,” as “lavishly decorated ...
Figure 6.21: Leather stamps of Woldegabriel Gebretsadkan, Axum. The extra tools in Fig. (i) are duplicates of those pictured.
(a) Criss-Cross  (b) Curved X  (c) Turk’s Head  (d) Knotwork

(e) X Cross  (f) Three Lines  (g) Dotted X  (h) Ram’s Horns and Dove’s Eye

Figure 6.22: Leather stamps on the cover of Däbrä Marqos MS DM001, Nāgārā Mariyam.
(a) Criss-Cross
(b) X Cross
(c) Crescent
(d) S Curve
(e) Zig Zag
(f) Wide Dotted Stripe

Figure 6.23: Leather stamps on the cover of Bichena Gyorgis MS BG001, *Four Gospels*. 
Figure 6.24: Leather stamps on the cover of Oxford, Bodleian, Aeth. F. 29.

Figure 6.25: From the cover of Oxford, Bodleian, Aeth. B. 3.
(a) Detail of the binding of a ca. 15\textsuperscript{th}-/16\textsuperscript{th}-c. Gospel of Sawne Maryam, Tǝgray. Photo by Michael Gervers.

(b) Tool of Qes Felege.

Figure 6.26: Dotted-Line and Outlined X-Tools.

Figure 6.27: Tool of unknown name of Melaka Tsehai Keflemaryam Abbay, Axum.
Figure 6.28: Detail of the cover of a *Sənkəssar* in Maryam Dengelat, Təgray, showing silver boss and ram's horns constructed with the twist, dove's eye, and crescent tools. Photograph by Michael Gervers.

Figure 6.29: Tools of *Marigeta Ḥaylā Šallase*, Mäqālā. Note the three tools that double the pattern of single-tools.
Figure 6.30: Leather stamps. Gälawdiwos.
back and front, with decorative plaques, crosses, and numerous pins...made out of a silver-tin alloy."  
Nosnitsin has found a nineteenth-century copy of the Gospels at ˁAddäqäḥarsi Mäkanä Ḥay-wät Paraqlitōs which has silver gilded covers inscribed with images of Christ and Mary (fig. 6.37). The Deutsche Aksum Expedition photographed at least two manuscripts with metallic covers, one with an elaborate pattern of interlinking circles and squares (Abb. 277) and another with engraved scenes of the life of Christ (Abb. 278).

Though there is some debate over the actual dating of the manuscripts, carbon-dating of the Gospels of Ênda Abba Gärima suggests they may be the oldest surviving Ethiopian manuscripts, and both Gäirma 1 and Gäirma 2 have metal covers. The suggestion that the copper gilt covers of Gäirma 1 (fig. 6.31a) may be original is largely impossible to verify.


63. Nosnitsin, “An Ethiopian Manuscript after its Completion.”


Figure 6.31: Metal covers of the *Gospels* of İnda Abba Gärima. Photographs by Michael Gervers.
(a) Front. Virgin and child flanked by angels.  
(b) Back. Emperor Yohannes enthroned and angel.

Figure 6.32: Front and back covers of a Gospels of Däbrä Genet Mädhane Aläm, Mäqälä.
Figure 6.33: Spine attachment of a *Gospels* of Däbrä Genet Mädhane Aläm, Mäqälä.
Figure 6.34: Silver covers of a Gospels of Endaba Hadara, Tǝgray. Photographs by Michael Gervers.
The decorative patterns of the covers depicted in figs. 6.32 and 6.34 to 6.36 all resemble painting or other forms of decoration more than they resemble the specific, more geometric style associated with the decoration of leather covers. The decorative schemes, though obviously relevant in content and appropriate in their use, seem inspired by forms of artistic expression other than bookbinding, and there are no elements in any of the covers depicted that specifically draw upon the shapes of decorating tools for leather covers or the specific shapes and patterns associated with the same. Clearly, metal covers are a class unto themselves, and, if the assertion by Pickwoad (section 6.6) is correct, they may be as old as any other practice associated with the Ethiopian tradition. Until more examples are catalogued, it is difficult to make any convincing claims about the character of metal covers in Ethiopia. Examples have been identified from the sixth (Gärima 1), tenth-twelfth (Gärima 2), mid-eighteenth (BL Or. 728) and nineteenth (figs. 6.32 and 6.33) centuries, and it may be reasonable to presume a continuous tradition from the early identified examples to the later, but it remains supposition until more work is done. Note that in the twentieth century, it has been more common for churches to have decorated Gospels, but such examples seem more related to traditions in other Orthodox churches (who may supply them) than to the historical examples in Ethiopia.

The Gospels of Enda Abba Gärima merit special attention, as both the earliest examples of metal covers and the earliest dated Ethiopian manuscripts known. Lester Capon, who did conservation work and rebinding on them in 2006, gives the following description of the binding:

AG1 is sewn with two pairs of sewing stations with a hard 2 ply linen thread. The boards are copper with holes that would presumably have displayed coloured glass or jewels originally. On the inside of the back cover are the remains of a deteriorated papyrus board. The metal boards are attached loosely by the sewing threads from the sections, as well as from the quire tacketing at head and tail, being wrapped around the hinge rod. The spine is three separate pieces of much more recent vellum, brought round under the boards and sewn through the preliminary pages approximately four cms. from the back fold, with parchment strips. This prevented satisfactory opening of these pages.

67. “Perhaps the most unusual covers on any Ethiopian manuscript in Britain are those of the British Library’s Orient 728, a mid-eighteenth century copy of the Life and Acts of Täklä Haymanot. Its covers are made of thick copper, gilt, and crudely decorated back and front, with one large and two small crosses, with a few tiny flowers, two on the front and one on the back.” Pankhurst, “Ethiopian Manuscript bindings and their Decoration,” 249.
Figure 6.35: 20th c. gilded covers of a QDMG-049 Gospels at Qäqäma Maryam. Photograph by Michael Gervers.

Further damage had been effected by vellum guards being sewn into the pages, with parchment strips, diagonally through the images, thus preventing proper opening, and the formation of creases where attempts had been made to fold the vellum leaves back. With this secondary sewing, intermingled in places with a tertiary sewing of a soft 2 ply linen thread from some later repair, the most important and attractive folios were rendered inaccessible and vulnerable. On one occasion the page was creased in two places and sewn through the doubled part. All four edges of each page had damage and missing areas through use over fourteen centuries. Insect damage was found throughout the main text block.68

Aside from being a compilation of many different forms of repair and ad-hoc maintenance, the description of the boards and the binding suggests strong continuity in the observed practices from the earliest period to the present. Though the production of the covers cannot be placed in a specifically Ethiopian context,69 the style of the hinges (if not the style of the decoration) is at least similar


69. Indeed, the traces of papyrus in the boards, the use of which was otherwise unknown in the Ethiopian context, may suggest an Egyptian origin of the boards, perhaps as a gift from the Coptic
to the later versions we have, and whether or not they were locally sourced, they attest the availability and practice of fitting metal covers to Ethiopian manuscripts in an early period. Given the many events which have seen churches destroyed or despoiled in Ethiopian history, it is reasonable that there may have been a continuous practice of fitting metal covers to manuscripts over the centuries, and as more manuscripts are catalogued and digitized, we shall have a fuller view of the extent of the surviving evidence for this practice.

### 6.6.1 Bosses and Metallic Ornaments

Bosses, fastenings, and other metallic ornaments are rare but not unknown features of Ethiopian bindings. Like metal covers, the lack of a large documented corpus of examples, and problems with church. Without further evidence, it is hard to make any judgements here.
Figure 6.37: 19th c. (or earlier) metal covers of AP-003, a 19th c. Gospels at ‘Addāqāḥarsi Mākanā Ḥaywāt Paraqlīṭos. Photograph by Denis Nosnitsin / Ethio-SPARE.

dating prevent saying a lot about the antiquity and use of the practice, but the few examples here may show the range of elements that have been used, and perhaps serve as a starting place for more dedicated study in the future. An eighteenth-century copy of the Haymanotā Ṭābw at Čelāqwot Səlasse church, outside Adigrat (fig. 6.38) shows that a spine repair has been put over the silver floral bosses, which are then likely to have been contemporaneous with the original covering and not a later element. Similar bosses are found on the cover of a Sənkəssar at Maryam Dengelat in Təgray
(fig. 6.28) and Däbrä Damo 001, an 18th c. manuscript of the Tä’ämmərä Maryam.70 A manuscript (of the early 20th c.?) at Dima Gyorgis (section 6.6.1) shows elements of a silver decoration more commonly used on liturgical umbrellas used as cover ornament, alongside silver bosses and strap-and-pin fastenings. Another manuscript (fig. 6.41b) at Bichäna Gyorgis has similar ornaments and a strap-and-pin fastening. A manuscript (fig. 6.40a) in the treasury of Ǝnda Abba Gärima monastery has a series of golden ornaments in the same style of an Amhara nobleman’s shield (fig. 6.40b), presumably salvaged from a donated shield. The bosses on a copy of the Haymanota Abäw at Abuna Abiyä Egzi (fig. 6.41d) are distinctly larger than the others depicted here and have points for resting upon when lying on the side. A Tä’ämmerä Iyasus at Säqota Mikael-Gabriel and a Mälkə Yohannes at Martula Maryam both exhibit the use of varied ornaments in the decoration of the cover; the latter includes an unusual permanent fabric cover (as opposed to a separable chemise), strap-and-pin fastenings, and some bosses in a rosette form similar to fig. 6.38 among its many varieties.

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70. For the latter, see Nosnitsin, “An Ethiopian Manuscript after its Completion,” 12. Nosnitsin suggests that the bosses may be a nineteenth-century addition.
Figure 6.38: Bosses on a copy of the Haymanotä Åbäw at Čeläqwot Salasse. AM 1785.
(a) Outside, showing bosses and fastenings.  
(b) Inside, showing attachments.

Figure 6.39: Decorative elements from a liturgical umbrella used as manuscript bosses on a manuscript of *Dîma Gyorgis*. 
(a) Golden bosses on a manuscript in the treasury of Ǝnda Abba Gärima, Təgray.

(b) Golden ornaments on a 19\textsuperscript{th} c. Amhara nobleman’s shield. Image by permission of Bryan Reeves.

Figure 6.40: Golden bosses on a manuscript and, for comparison, the presumed source of such ornament—a nobleman’s shield.
6.7 Cases and Accessories

A traditional mahdār or leather book-case consists of a single leather case with a flap or a pair of half-cases which slide complementarily over one another to better protect the manuscript. The mahdār almost invariably has a leather carrying strap which may be slung over the shoulder or serve to hang a book from a peg in a traditional store-room. The mahdār is common for both large and valuable books and small and portable books; Ethiopian children and monks frequently carry their copy of the Dawit around in a mahdār on a strap (see fig. 6.43).

Mersha distinguishes between the two types of mahdār thusly: the näṭāla mahdār lacks the separable cover, called difat, possessed by the mulu mahdār. Both types of mahdār have a flap, which may be external, covering the opening, in the case of the näṭāla mahdār, or internal, in the case of the mulu mahdār, where the difat closes the opening by sliding on a leather strap in order to reveal the internal mahdār, which in the case of the mulu mahdār may unfold in every direction to allow the book to be opened while laying flat on its side.

71. ከናወር
72. ከናወራይ: ከናወር
73. ከናወራይ: ከናወር
75. d’Abbadie:
Le volume s’enferme dans une mahdar, ou étui où il entre en glissant; on l’y assujettit par la patte qui forme le sixième côté du parallélépipède de l’étui, et dont on fait entrer le bout à l’intérieur quand l’ouvrage est pourvu d’un difat, mot qui dérive du verbe ለማንታኑ የሠራ ሊር. Le difat sert à fermer, en la recouvrant, l’entrée du mahdar, et on l’assujettit par deux ou trois doubles queues formées de plusieurs lanières de maroquin rassemblées en un gros noeud. On engage un noeud dans l’autre pour fixer le difat au mahdar. De part

The volume is enclosed in a mahdār, or a case into which it slips; it is held by a flap which forms the sixth side of a cuboid of the case, and which is guided into the opening of the interior of the work when it has a difat, a word which derives from the Amharic verb የሠራ ሊሩ(reverse. The difat serves to close, in covering it up again, the entrance of the mahdār, and is bound by two or three double cords formed from many thongs of leather coming together in a large knot. The knot is used to fix the difat to the mahdār, one to the other. On all sides of the difat, a notch
Figure 6.41: Ornamented bindings. Photographs by Michael Gervers.
Many manuscripts have a chemise, a cloth jacket which is always kept on the covers. Notably, the type of book which merits a chemise almost invariably has tooled covers (which are being protected, though concealed). In some cases, a long cloth strap will extend from the jacket and is wrapped around the edges to keep them clean and protected. It has been my experience that books with jackets usually also have an accompanying *maḫdär*, but the reverse is not necessarily true. Both of these attributes may be seen in fig. 6.44a.

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et d’autre du difat, une échancrure laisse passer une lanière de peau molle, fixée au maḫdár par des pattes, et qui permet de suspendre le volume dans une bibliothèque, ou de le transporter en passant la lanière au col en guise de sautoir.

allows a thong of soft leather to pass, fixed to the *maḫdär* by the flaps, which allows the volume to be hung in a library, or to be carried by slipping the thong around the neck crosswise.

d’Abbadie, *Catalogue raisonné de manuscrits éthiopiens appartenant à Antoine d’Abbadie*, xiii.
6.7.1 Mirrors

As noted by Professor Pankhurst, a number of Ethiopian manuscripts have mirrors incorporated into their covers, specifically the inside front cover. The history and use of this practice is obscure, but interviewees who did binding and covering were asked about this custom. Most did not know of the practice, or did not know why it was done, even if they had seen it. Delamarter has suggested that “The inclusion of mirrors in the construction of the book is a feature aimed at a specialized and 

76. Personal communication, 2008.

77. The assertion that “The mirror inset in the board places the individual reader into the company of illustrious persons in scripture or into the company of royal lineage in sagas of the kings” seems fanciful to me, and not based on any particular references to or examples of a mirror used in such a specific context. Gary Frost, “Historical Bookbinding Teaching Set,” December 2005, http://iowabookworks.bookways.com/?page_id=34.
(a) Dawit with chemise, edge-wrap, and mulu maḫdär. 19th c. Däbrä Genet Medhane Alem monastery, Mäqälä.

Figure 6.44: maḫdärş
Chapter 6. Binding

elevated social niche.” and that “In a Psalter, it may indicate ownership by a woman of higher social class.” while conceding that “As far as we know, the function of the mirror is normal (i.e. not spiritual, *per se*), aimed at personal grooming. ... A specialized liturgical and musical manuscript ... points to ownership by a *debtera* ... who take great care that their Ṭəmṭəm (turban) is properly worn.” Keshi Mengistu Eyesu similarly stated that the mirror is used when first opening the book, so that the priest-reader knows if his face is clean; if it is not, he cleans his face before reading. He states that he has seen old priests do this. In addition to the connotation of ritual purity, this explanation points to the mirror, a valuable object, being kept in a convenient place, where it will be kept flat and be protected from breaking. The inclusion of mirrors may also have a purely ornamental character, as a way of incorporating a valuable and unusual object into the binding (though notably, they are exclusively found on the inside of the binding, pointing to them being where they are protected for use, rather than on the outside of the binding, where they might be more explicitly decorative).

6.8 Post-Binding

There are a number of standard interventions, common in Ethiopian manuscripts, which are carried out after the binding of the book, usually by the new owner. This may include the chemise and *maḥdär*, and certainly includes the practice of marking chapter/book divisions with small pieces of coloured thread (usually silken) sewn into the edge of page. This is an especially-common practice in the production of the *Dawit*. Additionally, protective cloth covers are often sewn to the upper part of pages with large paintings, to drape over the painting, protecting it from damage as well as from transferring ink onto the opposing page.

78. Delamarter and Melaku Terefe, *Ethiopian Scribal Practice 1*, 11. I am unclear why the mirror would specifically be associated with a woman of higher social class, rather than a high-status person in general, especially as all the other associations seem to be with priestly men.
(a) Inside back board of a book owned by Keshi Teklay, Axum.

(b) Printed *Dawit* in the possession of Mulugeta Arəya Gābāyāhu, Gālawdiwos.

Figure 6.45: Mirrors.
Chapter 7

Selected Conclusions

New information about the subject of Ethiopian manuscript production has been gathered here and contextualized in relation to other published sources. I have up to this point focused on the uniquely Ethiopian characteristics of the scribal tradition, in order to avoid, as much as possible, confusion or contamination with practices from other traditions. I have also striven to be as descriptive as possible, because Ethiopian manuscript production is significantly understudied. The presentation of information about it is an important basis for informing any future study that might argue about its historical character in a more developed way. Here, I would like to move away from the description of practices and present some brief conclusions elucidating how a scholar of other traditions of manuscript production might approach significant lacunae in the sources, based on analogous Ethiopian traditions. For economy of space and because of the limitations/disciplinary expectations of this dissertation, I will proceed to discuss some comparative western examples, and will not treat with other related material. This is not to say that there are not interesting and important parallels with Armenian, Syriac, Coptic, and Arabic materials; rather, that they are the subject of another project, and beyond the scope of this one.
7.1 Contexts

7.1.1 De-Formalizing Manuscript Production

Manuscript studies, as a discipline, has traditionally been concerned, on the art-historical end of the discipline especially, with deluxe manuscripts and their involved and formalized production processes. I am more interested in the question of how the large number of low-status manuscripts used on an everyday basis, most of which have not survived, were produced and used. Since many of these manuscripts would have been produced by their end-users, I think it is important to consider and look at sites outside the monastery and the traditional scriptorium and workshop model for production hints. We can imagine, following the cues on the situation of scribing in Ethiopia (section 7.3.1), priests working in rural parishes, producing their own homily collections, notes on liturgy, common-place books, and the like from materials on hand, in a non-workshop based, informal fashion, and should interrogate our evidence more deeply to see if this may have been overlooked in traditional descriptions of the historical practices in Europe.

7.2 Parchmenting

7.2.1 The use and localization of lime in medieval European manuscript production

Lime always appears in discussions of European parchment production as a necessary component of the process; recipe books as well as modern inheritors and re-creators of the *percamenarius*’ art alike use lime as a routine and required step in the depilation and preparation of the hide. And why should they not? Leather works used lime in this same context, and parchment workshops would have a lime-pit or vat as a central feature. However, I have always wondered about small producers in remote areas; what, for example, of the rural parish priest, producing a small book of homiletic material for his own consumption as a personal resource for the preparation of sermons? Such a book would not need to be of any especial quality, and the priest would likely be limited in the
amount of resources available to him, so why should he not economize? Lime has multiple uses in
the medieval world, and would have been available as a constituent of mortar, used in the tanning of
hides, and as an agricultural fertilizing agent. It is reasonable to expect that an independent scribe
working in a rural area might have access to lime for the preparation of his parchment, but it is
shown by the Ethiopian example that acceptably good parchment can be made without the use of
lime, and suggests that we should analyze parchment for lime residue and re-think the necessity and
localization of parchment production. Does parchmenting require a lime pit? This would seem to
localize it with tanning, or in workshops (having a lime pit rewards volume of production, as it limits
the marginal cost of liming hides); on the other hand, small lime pits may have been common and
made upon demand. Unfortunately, lime seems to be studied and documented almost exclusively in
the context of construction, and serious analysis of archaeological sources would need to be done,
along with chemical analysis of parchment, in order to get anywhere. Is it possible to detect lime
residue in finished manuscripts? Would its absence be indicative of lack of use, or merely that it was
appropriately cleaned?

Bachrach calculates that it takes thirty-eight average work days of labor to produce one tonne of
burned lime, a volume of one-and-one-half cubic meters.¹ This conveniently works out to about one
cubic foot of lime per average work day, or approximately 100 cups; given one modern parchmenter’s
use rate of about four cups of lime per ten gallons, which could treat one or multiple hides, depending
upon need, one average work day’s worth of lime production could reasonably treat between twenty-
five and one-hundred hides.² This calculation suggests that lime is not an especially significant driver

¹ A little more than a 50 lb. sack of lime per day of work. (40 AWD quarrying 40 m³ limestone
+ 480 AWD of cutting of wood + 1400 AWD of kilning) / 50 tonnes produced, yielding 38.4 AWD /
tonne, excluding construction of the lime-kiln.) Bernard S. Bachrach, “The Cost of Castle Building:
The Case of the Tower at Langeais, 992–994,” in The Medieval Castle: Romance and Reality, ed. Kathryn

² Based on the weights provided by Properties of Typical Commercial Lime Products, technical
documents/lime_basics/lime-physical-chemical.pdf; and use rates provided by Rick
Cavasin, personal communication, February 2015; The Pergamena workshop, on the other hand,
of cost in the production of medieval parchment, but it nevertheless remains worth considering that, in the absence of a ready supply of lime, parchmenters may have omitted that step without significant effects on the finished product in some cases. It would be necessary to determine whether lime is detectible in the finished product after so much time, and, if so, conduct testing of a number of books of different levels of formal quality in order to answer this question definitively.

7.3 Scribing

7.3.1 The situation of scribing

The sites and work-patterns of scribes in Ethiopia, in similar housing conditions in a similarly rural society, can inform a re-imagining of the classical way that we present the scribe and his work. Instead of assuming the idea of a monk working in a scriptorium (which, imagined as a specific room, is problematic, given what is known about the situations of scribing in areas like the cloister or carrells), I would encourage looking for scribes in rural contexts, writing in door- and window-light. While this does not change our idea of the type of light (cloister and carrell would similarly be in open shade), it is a useful remedy to the predominance of the image of the monastic scribe working in a scriptorium or the later professional scribe working in a proper workshop space. Scribes uses 5–15% lime (8–40 cups per 10 gal.), making the process accordingly (2–10x) more expensive. Jesse Meyer, personal communication, March 2015; Fuchs cites 5–10% lime, in line with the amount used by Pergamena. Robert Fuchs, “The History and Biology of Parchment,” Karger Gazette 67 (2004), accessed April 10, 2015, http://misc.karger.com/gazette/67/fuchs/art_5.htm.

3. Other recent work has challenged and rejected the traditional narrative about scriptoria, at least in the English context. After all, “the procedures involved in making medieval books were precarious and versatile.” Jean-Pascal Pouzet, “Book Production Outside Commercial Contexts,” in The Production of Books in England 1350–1500, ed. Alexandra Gillespie and Daniel Wakelin, Cambridge Studies in Palaeography and Codicology 14 (Cambridge: Cambridge University Press, 2011), 214–215; Gillespie is unambiguous in her opinion on the matter: “Medieval books were not made, as is sometimes supposed, in monastic scriptoria. Nor does any evidence support the idea of ‘commercial’ scriptoria in England. Medieval books were instead made by a range of people in localized conditions.” Alexandra Gillespie, “Books,” in Middle English, ed. Paul Strohm, Oxford Twenty-First Century
could have, and did produce books in both rural and urban areas, outside the specific contexts of
scriptorium and workshop, and the situation of Ethiopian scribes can and should spark scholars to
imagine what the spaces of historic scribes might have been like: crowded and multi-purpose, their
scribal character competing with the demands of everyday life. So, me may look, for example, at the
simple furniture in the image of Ezra in his studio from the Codex Amiatinus, which shows a spare
workspace and a similar pose to the Ethiopian scribes (fig. 7.1), and imagine how the furniture of
a simple home might replace the stools of the dedicated workshop; it is impossible not to see the
strong resemblance in the images of Ezra and Yohannes, and I suggest that this is a starting-place for
reimagining the way that we depict and discuss scribes as workers in the historical context.

7.3.2 Anthropic measure

Much ink has been spent over describing the style of ruling, whether blind, plummet, or inked, and
even in measuring the dimensions of the margins and text block, but surprisingly little has been writ-
ten regarding the way the size of the text block was arrived at. In current Ethiopian use, a simple set of
anthropic measures, described in section 4.1.2, suggests ways that modern scholars of manuscripts
can think about the way that historical manuscripts, in their relationship to the hands that hold
them, may have been measured by the very digits they were designed to accommodate.

7.3.3 The “pricking tool” and its alternatives

The lead article in the October 1946 issue of *Speculum*, on “Pricking Manuscripts: the Instruments
and their Significance,” by L. W. Jones, started a long tradition of associating the runner, or “pricking
wheel” with medieval manuscripts, and has been authoritatively cited on this issue, as recently as
the 2007 new standard textbook by Clemens and Graham.4 Work by J. A. Dane, D. Muzerelle, and


(a) Ezra the scribe from the Codex Amiatinus. (8th c.)

(b) Qes Yohannes, Gälawdios (2009).

Figure 7.1: The situation of scribing.
R. A. Rosenfeld has fairly conclusively laid the issue to rest, with the latter pointing out that there is no evidence for the tool in use before the eighteenth/nineteenth century, when it only saw use by stationers on documents and not in books. How then did scribes measure the difference in space between the holes? Jones covers the use of compass and awl as well as the runner ("pricking wheel"), but importantly, neglects to consider rulings at the head and foot of the page. I suggest that this oversight (how are head and foot holes measured in Jones' system? Surely not by a runner.) leads to favouring the fanciful use of the runner. Jones' formulation ignores the potential and, indeed probable, use of model sheets in many situations, as per the use by Ethiopian informants, described in section 4.1.1, and the likely use of simple parchment guides, which I will continue to discuss here.

Jones, while simultaneously doubting the existence of the wheel ("it is unlikely...that a wheel was used"), goes on to make an argument for its use that undercuts the initial caution in the language; the ongoing legacy of this assertion has already been mentioned. If the work of Dane, Muzerelle, and Rosenfeld has ruled out the use of the runner, what then may account for Jones' examples? The primary (indeed, only) evidence for the use of the runner was a characteristic zig-zag pattern of dots which Jones was able to produce in trials with a runner; by Jones' own admission, this pattern is indistinguishable from a compass, and a compass used against a rule would produce straight and regular lines of pricking. There is no need for the runner in this formulation, but that leads to the

14.  


7. Ibid., 392, 396.

8. Pun intended.

question of what might have been used. While it is possible that the aforementioned straight and regular lines of pricking may have been produced (and surely in some cases were produced) by the combination of rule and compass, it could also be produced by the use of the simple and regular pricking template (fig. 4.3), the omission of which would seem like a glaring oversight in any investigation of the subject of pricking strategy. Similarly, the two-holed piece of parchment (fig. 4.4 / section 4.1.2).

Unlike the compass, the two-holed piece of parchment does not lend itself to the use of a rule, as the edges of the piece prevent a neat line being produced; this fact may account for the prevalence of prickings done without the aid of a rule as well as the use of a compass, as it is in essence a small, cheap, and limited compass, but one sure to be available to any worker with parchment and an awl. Additionally, it is the experience of both experimentation and observation that the user of this technique is biased in favour of the moving hand on both sides of the motion, without the ability to see precisely where the puncture hole will be underneath the parchment scrap, and this produces a characteristic zig-zag pattern that is essentially indistinguishable from that described by Jones for some uses of the compass.

The pricking methods described in the scribing chapter are an alternative to the mythical pricking tool. They correspond with the patterns presented and have the benefit of being historically feasible and made using tools and techniques more readily available. In this manner, they tie back to section 1.1.

### 7.4 Inkmaking

The predominance of carbon black inks in Ethiopia may initially seem like a boring story, but one of the useful takeaways in the study of other manuscript traditions is that the component parts of the carbon black are so varied, from leaves to charred animal parts to soot from lights (table 5.1).  

10. Which is to say, anyone involved in pricking manuscripts.
When thinking about the sources of blacks, we might think about the range of materials that could be repurposed to make ink for manuscripts, and need not assume that the only materials used are those we find in recipes.

### 7.5 Binding

The binding of the Ethiopian codex is said to play into the development of the Islamic Codex, an important bridge between two great religious bookmaking traditions; while the basic form and binding seem to be remarkably stable, and relatively simple, there is much to be understood about the decorative traditions for covers, and the interchange between Ethiopian and foreign sources in the exchange of patterns for decorative tools. Eventually, it could be hoped that a sufficiently extensive database of dated and datable tools on the covers of manuscripts might turn out to be a tool for identifying information about manuscripts by the presence or absence of certain patterns. More-extensive work cataloguing individual tools is necessary, extending the material in chapter 6. An example of a forthcoming piece of work that pays increased attention to the presence and types of tools used in cover decoration is the report on the archives of May Wäyni by Tomaszewski and Gervers, with its diagramming of the tools present on the covers. While a positive step in the right direction, what might be needed in order to make real progress is a database that takes covers, separates them out tool-by-tool, and cross-indexes tool types or dates in order to produce a fuller idea about the historical and regional patterns of use (if any emerge). While relatively simple conceptually, this would involve a great number of hours of work; perhaps, as in the aforementioned work on May Wäyni, it could be considered an adjunct to the the work of the cataloguer, and a standard for the field? In any case, there is an incredible potential to catalogue and make available the work of binding artisans in the Ethiopian context, and cover decoration tools may have a role to play in the

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dating and localizing, as well as being signature objects of artistic creation themselves.

7.6 General Conclusions

7.6.1 Bringing Christian Africa and the Oriental Churches into the Sphere of Medieval / Manuscript Studies

Having a field that is essentially defined by geographic borders that come out of a shared historic Christian identity, and then ignoring adjacent Christian areas during that period, is an arbitrary distinction that deserves to be broken down. This has already happened in recent decades with the incorporation of the Mediterranean into medieval studies; it is time for the greater Mediterranean to be expanded past its nearest Muslim borders, to wholeheartedly embrace the study of Oriental Churches. Given the close relationship of the Ethiopian tradition to the Christian Mediterranean tradition, the Introduction to this dissertation has argued that it makes sense to study it within the field of manuscript studies, disciplinarily located within medieval studies. There is, however, a larger issue of Ethiopia's disciplinary home in general.

In recent decades, the study of Mediterranean cultures has led to increased attention to the interactions between Islam and Christianity, expanding the focus of the field from the historical attention to Western Christendom. What seems lost in so much of the expansion of the field is the oft-ignored Eastern Christendom, which is in many ways treated as more alien than Islam in the presentation of Medieval history in the Anglophone world. Though Byzantine studies does exist as a small subfield, the Oriental Churches get lost in a muddle of overlapping fields that have come to replace the idea of Orientalism, but are generally more exclusive in their focus than that older and unfashionable field. Ethiopia, despite its location, is essentially ignored historically by most African Studies programs, as it does not fit into the various narratives about paganism, colonialism, or Atlantic trade; nor is it generally considered part of Middle Eastern history because it is not predominantly Muslim in makeup; nor is it considered a part of Byzantine Studies, which might be expected to be interested in it as an extension of Eastern Christianity. Ethiopia is generally lost to a larger field, and it is the suggestion
of this author that it may as well find a home in Medieval Studies as elsewhere: it is just as important to study cultural continuity and exchange with Oriental Christian communities as with Islam.

Though Ethiopia does bear mention in some works,\(^\text{13}\) it is often absent; notably one recent work, entitled *Medieval Europe and the World*, does not so much as mention Ethiopia, despite the shared Christian heritage and contacts through the churches in Jerusalem.\(^\text{14}\) Other, more focused works also tend to ignore Ethiopia: in the recent and exhaustive *Oxford History of the Book*, only four entries even reference the Ethiopian tradition, with none devoted to its manuscript history; scarce mention totalling one page in over 1,400 pages total.\(^\text{15}\) It is my hope that the present study might be a small contribution towards bringing the Ethiopian tradition to the attention of scholars of medieval and manuscript studies, and kindle an interest in a fascinating, rich, and understudied region of the world. I simultaneously hope that Ethiopians and Ethiopianists will find here a useful contribution towards the documentation of a beautiful and endangered tradition.

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Appendices
Appendix A

Sample Amharic Questionnaire

Master Interview Guide (Amharic Version)

Sean M. Winslow, M. A.

Fulbright Fellow, 2008-9

Ph.D. Candidate

Centre for Medieval Studies

University of Toronto
A.1 Preamble

There is concern that the shrinking number of people making books in Ethiopia means that we are losing information about how books are produced. The aim of this study is to learn as much as possible about the process of making, distributing, and using books, so please answer the questions as fully as you can.

A.2 All Respondents

When did you take up your craft? (If you practice multiple crafts, please answer for each one.) Have you practiced it continuously since then?

Who taught you your craft and where? Did you study with more than one person?

Please describe a typical day for you—what activities do you perform, and when? Do you perform different activities on different days of the week or during different times of the year? How many hours a day do you spend at your craft? Does it differ during the fasting season versus the non-fasting season?
Appendix A. Sample Amharic Questionnaire

Ethiopian artisans in collaboration with their countrymen. How did you learn the craft? If you have taught students, how do you teach? Do you explain what to do to the student, or are they expected to learn solely by watching what you do?

What tools do you use? Can you bring out all your tools and describe the use of each, one by one?

Who made each of your tools? How did you acquire the tools, and where?

Are some tools better than others?

Where can I acquire these tools and how much would they cost me?
Appendix A. Sample Amharic Questionnaire

Is there anything that is special about the social role of the scribe / parchmenter / binder / painter that is linked to craft—are there benefits or problems related to such work?

Some books have mirrors in them. What are these mirrors used for, and why are they put in the book?

A.3 Parchmenter/

Could you please describe the process of how to make parchment in full?

What makes an acceptable skin for parchmenting? What makes a better-quality parchment? Does the health of the sheep matter? Does the color of the sheep's hair change the color or quality of the parchment? Does a spotted sheep produce a different quality of parchment than a one-color sheep?
Do you make different types of parchment for different uses? (Do different books or uses require different techniques?)

Do you make small pages for small books out of large pieces, or do you make them out of smaller or damaged pieces?

What causes holes in parchment—what do you need to do to ensure that there are fewer holes? (Holes that appear in the process of stretching the skin and making the parchment, not holes caused on purpose by the parchmenter.)

Describe the process of sewing shut a tear or hole in the parchment. When can it be sewn shut and when not? Are there special considerations in sewing shut a hole?

How do you cut the skin to make the most usable pages? What do you do with the left-over pieces?
አገልግሎት ላይ የምታውሏቸውን ገፆች ከቆዳው እንዴት ትቆርጧቸዋላችሁ? ቁርጥራጮቹስ ለምን ይጠቅማሉ?

A.4  Scribal Practices/

A.4.1 Orders and Production/

How do orders for books come to you? If someone wanted to commission a book, how would they approach you?

Are your books all commissioned, or do you produce some books before there is a buyer?

How are you paid for a book? How do you determine how long and how much a book will cost?

How many books (objects) have you made during your career?

How many different books (titles) have you scried/copied?
(Ask which titles and who ordered them.)

Do you make written materials other than books?

መፅሐፍ ያልሆኑ ትንንሽ ቁሳቁሶችን ጽፈዋል? ከመፅሐፍ ውጭ (ምን አይነት ቁሳቁስ)

(Ask what materials and who buys them.)

The Synaxarium can be produced in two or three volumes. Why would you choose to produce it in two? Why in three?

ስንክሳር በሁለት ነው ወይስ በሶስት ክፍል የሚፃፈው? በሁለት ክፍል እንዲዘጋጅ የተደረገው ለምንድን ነው? ለምን በሶስት ከማን ነው?

A.4.2 Scripts

How many different styles of script do you know? What purpose is each script used for? (Would you write in a very round hand for some purposes, and an angular/'sharp' hand for others?)

ስንት አይነት የአፃፃፍ ዘዴ ታውቃለህ? እያንዳንዱ ዘዴ የየራሱ ጥቅም አለው ወይ? በክብ ወይም በከርብ ቅርፅ መፃፍ ትችላለህ?

A.4.3 Materials

Do you buy or make your parchment? Where/from whom do you get your parchment?

አፓር ያግዛ ወይስ ትሰራለህ? የትና ከማን ነው የምትገዛው?
Do you buy or make your pens/material for pens? Where/from whom do you get your pens/material for pens?

(Ask them to demonstrate how to properly make a pen. How is the pen cut? What angle is the pen held at? Could I take a pen with me?)

Do you buy or make your ink? Where/from whom do you get your ink?

Do you buy or make your paints? Where/from whom do you get your paints?

How many recipes do you know for black ink?

(Note that the purpose of these questions is to get as detailed information as possible about the process of making inks. Ideally, I would like to arrange to accompany the scribe as he goes to collect all the necessary ingredients, and watch and ask questions through every step of the process.)

How many recipes do you know for red ink?
Please write out these recipes.

አለሁ እለበውን ዓለምት ይርጫልኝ፣

Do you know any recipes for gold ink?

ምርጫማ ወለሸው እውነት ዳህታዊ ያለው የተለየሁ? እለሁ ይርጫልኝ፣

Do you know any other ways to use gold in manuscripts? If so, please describe them.

ምርጫማ ወለሸው እውነት ድል እንገት ይዞ ያለው የተለየሁ? እለሁ ይርጫልኝ፣

Do you know recipes for different colors of paint?

እተለየዩ ቀለም የሆነ ይዞ ያለው የተለየሁ? እለሁ ይርጫልኝ፣

A.4.4 Layout/Organization

Do you write in red ink at the same time that you write in black ink or do you leave space and come back later?

ምሮንስክ የስ ይህን ውሳኔ ወለሸው ይላን እንገት ያለው የስ ይህን ዴቅስ ወለሸው ይላን ሸቀ እንደ እንደ ይስ ይናሉ ከተውክ የስ ይህን ዴቅስ ይስ ይናልፋ ከተውክ ትፅፋለሁ?

There are many lines of red ink at the front of many works—why is this, and what is the rule for what is written in red?
How do you determine the size margins (amount of empty space on the edges of pages)—is there a rule?

Do you own your own copies of the books you copy? When you copy a book, what do you use as a model/exemplar text?

How do you lay out the text and images on the page? What processes, tools, and decisions are involved? Could you talk about all the different things that might go on the page (text, image, chapter breaks, and more) and how they affect your decision-making process?

Do you draw härgs yourself or does someone else make them?
Do härags have different regional styles? Can you tell where a book was scribed based upon the style of the härag?

ህፋ Kare ከአካባቢያዊ መግለጫ አላቸው? ከህፋ ከሳሳል ዘይቤ ተነስተን ይህ መፅሐፍ ከዚህ አካባቢነት ከው ብለን መግለፅ እንችላለን?

How do you determine how many words fit on a line? What do you do if it seems they will not fit?

ስንት ቃል በአንድ መስመር ላይ? መስመሩ ይታካልካ?

When you copy a book, do you copy the format (number of columns, number of words in a line, number of lines on a page, etc.)? Is the copy the same size as the original? If not, what do you change?

መፅሐፉበን በምትገለብጥበት ጊዜ ፎርማቱን እንዳለ ትገልብታለህ?(የአምዱ ቁጥር፣ በአንድ መስመር ወረቀት ቁልት ቁጥር፣ በገፋ ያሉት መስመሮች ብዛት፣ ወዘተ) መጠናቸው ከዋናው ወረቀት ጋር ተመሳሳይ ነው? ካልሆነ እንዴት ነው የሚቀይሩት?

There are sometimes marks in the margin–what kinds of marks would you put in the margins and why?

በህዳጉ ላይ አንድ አንድ ጊዜ ጌጣጌጥ ወይም ማህተም አላቸው ምን አይነት ጌጣጌጥ ወይም ማህተም የመታስቀምጡት? ወምን?

How do you choose how many sheets go in a quire? Do you know why different books have different numbers of sheets in a quire?
Many quires have single folios/half-sheets inserted into the quire. Why is this done?

Some quires have two single folios/half-sheets in them. Why would you use two single pages/half-sheets instead of a full bifolium/full sheet?

How do you decide where in a quire to place the single folio/half-sheet? Do you put all the single folios/half-sheets in the same place in a quire?

Are blank sheets (fly-leaves and end-leaves) at the front and back of the book inserted by the scribe or the binder? How many should there be? What are they there for?
How are quires numbered? Do you ever number the first quire? Where do you put the quire numbering and why?

Many books have pieces of string sewn onto the page to mark new works or major text divisions. Are these added by the scribe or the user? Are there rules for where and how to place them? The string is often made of silk—is there a reason for this?

The Psalter: The first three works of the Psalter (151 psalms, 15 canticles, Song of Songs) are arranged in one column, with one sentence per line, with a full-stop symbol at the end of the line. The final two (Praises of Mary, Gate of Light) are arranged in two columns. Why are they arranged differently? Can they be arranged different ways? Would it mean something if they were arranged differently?

The Psalter: Some, but not all Psalters mark one line in Psalm 76 as the midpoint of the Psalms. Do you know why is this done? Why are some marked, but not others?
The Psalter: The word for God is sometimes rubricated (written in red ink) and sometimes not. Why is this, and when is it appropriate to rubricate the name of god, and when not? The name of Mary?

The Psalter: Psalm 150 and the Tenth Biblical Canticle (The Song of the Three Holy Children, Daniel 3:57-88) are laid out differently than others. Could you describe how it is laid out and tell why it is so?

Are there special rules for the “Psalter of the Virgin” (Mezmura Dengel)?

What distinguishes a deluxe/luxury edition of a book from a normal one? How much more would it cost if I wanted a luxury/deluxe edition?
Do you bind books yourself or send the quires to other people? If the latter, who do you send them to?

A.5 Binder/

Please describe the process of binding books from when the scribe finishes. (How many people are involved, and in what order? What does each person do?)

How many different ways can you sew a book together?

What do you use for glue?

What kinds of wood are suitable for making covers? Would you ever use a different kind of wood?
What kind of cord do you use for sewing and binding? Do you do anything to prepare it?

1. How do you make the headband? Could you demonstrate the technique?

Who prepares the wood for the covers—you or someone else?

Who sews the cloth to cover the book? Do you or the buyer arrange this?

Who makes the leather book-sleeve? Do you make this or does the client arrange for it?

A.6 Painter/Minaturist/አ_owned.
What books have you painted in? What paintings/scenes? Who ordered the painting?

How do you work together with the scribe or others in order to organize where paintings go and what they are of? How much direction does the book-maker give concerning content, location, and size?

When you are painting on parchment, how do you prepare the surface of the page? Do you have to prepare parchment differently from other surfaces you might paint on?

How do you know what to paint in a scene? Do you copy other paintings or work on your own? What is your inspiration?
There have been many styles of painting in Ethiopia over time. Which styles influence the way you paint?

Do you only use Ethiopian styles or do you look to Western/Russian/other sources of inspiration? Photographs? Television? The Internet?

At various times in Ethiopian history, Ethiopians and others (notably Christ and the Virgin Mary) have been depicted with a variety of skin tones, from very dark to almost-European peach/orange tones. How do you depict Ethiopians in regard to skin tone? Christ and the Virgin Mary? Why do you choose these tones?

Do you buy or make your paints? Where/from whom do you get your paints?
Do you know any traditional recipes for paints?

(If so, please list recipes for all the different colors and types of paints. Ask if he would be willing to let me accompany him to collect materials and to demonstrate how they are made.)

Do you know how to work with gold in a painting?

(Ask to see how this is done. If they are willing, have them describe the process and variants.)

Do you sign your paintings? If so, is there a certain rule for how and where?


Please describe your role in commissioning, buying, selling, and transporting books.
What portion of your business is commissioning new books and what portion is buying and selling existing books?

How many books do you commission in a year?

How many books do you buy from other sources? From whom?


What difficulties do you experience in the process of brokering books?
A.8 Other Questions/

You are the expert, and I am trying to learn from you. There are many things about your craft that I did not think to ask. What questions should I have asked, in order to learn more about your work and how books are made in Ethiopia?

What can you tell me about your craft that I did not ask about? If you suggested questions above, please answer them here.

What is your name?

Where were you born? Where did you grow up?

Where did you attend school? Who taught you? What subjects did you study? Please state the number of years for each stage of education.
As a craftsman, do people fear you? Have you ever been described as buda, accused of having the evil eye, or of having cast a spell on someone? If you have, could you please describe it?

Do you know magical prayers? Have you produced talismans or magic scrolls in the past?

Who buys/commissions these works?

What distinguishes a 'magic' scroll from a 'Church' scroll?

I would like to interview as many people who scribe books, make parchment, bind books, or paint/decorate books as possible. Additionally, I would like to speak with people who buy and sell books, so that I can understand how orders come to producers and books get to buyers. Do you know other people who would be willing to work with me? How would I contact them?
Appendix B

Sample Tigrinya Questionnaire

Master Interview Guide (Tigrinya Version) እውራ ምርመራ ምምራሕ ያማም ከክ

Sean M. Winslow, M. A. ፵፫፳፵፪, ፫፫፲፲ ፹፲. Fulbright Fellow, 2008-9 Ph.D. Candidate Centre for Medieval Studies University of Toronto
B.1 Preamble

There is concern that the shrinking number of people making books in Ethiopia means that we are losing information about how books are produced. The aim of this study is to learn as much as possible about the process of making, distributing, and using books, so please answer the questions as fully as you can.

B.2 All Respondents

When did you take up your craft? (If you practice multiple crafts, please answer for each one.) Have you practiced it continuously since then?

Who taught you your craft and where? Did you study with more than one person?

Please describe a typical day for you—what activities do you perform, and when? Do you perform different activities on different days of the week or during different times of the year? How many hours a day do you spend at your craft? Does it differ during the fasting season versus the non-fasting season?
How did you learn the craft? If you have taught students, how do you teach? Do you explain what to do to the student, or are they expected to learn solely by watching what you do?

What tools do you use? Can you bring out all your tools and describe the use of each, one by one?

Who made each of your tools? How did you acquire the tools, and where?

Are some tools better than others?

Where can I acquire these tools and how much would they cost me?

Is there anything that is special about the social role of the scribe/parchmenter/binder/painter that is linked to craft—are there benefits or problems related to such work?
Some books have mirrors in them. What are these mirrors used for, and why are they put in the book?

What makes an acceptable skin for parchmenting? What makes a better-quality parchment? Does the health of the sheep matter? Does the color of the sheep’s hair change the color or quality of the parchment? Does a spotted sheep produce a different quality of parchment than a one-color sheep?

Do you make different types of parchment for different uses? (Do different books or uses require different techniques?)
Do you make small pages for small books out of large pieces, or do you make them out of smaller or damaged pieces?

What causes holes in parchment—what do you need to do to ensure that there are fewer holes? (Holes that appear in the process of stretching the skin and making the parchment, not holes caused on purpose by the parchmenter.)

Describe the process of sewing shut a tear or hole in the parchment. When can it be sewn shut and when not? Are there special considerations in sewing shut a hole?

How do you cut the skin to make the most usable pages? What do you do with the left-over pieces?
B.4  Scribal Practices

B.4.1 Orders/Production

How do orders for books come to you? If someone wanted to commission a book, how would they approach you?

Are your books all commissioned, or do you produce some books before there is a buyer?

How are you paid for a book? How do you determine how long and how much a book will cost?

How many books (objects) have you made during your career?

How many different books (titles) have you scribed/copied? (Ask which titles and who ordered them.)
Do you make written materials other than books?

The Synaxarium can be produced in two or three volumes. Why would you choose to produce it in two? Why in three?

B.4.2 Scripts

How many different styles of script do you know? What purpose is each script used for? (Would you write in a very round hand for some purposes, and an angular/'sharp' hand for others?)

B.4.3 Materials

Do you buy or make your parchment? Where/from whom do you get your parchment?

Do you buy or make your pens/material for pens? Where/from whom do you get your pens/material for pens?
Ask them to demonstrate how to properly make a pen. How is the pen cut? What angle is the pen held at? Could I take a pen with me?

Do you buy or make your ink? Where/from whom do you get your ink?

Do you buy or make your paints? Where/from whom do you get your paints?

How many recipes do you know for black ink?

How many recipes do you know for red ink?

Please write out these recipes. (Note that the purpose of these questions is to get as detailed information as possible about the process of making inks. Ideally, I would like to arrange to accompany the scribe as he goes to collect all the necessary ingredients, and watch and ask questions through every step of the process.)

How many recipes do you know for black ink?

How many recipes do you know for red ink?
Please write out these recipes.

Do you know any recipes for gold ink?

Do you know any other ways to use gold in manuscripts? If so, please describe them.

Do you know recipes for different colors of paint?

B.4.4 Layout/Organization

Do you write in red ink at the same time that you write in black ink or do you leave space and come back later?

There are many lines of red ink at the front of many works—why is this, and what is the rule for what is written in red?
How do you determine the size margins (amount of empty space on the edges of pages)–is there a rule?

Do you own your own copies of the books you copy? when you copy a book, what do you use as a model/exemplar text?

How do you lay out the text and images on the page? What processes, tools, and decisions are involved? Could you talk about all the different things that might go on the page (text, image, chapter breaks, and more) and how they affect your decision-making process?

Do you draw härags yourself or does someone else make them?

Do härags have different regional styles? Can you tell where a book was scribed based upon the style of the härag?
How do you determine how many words fit on a line? What do you do if it seems they will not fit?

When you copy a book, do you copy the format (number of columns, number of words in a line, number of lines on a page, etc.)? Is the copy the same size as the original? If not, what do you change?

There are sometimes marks in the margin—what kinds of marks would you put in the margins and why?

How do you choose how many sheets go in a quire? Do you know why different books have different numbers of sheets in a quire?

Many quires have single folios/half-sheets inserted into the quire. Why is this done?
Some quires have two single folios/half-sheets in them. Why would you use two single pages/half-sheets instead of a full bifolium/full sheet?

How do you decide where in a quire to place the single folio/half-sheet? Do you put all the single folios/half-sheets in the same place in a quire?

Are blank sheets (fly-leaves and end-leaves) at the front and back of the book inserted by the scribe or the binder? How many should there be? What are they there for?

How are quires numbered? Do you ever number the first quire? Where do you put the quire numbering and why?

Many books have pieces of string sewn onto the page to mark new works or major text divisions. Are these added by the scribe or the user? Are there rules for where and how to place them? The string is often made of silk—is there a reason for this?
39. The Psalter: The first three works of the Psalter (151 psalms, 15 canticles, Song of Songs) are arranged in one column, with one sentence per line, with a full-stop symbol at the end of the line. The final two (Praises of Mary, Gate of Light) are arranged in two columns. Why are they arranged differently? Can they be arranged differently? Would it mean something if they were arranged differently?

The Psalter: Some, but not all Psalters mark one line in Psalm 76 as the midpoint of the Psalms. Do you know why is this done? Why are some marked, but not others?

The Psalter: The word for God is sometimes rubricated (written in red ink) and sometimes not. Why is this, and when is it appropriate to rubricate the name of god, and when not? The name of Mary?
The Psalter: Psalm 150 and the Tenth Biblical Canticle (The Song of the Three Holy Children, Daniel 3:57-88) are laid out differently than others. Could you describe how it is laid out and tell why it is so?

Are there special rules for the “Psalter of the Virgin” (Mezmura Dengel)?

The Psalter: If I were a patron, and wanted to commission a Psalter, how much would it cost?

What distinguishes a deluxe/luxury edition of a book from a normal one? How much more would it cost if I wanted a luxury/deluxe edition?

Do you bind books yourself or send the quires to other people? If the latter, who do you send them to?
B.5 Binder

Please describe the process of binding books from when the scribe finishes. (How many people are involved, and in what order? What does each person do?)

How many different ways can you sew a book together?

What do you use for glue?

What kinds of wood are suitable for making covers? Would you ever use a different kind of wood?

What kind of cord do you use for sewing and binding? Do you do anything to prepare it?

How do you make the headband? Could you demonstrate the technique? (Ask if he can make a head band for me to take with me.)
Who prepares the wood for the covers—you or someone else? 

Who sews the cloth to cover the book? Do you or the buyer arrange this?

Who makes the leather book-sleeve? Do you make this or does the client arrange for it?

The leather of the book-covering often does not meet on the inside-cover, and fabric, bare wood, or mirrors are placed there. Why do you leave this square, and how do you prefer to cover it (or not)?

B.6 Painter/Minaturist

Do you paint in certain books or any book? What do you paint other than books?
What books have you painted in? What paintings/scenes? Who ordered the painting?

How do you work together with the scribe or others in order to organize where paintings go and what they are of? How much direction does the book-maker give concerning content, location, and size?

When you are painting on parchment, how do you prepare the surface of the page? Do you have to prepare parchment differently from other surfaces you might paint on?

How do you know what to paint in a scene? Do you copy other paintings or work on your own?

What is your inspiration?

There have been many styles of painting in Ethiopia over time. Which styles influence the way you paint?

Do you only use Ethiopian styles or do you look to Western/Russian/other sources of inspiration?

Photographs? Television? The Internet?
At various times in Ethiopian history, Ethiopians and others (notably Christ and the Virgin Mary) have been depicted with a variety of skin tones, from very dark to almost-European peach/orange tones. How do you depict Ethiopians in regard to skin tone? Christ and the Virgin Mary? Why do you choose these tones? Do you buy or make your paints? Where/from whom do you get your paints? Do you know any traditional recipes for paints? (If so, please list recipes for all the different colors and types of paints. Ask if he would be willing to let me accompany him to collect materials and to demonstrate how they are made.) Do you know how to work with gold in a painting?
(Ask to see how this is done. If they are willing, have them describe the process and variants.)

Do you sign your paintings? If so, is there a certain rule for how and where? እስራርሑ’ዶ ይግለፁለይ?


B.7 Broker

Please describe your role in commissioning, buying, selling, and transporting books.

What portion of your business is commissioning new books and what portion is buying and selling existing books?

How many books do you commission in a year?
How many books do you buy from other sources? From whom?


What difficulties do you experience in the process of brokering books?

B.8 Other Questions

You are the expert, and I am trying to learn from you. There are many things about your craft that I did not think to ask. What questions should I have asked, in order to learn more about your work and how books are made in Ethiopia?

What can you tell me about your craft that I did not ask about? If you suggested questions above, please answer them here.
What is your name? እና በኳኔ ያለበት ወንጀለን?

Where were you born? Where did you grow up? እና በኳኔ ያለበት ወንጀለን?

Where did you attend school? Who taught you? What subjects did you study? Please state the number of years for each stage of education. እና በኳኔ ያለበት ወንጀለን? የመምህር ያለበት ወንጀለን? እና በኳኔ ያለበት ወንጀለን? የመምህር ያለበት ወንጀለን? የመምህር ያለበት ወንጀለን?

As a craftsman, do people fear you? Have you ever been described as buda, accused of having the evil eye, or of having cast a spell on someone? If you have, could you please describe it? እና በኳኔ ያለበት ወንጀለን? የመምህር ያለበት ወንጀለን? የመምህር ያለበት ወንጀለን? የመምህር ያለበት ወንጀለን?

Do you know magical prayers? Have you produced talismans or magic scrolls in the past? እና በኳኔ ያለበት ወንጀለን? የመምህር ያለበት ወንጀለን? የመምህር ያለበት ወንጀለን? የመምህር ያለበት ወንጀለን? የመምህር ያለበት ወንጀለን? የመምህር ያለበት ወንጀለን?

I would like to interview as many people who scribe books, make parchment, bind books, or paint/decorate books as possible. Additionally, I would like to speak with people who buy and sell books, so that
I can understand how orders come to producers and books get to buyers. Do you know other people who would be willing to work with me? How would I contact them?

አልስና ነፃታም ርት-

የካት ብርሃኔ ይታል ያተሆኑ ነበር ያለው? ይህ ምወ ያለ የሰላማ ርት ከው ከት ከት ያቀቀ በየት ያለው? ያለው? ያለው ይታል ከው ከት ከት ያቀቀ በየት ያለው? ያለው ይታል ከው ከት ከት ያቀቀ በየት ያለው?
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