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Corana. Production and Transmission of the Qur’ān in the Western Islamic World

*Production and Transmission of the Qur’ān in Western Islamic World* (CORANA) is an interdisciplinary research project funded by the Spanish Ministry of Research for three years (2013 – 2016). It aims at establishing for the first time in a coordinated and systematic way a comprehensive corpus of data about the production of Qur’ānic copies in the Western Islamic world between the twelfth and the seventeenth centuries. Such corpus could serve as a basis for further studies that would shed light on the cultural and intellectual history of Muslim societies during the European Middle Ages and Modern times.

CORANA intends to reach the following goals: to complete the compilation and detailed analysis of the material features of the handwritten copies of the Qur’ān produced in the West (codicology, palaeography and art history); to study their contents; and to study the various ways they were used within Andalusi or Maghribi Muslim communities as well as within a Christian context. Besides the Qur’ānic manuscripts produced in al-Andalus in the late Middle Ages and early Modern times, manuscripts produced and circulating during the same period in Northern and Subsaharan Africa shall be taken into account. All this will help to understand the complex reality which surrounds the Qur’ān.

Headed by Nuria Martínez-de-Castilla (Universidad Complutense de Madrid, Spain), this international research group is composed of the following scholars: Thomas Burman (Tennessee, USA), François Déroche (École Pratique des Hautes Études, France), Marie-Geneviève Guesdon (Bibliothèque Nationale de France), Mauro Nobili (University of Cape Town, South Africa) and Patricia Roger (Centre national de la recherche scientifique, France).

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Corpus Coranicum

“Corpus Coranicum” is a research project of the Berlin-Brandenburg Academy of Sciences and Humanities, initiated in 2007 by Angelika Neuwirth (chair of Arabic Studies at the Freie Universität Berlin), Michael Marx and Nicolai Sinai. It is devoted to researching the history of the Qur’ān. With an estimated time-span of 18 years, the project is pursuing research in three areas: (1) textual documentation (manuscripts and variant readings); (2) collection of indirect testimonies from around the time of the emergence of the Qur’ān; and (3) historical-literary commentary. The project results are published online at www.corpuscoranicum.de.

(1) Regarding the textual documentation, the oldest manuscripts and variant readings of the Islamic scholarly tradition are collected in two databases, “Manuscripta Coranica” and “Variae Lectiones Coranicae”. Access to the relevant material for the written and oral tradition (variant readings of the text described in Muslim linguistic and exegetical treatises of the first five centuries) opens new ways for scholarship.

The earlier manuscripts of the Qur’ān have only been under serious scrutiny in the very last years, and it is still necessary to take the material evidence into account. Theodor Nöldeke (1836–1930) already highlighted the need to study manuscript evidence in his reference work “Geschichte des Qorāns” (1860). In the 1920s, Gotthelf Bergsträßer (1886–1933), in close cooperation with the Australian scholar Arthur Jeffery, developed the idea of setting up an apparatus criticus for the text of the Qur’ān, comprising both evidence from manuscripts and variant readings as described in Muslim scholarly literature.

In 1930 Bergsträßer created the “Korankommision”, a section at the Bavarian Academy of Sciences in Munich dedicated to that task. Financed by the Academy, Bergsträßer and his colleague and successor Otto Pretzl (1893–1941) took more
than 10,000 photographs of Qur’anic manuscripts from collections in Berlin, Istanbul, Cairo, Madrid, Meknes, Paris and Rabat. Their photo collection is currently being digitised by the project in Potsdam.

(2) Texts coming from the religious, cultural and linguistic environment of the Qur’ān are collected in the database “Texte aus der Umwelt des Korans”. Here, testimonies from Late Antiquity in Arabic, Syriac, Hebrew, Greek and Ethiopic, pre-Islamic inscriptions in North and South Arabian, and other relevant texts are collected and referred to verses of the Qur’ān. These data are extracted both from secondary literature and from a direct study of the original sources. So far, a focus has been placed on the study of Syriac literature. By the study of Late Antique sources, the project attempts to reconstruct the cultural and religious background of the people addressed by Muhammad’s message.

Much existing research has been trying to find sources of the text, describing the Qur’ān as a kind of a copy-and-paste text using older material. The project aims to establish a new approach to the intertextual study of the Qur’ān. The highly argumentative and discursive text, proclaimed by Muhammad to his listeners, is read against the background of the Late Antique period in order to understand its original argumentative task. Since the first community seemingly had knowledge of Jewish, Christian or Arabian traditions, the text of the Qur’ān can be read by comparing it to Late Antique traditions and by documenting similarities and differences in order to retrace the argumentative line of its discourse.

(3) The historical-literary commentary analyses observable literary patterns (rhyme patterns, verse length, Medinan insertions) and thematic developments in the text. Here the Qur’ān is understood as a text that was proclaimed first in Mecca and then in Medina (between c. 610 and 632 AD) over a period of more than 22 years. Reading it in a chronological order allows us to perceive the text and its theology in a historical framework, reflecting the development of the first Muslim community. The commentary on the early Meccan suras by Nicolai Sinai is accessible under www.corpuscoranicum.de. Suras of the middle Meccan and the late Meccan period are being studied.

“Corpus Coranicum” cooperates with scholars from Europe and the Middle East in the framework of the EUME-Project of the Wissenschaftskolleg zu Berlin (Institute of Advanced Study). It is also currently engaged in the German-French research programme “Coranica” (www.coranica.de), dealing with material evidence (manuscripts, inscriptions and language contact). Its databases also place the project in the field of digital philology for Semitic languages. Contact: Michael Marx; marx@bbaw.de. Web: koran.bbaw.de; www.corpuscoranicum.de.

**Khartasia: Online Database on Asian Papers**

In the spring of 2012 Khartasia, a database of technological and historical information on Asian papers, was launched as part of a wider research programme conducted by the Centre de Recherche sur la Conservation des Collections and the Paris 1 Panthéon-Sorbonne University (in collaboration with several institutions in Japan – National Museum of Ethnology, Osaka, Kochi Prefecture Paper Technology Center, Kochi, – Korea – National Research Institute of Cultural Heritage, Daejeon, Forest products and Biotechnology, Kookmin University, Séoul, Wood and paper science, Chungbuk National University, Chungbuk, – and China – Fudan University, Shanghai). The final goal of this programme is to provide a better knowledge and understanding of the nature and characteristics of papers in Asian collections and also the Western works especially from the nineteenth and twentieth centuries, made on Oriental papers.

Europe has known Asian paper from the seventeenth century onwards, with increase of imports from China. It was appreciated by artists such as Rembrandt for its texture and colour. The great expeditions of the late nineteenth century contributed to the creation of the first Asian collections in the European libraries and museums. These collections, however, have rarely been investigated from a technological perspective. Thus far, codicological and paleographic studies conducted on these manuscripts focused on visual observation, and the papers have frequently been misidentified. As for the Oriental papers from the Middle East, they have been in use since the Middle Ages, but their exact origin and constituents remain elusive.

Little is known on the manufacturing processes and the chronological evolution of paper in Asia. The main reasons are twofold. First, because of the lack of study in countries holding ancient sources outside China, Korea and Japan, we have no precise information on the manufacture of the first Chinese papers, their distribution in neighbouring countries and their journey via the Muslim world to Europe. Second, the problems in accessibility of European literature in the Far East and of the Eastern publications in Europe limit the availability of existing data. Information is often scattered in small-circulation publications, often confusing and fraught with translation error or technical misinterpretation.

The research shall provide various elements of
knowledge to curators, conservators, historians and archaeologists and help them in determining the nature of the works of art and documents within the collections. A global protocol for the identification of the raw paper constituents will help establish the chrono-geographical origins of paper. The protocol combines the conventional codicological and palaeographical study with microscopy or more complex laboratory techniques, such as chromatography and spectroscopy methods. The study thus draws expertise from the humanities (history, history of technology, ethnography, sociology, palaeography) and the sciences (botany, physics and chemistry).

Once the origins of paper have been determined, we shall achieve a better understanding of distribution and dissemination of paper among and beyond the paper-producing areas. Not only a European drawing could be produced on an Asian paper: a Chinese painting could be executed on a Korean paper or a Japanese or Korean manuscript on a Chinese paper. The study of the first Arab-Muslim documents on paper will suggest a chronology of the use of import papers and the appearance of locally produced paper in the Middle East.

The Khartasia database brings together the results of the research programme. It is designed as a directory of paper materials and paper manufacturing processes placed in a historical context that can be used for the identification of Oriental papers. It is additionally a documentation of a disappearing industry. As previously in Europe, paper mills are disappearing in Asia as they are no longer profitable.

The information is collected from the technical documentation, ancient and modern, from photographs and films and analytical results of paper samples, plants etc. The base is organised around raw materials, mainly plants, used to make paper: fibers, formation aids, dyes, but also sizing agents, dyeing agents, paper medicines, and inorganic compounds such as fillers. Search can be conducted for plant name (scientific, in Latin, or vernacular, in one of the five database languages: English, French, Chinese, Japanese, Korean), paper constituents and paper names. The database allows application of multiple filters as well as simple alphabetical browsing. (Currently, only English and French versions are available).

The information is grouped under four main headings: (1) A descriptive section of the plant (with its phylogenetic classification) which includes the intended use: fiber, dispersing agent, dyes, sizing agent, etc.; the part used: bark, stem wood, root, leaf, etc., where the plant grows and where it is used for paper. The section also includes general information on the cultivation and other uses of the plant. (2) A historical presentation per country (currently China, Korea, Japan) of the chronology of the use of the plant in paper manufacture. Papers made from each plant are presented per country along with historical and technological notes. Papers (3) A technological section on the preparation of the raw materials per country. (4) Fiber identification; the determining elements are specified and illustrated.

The project welcomes cooperation from interested scholars.

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Slavonic Apocryphal Heritage Online Database

A new project in the field of Slavonic apocrypha has been launched at the Free University of Berlin. Produced in scriptoria scattered in the realms of what was once the Byzantine Commonwealth and later Ottoman and Russian empires, these texts represent a fascinating cultural phenomenon. No systematic research of these sources has ever been attempted; a study with special emphasis on the Slavonic domain of the Byzantine Commonwealth is much needed, since most analyses of this material are conducted from the perspective of Jewish traditions from Palestine (although some may originate from Babylonia), Syria, or Egypt. There is a large geographical area along the borders of the Roman Empire which has escaped notice. The aim of the project is to make these texts available online to all those interested in studying them through an open access digital research database.

The project is headed by Florentina Badalanova Geller, in conjunction with a larger project of Christoph Markschies within the framework of 264 Excellence Cluster TOPOI, Research Group D-4 “Immaterial Causes and Physical Space”. The PI is supported by Iva Trifonova, a post-doctoral researcher from the Bulgarian Academy of Sciences, Cyrillic-Methodian Research Centre.

Slavonic apocrypha preserve texts of originally Jewish and/or Christian extra-canonical writings from the Second Temple Period (attested in Hebrew, Aramaic, Greek, Latin, Armenian, Georgian, Syriac, Coptic, etc.) in a unique form, namely the last European lingua sacra: Old Church Slavonic. Some of these ancient sources, like 2 (Slavonic) Enoch, the Apocalypse of Abraham, the Ladder of Jacob, etc., survive exclusively in Slavonic witnesses; of particular interest are also indigenous apocryphal texts reflecting secondarily absorbed cultural traditions, such as The Contest between the Archangel Michael and Satan and The Sea of Tiberias, which have important parallels in vernacular oral heritage (i.e. The Folk Bible). Other earlier Jewish texts transmitted to the Byzantine Commonwealth survived in a number of Slavonic versions; these include the Testaments of the Twelve Patriarchs, the Ascension of Isaiah, the Apocalypse of Baruch, the Testament of Abraham, etc. with earlier attestations in Greek and/or Syriac. Slavonic apocryphal prayers are also relevant, with parallels in Syriac and Greek. Early Christian texts are also to be taken into consideration (some known from Coptic as well). The New Testament apocrypha which will be included in the research topics of the project will be the Proto-Gospel of James (also known as Protovangelium Jacobi), the Infancy Gospel, the Descent of the Virgin Mary to Hell, the Gospel of Nicodemus, etc.

The creation of a new European lingua sacra (i.e. Old Church Slavonic) reflects the transfer of ancient knowledge from other regions into European cultural space through the medium of the Byzantine Empire, usually (but not only) via Greek sources; this entire process has not been sufficiently studied, because much of the Slavonic material is unavailable to Western scholarship since it has not been adequately edited and translated in a modern up-to-date form. The importance of this material for spatial knowledge transfer is obvious: they reflect the way in which Jewish midrash and early Christian patristic writings were preserved and conveyed into Late Antiquity, finding a place in both Muslim tafsīr and ritual practice and beliefs commonly known throughout Eastern Europe. Such concepts and ideas are not only preserved in written forms; they can be found in oral tradition from these regions, as well as in the art and iconography of Orthodox Christianity, which has hardly been studied by Western art historians.

Berlin is home of many bibliographic rarities rel-
event to this research, such as the following items: 
SBPK Berlin Ms. slav.fol.10: New Testament of Miklauš Jakubica, sixteenth century; SBPK Berlin Ms. slav. Wuk 18 and Wuk 41 Pandects of Nicon of the Black Mountain, sixteenth-seventeenth century; SBPK Berlin Ms. slav. Wuk 23 Menaion for September to November, sixteenth century; SBPK Berlin Ms. slav. Wuk 30 Liturgico-homiletic collection, seventeenth century; SBPK Berlin Ms. slav. Wuk 48 Theological collection, thirteenth-fourteenth century (Matthes, Elke, Katalog der slavischen Handschriften in Bibliotheken der Bundesrepublik Deutschland, Wiesbaden: Harrassowitz, 1990, pp. 7–64). These will be consulted and collated during the process of this research. The intention is also to include texts from manuscripts collections from libraries in Bulgaria, Russia, Ukraine and Serbia.

A further aspect of this research will be to include texts accessible only from the nineteenth- and early twentieth-century anthologies published in Eastern Europe, which remain valuable as sources of data but urgently need updated editions and commentaries. These include: “Апокрифические сказания о ветхозаветных лицах и событиях по рукописям Соловецкой библиотеки” (Apocryphal Legends About Old Testament Characters and Events from the Manuscripts of the Solovetskaia Library) and “Апокрифические сказания о новозаветных лицах и событиях по рукописям Соловецкой библиотеки” (Apocryphal Legends About New Testament Characters and Events from the Manuscripts of the Solovetskaia Library) by I. Porfir’ev [И. Порфирьев], published in 1877 and 1890 in St. Petersburg; Памятники старинной русской литературы, издаваемые Графом Григорием Кушелевым-Безбородко, Выпуск третий: Ложныя и отреченныя книги русской старинны, собранныя А. Н. Пыпиным (Monuments of Old Russian Literature, Edited by Count Grigory Kushleve–Berzorodko, Volume three: False and Proscribed Books of Russian Antiquities, Collected by A. N. Pypin), published in 1862 in St. Petersburg; Памятники отреченной русской литературы, собранны и изданны Николаем Тихонравоым (Monuments of Proscribed Russian Literature, Collected and Edited by N. Tikhonravov), published in 1862 in St. Petersburg; Апокрифы и легенды (Apocrypha and Legends) published from Ukrainian manuscripts by I. Franko [Я. Франко] in Lvov in 1896–1902.

The intention is also to include texts from various periodicals from the Balkans and elsewhere from the end of the nineteenth and the beginning of the twentieth century, such as the Bulgarian Сборник за народни умотворения, наука и книжнина (Miscellany of Folk Lore, Scholarship and Literature).

The Slavonic texts in this Corpus will be digitised on the TOPOI website. The project shall classify published material and draw attention to new manuscript sources. The project shall be strengthened by scholars familiar with Koiné Greek, Latin or Syriac (preferably with some knowledge of Old Church Slavonic).

The first tangible results of the project have found their reflection in the new courses offered by the PI at the Free University, The Unholy Scriptures, Apocryphal Heritage: the Bible Rewritten and Retold, and The Folk Bible.

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Orient-Digital. Database of Oriental Manuscripts at Berlin State Library
After a two year period of labour-intensive preliminaries, the Berlin State Library (Staatsbibliothek zu Berlin Preußischer Kulturbesitz) launched the comprehensive and pioneering research tool Orient-Digital (www.orient-digital.de), its database of Oriental manuscripts, on March 5, 2013. It emerged from an intra-departmental database that originally served administrative and library-oriented requirements that visitors or scholars had no access to. An increasing number of domestic and international queries concerning the manuscript collection indicated the need of a modern research and presentation tool doing justice to the impressive amount of Oriental manuscripts held by the Berlin State Library.

The information on the Berlin collection is chiefly provided by the catalogues by Wilhelm Ahlwardt (Verzeichnis der arabischen Handschriften, 10 vols., Berlin: Asher, 1887–99) and Wilhem Pertsch (Verzeichnis der Persischen Handschriften der Königlichen Bibliothek zu Berlin, Berlin: Asher, 1888; Verzeichniss der Türkischen Handschriften der Königlichen Bibliothek zu Berlin, Berlin: Asher, 1889) compiled in the nineteenth century. Although the content of the catalogues is still of scholarly value and it has been made available in PDF on www.archive.org, the fact that they were written in German may be an obstacle for non-German speaking researchers. Moreover, the files containing Latin and, particularly, Arabic scripts are not well searchable due to the poor quality of the OCR.
The Orient-Digital ties in with two manuscript cataloguing projects based in Leipzig that were successfully initiated by Verena Klemm and implemented by the Data Processing Service Centre under the direction of Jens Kupferschmidt setting a high standard in regard to terminology and content-related depth of the metadata to be described (www.islamic-manuscripts.net and www.refaiya.uni-leipzig.de, see also COMSt Newsletter 1, 2011, pp. 4-5).

A database structure greatly facilitates the process of research: the user does not merely depend on the information allocated by the librarian any longer but finds access to a huge amount of metadata retrievable through a variety of search forms. The usage of multilingual classifications automatically generates manuscript descriptions in the relevant languages used in the database, resolving thus the above mentioned linguistic obstacle. Whenever capacities are available, the metadata will be constantly updated with additions and/or revisions to the historical catalogue entries. For the moment, the Orient-Digital comprises just a fraction of detailed entries of the complete collection held by the Berlin State Library (43,000 Oriental items). At the time of the launching of the database, entries on all manuscripts purchased after 2010 were made accessible. Currently the amount of information varies from one description to another but the catalogue entries are expected to gradually reach the same level of detail. New projects and applications for external funds are being planned in order to expand and consolidate the team that describes the manuscripts.

The users themselves are given the opportunity to contribute information to the available datasets by sending remarks or error reports to the Oriental department. Digital copies of the manuscripts are produced, so that the users can work with them comfortably from anywhere in the world. Ideally, the manuscripts shall be described in detail and made accessible in digital copy visually stored at the Digital Library of the Berlin State Library (see http://digital.staatsbibliothek-berlin.de/dms/suche/?DC=orientalische.handschriften).

One feature of the Orient-Digital that distinguishes the database from its forerunners is its newly developed metadata model for Islamic Book Art which describes and presents illuminated manuscripts from Islamic countries. This project features classifications that were developed to standardise images (text-related illustration, unrelated illumination, non-illustrative image) and motifs (fabulous creatures, persons, plants, animals, scenery) decorating the manuscripts. For this datamodel, the IT-experts from the Leipzig University Data Processing Service Centre programmed a METS/MODS interface to Goobi (http://www.goobi.org/), the image administration and presentation tool used at the Berlin State Library, in order to provide thumbnail-preview-pictures.

It will be a long way until the complete collection of Oriental manuscripts can be presented properly but the Orient-Digital database is a first major step to make the Berlin collection known and accessible to a wider audience.

Text: Thoralf Hanstein, Mareike Beez.
Web: www.orient-digital.de.
Research in manuscript studies

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Ancient Medicine in Talmūdic Manuscripts, Yevgeniy Zingerman

Conservation of Islamic Manuscripts in the Biblioteca Apostolica Vaticana, Gaia Petrella and Herre de Vries

Decoration techniques observed in the Oriental manuscripts of the Biblioteca dell’Accademia Nazionale dei Lincei e Corsiniana, Claudia Colini and Alessandro De Cupis

Ancient Medicine in Talmūdic Manuscripts

The project dedicated to the first systematic critical study of Talmudic medical information has been called into life by Markham Geller, who is responsible for several research projects dedicated to the formation and transformation of medical knowledge in ancient civilisations, currently carried out under the common roof of interdisciplinary collaborative TOPOI programme in Berlin (more information about this programme can be found at http://www.topoi.org/faq-topoi, see also pp. 5–7 above).

Defining the term “Talmūd” is far from simple. This enormous collection of ancient Jewish materials written down in Hebrew and Aramaic during the period of Late Antiquity contains legal and religious teachings, historical accounts and local anecdotes, biblical exegesis and grammatical observations, philosophical remarks and moral reflections, descriptions of natural phenomena and of magical practices. One could possibly say that the “Talmūd” is a textual cast of the whole Jewish civilisation of the ancient (though post-biblical) period.

The scale of Talmūdic texts is unparallelled. Read one page of Talmūd a day – and you shall finish its main core in twenty-four years. Additional treatises, collections and tractates, no less authoritative, though structurally peripheral can take another ten years of reading. And then the turn of medieval Talmūdic commentaries exegesis comes. Trying to read and understand faster than one page per day may present a significant problem: due to its very dense, almost stenographical style, one Talmūdic page includes material that, were it expanded according to the norms of regular writing, would grow by 75 per cent, as is clearly seen in various translations of the Talmūd, which are several times longer than the original text.

It is therefore little surprise that there is no critical edition of the entire Talmūd. Although a few Talmūdic chunks, including its earliest strata, were already honoured by scholarly comparison of various manuscripts, the bulk of the text is still untreated. The following fact complicates the situation even further: since the Talmūd commands utmost respect and has enjoyed an incredible authority with all Jewish communities throughout the world, thousands of textual witnesses have been produced since its gradual composition. The manuscripts have been dispersed among innumerable libraries, private and institutional collections, often without being specially noticed or properly catalogued by their custodians. Some may have the form of a scraped off text on a medieval palimpsest or a flyleaf used in a binding of some later composition (this cluster of problems is known in contemporary research under a general term “European Genizah”).

The Talmūdic literature abounds in highly interesting information on a number of topics. One of those is ancient medicine – drug prescriptions, treatment methods, diagnostic means and anatomical observations. Already the medieval commentators of the Talmūd (such as Maimonides) decided that the authoritative value of the medical observations is not particularly high – no Jew is obliged to treat his diseases according to the methods mentioned in the Talmūd, much unlike the legal and religious teachings of Talmūdic sages. However, Talmūdic medical passages represent a very important stage in the development of medicine and have primary significance for the history of science.

The goal of this project is twofold. At the first stage, the whole scope of medical material scattered throughout the ocean of Talmūdic texts has to be assembled and edited according to the strictly critical principles of scholarly editions on the basis of the extant multitude of manuscripts. And the differences between textual witnesses must not be taken lightly. The absence of vowels in Hebrew and Aramaic, spelling inconsistency of specific terms and an abundance of foreign words heavily muddled and distorted by the numerous medieval scribes who could not understand them sums up in a wide range of reading variants, only one of which is the original. For example, the Talmūd recommends treating rhinitis with a potion prepared from white dog’s excrements dipped in a liquid, which in some manuscripts is written as nftʾ (‘petroleum’), and in the others as ntfʾ (‘balm’). Which one is correct? An-
other example: having sexual intercourse standing up, according to the Talmūd, usually results in some sort of disease represented in various manuscripts by the variants diry’, ṭry’, ḍrd’ and a few others. Is it possible to assume that this obviously uncommon word stems from the Latin deliria (pl. of delirium) or dolor (‘pain’)? These and similar questions will be posed during the first – editorial – stage of the project.

At the second stage the provenance of the Talmūdic medicine will come into question, as well as its basic principles and assumptions. Which medical school do the Talmūdic sages represent: the Greek one, as the most influential in the area, or the ancient Babylonian one, which is much closer geographically to the Mediterranean regions, in which most of the later sages lived and acted? Or maybe is the Talmūdic medicine, to some extent, an unprecedented independent tradition of medical thinking? Up to which extent this medical thinking was based on actual observations and what can be called scientific methods? And how exactly are Talmūdic treatment methods related to magic, which is strictly prohibited by the biblical law?

Since the launch of the project several months ago, we have prepared a critical comparison of various manuscripts for the longest and the densest medical source of Babylonian origin, and now we are shifting out attention to the medical passages of Palestinian tradition. However, there is still a long way to go.

Select bibliography
Albeck, Chanoch, Mavo' La-Talmudim, Tel-Aviv: Devir, 1969.
Preuss, Julius, Bibliisch-talmudische Medizin: Beiträge zur Geschichte der Heilkunde und der Kultur überhaupt, Berlin: Karger, 1911.

Yevgeniy Zingerman
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“The new Conservation Workshop of the Vatican Library, created around 1890 by Pope Leo XIII, is one of the oldest such workshops to be housed in a library. It was set up in accordance with the views of Franz Ehrle, and its main objective was, and remains, that of preserving the rich collection of manuscripts and printed books from physical, chemical and biological dangers, in order to ensure its transmission to posterity” (Source: http://www.vatlib.it/home.php?pag=ufficio_restauro&ling=eng&BC=11, accessed 17 June 2013).

This contribution summarises the results of the conservation of selected Arabic, Persian and Turkic manuscripts from the Biblioteca Apostolica Vaticana, funded by the Heydar Aliyev Foundation (Azerbaijan) in the years 2011–12.¹

In accordance with the tradition of the library, the policy of minimal intervention was applied. This means finding a balance between minimum changes to structural elements and minimal interference of materials on the one hand and an effective conservation on the other, without erasing the traces which reflect the historical evidence in the life of the manuscript.

Forty-eight manuscripts were selected, dating from the late twelfth until the early twentieth century. Most of them contain poetry by famous Persian and Turkish poets, scientific treatises and religious texts. Forty-six manuscripts are actually bound volumes: twenty-eight are in Islamic bindings and eighteen had been rebound in Western book bindings (fig. 2). The remaining two are sets of miscellaneous unbound folia, bifolia and/or quires, one inserted into an old Islamic cover, and the other in a more recent temporary Vatican Library wrapping. The Western re-bindings all show prior paper repairs, as do many of the Islamic bindings which in several cases indicate they have been rebound. In the case of repairs to the Islamic bindings a distinction can be made between those done in the Middle East and those executed in the West.

All the manuscripts can be defined as mundane or meant for everyday use; they do not possess the finest decorative luxury bindings which can be found in other collections. Although showing a great variety in detail, the Islamic bindings all have the “typical” Islamic binding structure.

At the start of the project we conducted a preliminary survey of particular features of the manuscripts and their bindings. We recorded old repairs (Islamic or European), origin of paper (Islamic or European), type of endbands, type of spine linings, sewing structure, doublures, absence or presence of envelope flaps and other remarkable binding features.

The record was completed during the actual work, which initially focused on manuscripts with detached binding elements and loose folios. It was followed by more complex conservation treatments, always using a sympathetic approach to the existing elements. What follows is the overview of the findings.

Paper

Paper of both Western and Middle Eastern origin was identified. The Middle Eastern paper is most probably identifiable as Persian due to the extremely fine maceration of the fibres and the near absence of visible water and chain lines, in line with the general supposition that Egyptian paper is cruder in its maceration. Western paper could be identified by watermarks, and the presence of the laid and chain lines.

¹ Together with Angela Nuñez Gaitan, Head of the Conservation Workshop of the Library, each manuscript was considered individually to establish the best treatment for its own particular needs. Ongoing discussions with Delio Proverbio, Scriptor Orientalis, were very important in making the conservation decisions. We are also grateful for the opportunity offered to Jean-Louis Brugués, Archivist and Librarian of the Holy Roman Church, Cesare Pasini, Prefect at the Biblioteca Apostolica Vaticana, Ambrogio M. Piazzoni, Vice Prefect at the Biblioteca Apostolica Vaticana, Paolo Vian, Head of the Biblioteca Apostolica Vaticana Manuscripts Department and the entire staff of the library.
Inks and pigments
Soot ink was used in forty-seven manuscripts, in all cases water soluble but to varying degrees. One manuscript is written in iron gall ink. Western marginal notes, often appearing on the opening pages, are all in iron gall ink.

Nearly all manuscripts have miniatures on title pages; some are illuminated throughout. In general, most manuscripts do not generally strike one’s attention for their miniatures, whereas some do for their mise en page and writing layout.

Coloured papers are widely used; the common colours are reds, greens (copper greens), blues, gold (both real and copper-based imitations) and yellow (saffron or turmeric, fig. 3). We have also seen marbled papers (fig. 4) and a type of paste paper, where the pigment seems to be mixed into the paste used for sizing and finishing the paper surface.

Sewing structure
Many of the Western re-bindings were re-sewn on recessed supports. A structural feature which, combined with heavy-boarded bindings and hard and robust paper repairs, did not do the manuscripts any favour. The twenty-eight Islamic (re-)bindings are often sewn on two stations without supports, often using a silk coloured thread (fig. 5). The first exception was a different unsupported resewing on four stations with a long stitch on the spine of the gatherings between the second and third stations. This long stitch was linked to the one of the previously sewn gathering (fig. 6). The other was a mid-nineteenth-century Turkish binding with a link stitch on three stations. Finally, two of the miscellaneous sections inserted in an Islamic binding showed two kinds of oversewing.

Endbands
Although in some cases lost and often damaged to some extent, we have mostly been able to determine the original presence of a primary sewing of the endband, mostly through lining (fig. 7). When it was possible to determine the material of the core it was always leather, except for one Western-style tight back re-binding which had a typical Islamic primary sewing and chevron pattern over a core of cord.

Endbands could be identified in thirty-one codices, thanks to the fact that several of the Western re-bindings still contain clear traces of their previous Islamic structure(s). In twenty-five cases, endbands were still present to an extent sufficient to determine the pattern. They all show the typical chevron pattern sewn over primary sewing threads, except for one case which shows parallel diagonal lines (fig. 8). For six more books the original presence of endbands could be determined based on the remains of primary and/or secondary sewing thread.
thetic approach to the conservation of the manuscripts and their binding, preserving their material and technical features to the fullest extent. With our extensive documentation of the bindings, their prior repairs and our own treatment, we have aimed to keep all information which might be compromised or obscured by the treatments available to future scholars and other users of the manuscripts, hoping to have thus contributed to the field of Oriental manuscript conservation.

Select bibliography


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Board attachment
The flanges of the lining are often glued to the inside of the boards and we have found both spine lining made of leather, cloth (cotton/linen or silk) and paper, with six cases being non verifiable. Sometimes the lining is visible as the inner joint, or the “visible inner joint” is part of a pastedown construction. Such construction can be a pastedown with a stub, or a separate strip of paper or cloth along the inner joint combined with a doublure on the inside of the board.

Covers
In eighteen out of the total number of forty-eight manuscripts, the envelope flap is still present or there are traces in and on the book, indicating its presence with the current or a previous binding. In seven more cases we are sure the current Islamic binding never had an envelope flap.

The turn-ins along the boards and on the corners are all done in a quite “straightforward” manner, obviously some more refined than others. The tabs, as far as we have been able to determine, have mostly been cut at the height of the endbands; some extend over and sometimes beyond the endband sewing (fig. 9, 10).

Sometimes the wear of the tabs made it impossible to determine where they had been cut originally and we could only determine that they were not turned in. In only one case we found the leather of the spine to be turned in at the endbands.

In our treatments we have sought to take a sympa-
Decoration Techniques Observed in the Oriental Manuscripts of the Biblioteca dell’Accademia Nazionale dei Lincei e Corsiniana

This paper summarises the results of a survey conducted on the Oriental Collection of the Biblioteca dell’Accademia Nazionale dei Lincei e Corsiniana, in Rome.

The Oriental Collection was assembled between the end of the nineteenth century and the first half of the twentieth century, started by Prince Leone Caetani who donated his library to the Reale Accademia dei Lincei through the establishment of the “Fondazione Caetani per gli studi musulmani”. It preserves 211 manuscripts in Arabic script (codices, miscellanea, unbound quires, fragments, firmans, documents) dating from the thirteenth to the twentieth century. Most contain texts in Arabic, Persian and Turkish, but there are also manuscripts in Urdu and Mongol.

The survey began in 1999 for conservation purposes but it soon became an occasion for an in-depth examination of the particular material aspects of book manufacture. In our paper we focus on decorative techniques observed in the ninety-six Oriental bindings at our disposal. Of these, seventy-six are contemporary with the codex, while the remaining twenty have been re-made by Oriental craftsmen between the nineteenth and twentieth centuries. The bindings date from the thirteenth to the twentieth century and are produced in different geographical areas, from Maghreb to India. Most bindings were produced from the sixteenth century onwards in Persia and Yemen.

The incidence of decoration is very high, with eighty-three decorated bindings against thirteen undecorated ones. An envelope flap is present in forty-one bindings where an interesting geographic trend seems to emerge: in Persia we found a preponderance of bindings without flap while in Yemen the majority of the covers have it. There also seems to be a correlation between the flap and the decorations: undecorated manuscripts usually have no flap. As illustrated in Table 1, decorations follow three different trends: the most common (observed in sixty bindings) consists of a central element, around which the whole layout is developed, then we have the ones based on a full page layout (in fifteen cases) and those characterised only by perimetral decoration (five bindings).

Regarding the first group, we noticed two principal alternatives: a circular central medallion – attested in four cases – and the almond-shaped central medallion – visible in fifty-four cases. The circular medallion is always obtained through the impression of different tools, arranged together to form the drawing, directly on the leather cover. However while the impressions on Or. 20 (Syria, fourteenth century) are blind-stampings, those on the other three (all from Yemen and realised with the same layout but in the thirteenth, fourteenth, and seventeenth century, respectively) are blind-toolings (fig. 1).

The differences between the two techniques are difficult to see: blind-stamping is performed with wood or unheated metallic tools, while blind-tooling is performed with heated metallic instruments. The first technique leaves a gentler impression on the borders and the lines of the drawing, with no difference in colour between the tooled and untooled leather; the second technique instead alters the leather colour and produces sharper borders and drawings.

The almond-shaped medallion is generally obtained through the impression of a single engraved plate (fifty cases) seldom enriched by the addition of other tooled decorative elements such as dots or dashes or small flowers (six cases), borders or rays or a uniform background layer painted in gold (nine books) or colours brushed on the relief (four bind-

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<th>Central element (60)</th>
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<td></td>
<td>Almond shaped</td>
<td>54</td>
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<td>Full page layout (15)</td>
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<td>Painted leather cover</td>
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<td>Scrap materials cover</td>
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<tr>
<td>Perimetral decoration</td>
<td>5</td>
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<td>Flap decoration only</td>
<td>3</td>
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Table 1. Summary of decoration trends in the 83 manuscripts with decorated bindings.
ings). Gold tooling – a tooling made directly over a gold leaf – is attested only in eleven cases, while twenty-seven are blind-tooled medallions and only six are blind-stamped. It is interesting to notice that thirteen medallions were obtained through a first impression, with the heated tool on the leather cover and then a paper layer was adhered to it, performing a second impression with the same tool but probably unheated. Other two medallions realised on paper are placed over a paper cover and a silk cover respectively: in these cases, we infer a unique blind-stamped impression due to the different nature of the cover.

In most cases, the impressions are performed on the very same leather cover, as attested by twenty-three examples, and sometimes on leather snippets, even of different colours, adhered to the cover (in eight cases). It is interesting to see how these techniques have been re-elaborated in the eighteenth–twentieth–centuries Yemen giving rise to paper covers decorated with almond-shaped medallions made with scraps of paper or leather, impressed or not.

The decorative motifs found on the almond-shape medallions are mainly floral (in fifty out of fifty-four cases): these are often symmetrical (seventeen instances), sometimes even geometrical (eight examples). We only found one medallion with figurative motifs, specifically birds (Or. 265, Persia, nineteenth century). In forty-five cases, the almond-shaped medallion was associated with pendants, generally with floral symmetric motifs (fig. 2).

Nineteen bindings have a cross or simply a vertical line impressed or depicted on the plate. It is possible that they were useful to put in place the different decorative elements but it is interesting that they were highlighted when completing the decoration. In one example (Or. 330, Yemen, nineteenth century) the cross is completed by a rectangle that inscribes the almond-shaped medallions and its pendants. In the end the background of the decoration of Or. 62 (Persia, nineteenth century) is filled with a net pattern.

Frames, corners and laterals are common elements seen both in the perimetral decorations and in the ones with a central medallion. Both the corners (found in thirty-nine bindings) and the laterals (appearing only in thirteen cases) respect the percentage given for the decorative techniques of almond-shaped medallions. It is interesting to notice how the technique used for the medallion is not necessarily the same used for the other elements of the cover. Moreover, even if the majority of the decorative motifs are floral, the geometrical patterns play an important part. Frames are present in all the bindings observed except those with a full-page layout, which we shall describe in a few lines.

A filet is present in sixty bindings: twelve have blind-stamped filets, twenty-seven blind-tooled, six gold tooled, nine gold painted and ten colour painted. Those without filet still have a frame: three (Or. 77b-f-I, India, eighteenth century, fig. 3), with silk covers, have friezes blind-stamped on paper, while five more (Or. 309, 350, 351, 370, 372, Yemen, eighteenth/twentieth century) have a thick band painted in colour.

Friezes are quite common and can be found in different combinations in forty-six manuscripts: the most used technique is blind-tooling directly over the leather cover. The use of a single tool repeated for the whole length of the frame is common (eighteen cases), as is the use of a wheel (sixteen cases), while the combination of different tools is less popular (only four cases, all four Yemeni books from the thirteenth to the seventeenth century). Gold tooling is observed in six bindings while gold painting is found in nine, with the latter often associated to friezes gold tooled with a wheel. Geometrical motifs prevail over the floral (twenty-four over fifteen); calligraphic friezes are present in Or. 318, Yemen, fourteenth century (fig. 1), and Or. 312, Yemen, seventeenth century.

Full-page decorations are very different in form. From an artistic point of view, the most interesting are the lacquered covers. This technique was imported in the late fifteenth century in Persia, India
and then Turkey from China, but the only four examples in the collection are of a later date. The images are realised by painting on pasteboard and then covering the painting with urushal varnish. The examples we have are varied both in subject and lay out: Or. 1, India, seventeenth century, portrays the story of Layla and Mağnün, framed by a geometrical frieze (fig. 4); Or. 32, a Qur’ân, Turkey, seventeenth century, is decorated with geometrical patterns framed by a floral gold frieze; Or. 44, Persia, seventeenth century, is painted with big flowers framed by filets and Or. 273, Persia, 1238 H./1822 C.E., is a combination of floral and calligraphic elements in a geometrical layout, framed by a geometrical gold and green frieze.

The other bindings are from a later period (from the eighteenth to the twentieth century) and are generally realised in Yemen. These bindings are extremely simple and quite naïve. Five of them are realised with decorated clothes: four areornated with white flowers over a blue ground, one with horizontal coloured bands. Four bindings have paper covers: three are marbled papers, one is a xylographed paper with pale blue horizontal and geometrical bands.

We observed even a leather cover with a circle inscribed in a cross with pendants framed in a band all painted in black and gold (Or. 363, Yemen, twentieth century, fig. 5) and a cover made of scrap materials such as leather, paper and cloth, decorated with the impression of a sketched star and a frame (Or. 304, Yemen, eighteenth century).

**Select bibliography**


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Conference reports

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11-13 July 2013, Hamburg, The Second(ary) Life of Manuscripts

COMSt workshops

Towards a Final Version of the Handbook Chapter on Oriental Manuscript Cataloguing

As most other COMSt meetings held in the first half of 2013 (Team 2, 29–30 April, Turin; Team 5, 18–19 May, Hamburg; Team 1, 8 July, Rome), the workshop of Team 4 (Cataloguing), hosted on 6-7 June by the National Hellenic Research Foundation in Athens was primarily dedicated to the editorial work on the forthcoming handbook Comparative Oriental Manuscript Studies: An Introduction.

Its plenary session was dedicated to issues of palaeography. It is superfluous to point out that one of the most important tasks of a cataloguer is to try to date the manuscript or the fragment (s)he is describing. When the manuscript in question does not contain any clear chronological indication, palaeographic analysis may help in the delicate operation of dating. It is thus one of the key disciplines to consider when one is concerned with manuscript cataloguing.

During the workshop, several historical overviews of different Oriental scripts were presented: Arabic (A. d’Ottone), Armenian (D. Kouymjian, see also his contribution to this Newsletter), Ethiopic (D. Nosnitsin), Georgian (T. Pataridze), Greek (D. Bianconi), Slavonic (R. Cleminson). The speakers (in particular, d’Ottone, Nosnitsin, Bianconi) paid particular attention to the way in which palaeographic descriptions have contributed to cataloguing. They did not only present a summary of the development of the respective scripts but showed, on a series of examples, how much – or rather, in most cases, how little – space has been dedicated in the historical catalogues to a palaeographic description. A discussion arose as to whether a detailed verbal palaeographic description is necessary in the era of electronic cataloguing when the catalogue entry is usually accompanied by the digitised manuscript images.

A part of the afternoon session was dedicated to the presentation of a publication that is about to appear with Peeters, Leuven (http://www.peeters-leuven.be/boekoverz_print.asp?nr=9116): Scripts Beyond Borders. A Survey of Allographic Traditions in the Euro-Mediterranean World, edited by Johannes den Heijer, Andrea Schmidt and Tamara Pataridze of the Université Catholique de Louvain. The problem of the definition of allography or use of multiple scripts, whether parallel or consequent, in the Oriental context, is of high relevance for all text-related disciplines treated by the COMSt network.

For a detailed conference report, visit http://www1.uni-hamburg.de/COMST/meet4-4.html.

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Conference and workshops in manuscript studies

The Second(ary) Life of Manuscripts

On 11–13 July 2013, an international conference was convened, dedicated to the wide range in functions that may be assumed, at various times, by a manuscript book. Hosted by the Centre for the Research of Manuscript Cultures (SFB 950) at Hamburg University, the conference was co-convened by the Nepalese-German Manuscript Cataloguing Project, the ERC-funded Ethio-SPaRe: Cultural Heritage of Christian Ethiopia: Salvation, Preservation, Research, as well as the ESF RNP Comparative Oriental Manuscript Studies.

As a living object, the manuscript bears in itself written and non-written evidence of its history. In particular, additional notes, marginalia, guest texts as well as structural changes testify to various phases in the “life” of a book.

Various insights on the manuscript histories were provided for a variety of COMSt-relevant cultures, including Georgian (J. Gippert), Arabic (B. Liebrenz), Ethiopic (D. Nosnitsin, S. Ancel, S. Dege, Abreham Adugna), Turkish (J. Karolewski), Greek (B. Pouvkova, G. De Gregorio). Case studies and typological ob-
Observations were provided for the manuscript cultures of the Indian subcontinent (H. Isaacson, K. Harimoto) but also for the West European sphere (a music manuscript from the Dominican milieu, E. Maschke).

Several speakers tried to approach the definition of when a “second(ary) life” of a manuscript, if anything like that does exist, begins. J. Gippert suggested that anything that does not belong to the main text and may have been added later, even if shortly afterwards (images, glosses, foliation signs), can be defined as “second(ary)”. One should distinguish between the “canonical” reuse, corresponding to the original “project” of the scribe(s) and the “non-canonical” reuse that would include text-unrelated notes, exercises and contracts, but also the reuse of the manuscript as material base for a new book, whether as a palimpsest, flyleaf or binding fragment.

D. Nosnitsin chose to talk not about primary or secondary life but about the functions that a manuscript may assume. He distinguished between the functions related to the content (text) and those related to the structure (binding, textblock) and showed how these could be modified through time (e.g., a liturgical reading added to a biblical manuscript makes it usable in the mass, or a deluxe binding transforms a liturgical book into an object of display). He also suggested treating illuminations as a separate functional element (this point was additionally expanded by S. Dege).

A series of case studies followed up upon the discussion launched during the 2012 workshop “Manuscripts in Motion” (see COMST Newsletter 5, 2013, pp. 21–22). In particular, B. Pouvkova and E. Maschke largely expanded on the papers they had presented on that occasion. Additionally, S. Ancel illustrated how marginal notes may help reconstruct important historical manuscript collections.

In lively discussions, additional typological and methodological considerations were raised. L. Parodi expressed concern that a different approach may be necessary in the case of art albums, where the manuscript presents itself as a collection of illuminated sheets and the original intention or project may not be as clear. G. De Gregorio called to the necessity to distinguish between the unique additional notes and those that have a transmission history of their own. He additionally paid attention to the graphic interplay between the main text and the marginal notes, especially when those stand in a direct relationship to each other (e.g., the cursive notes added to a Greek majuscule Bible that transformed it into a lectionary).

P. Buzi noted that, while some additional notes may indeed signify a change in the manuscript’s “life”, others may be an indication of its continuity (such as, e.g., a chain of ownership notes in the Arabic manuscripts presented by B. Liebrenz). In the final discussion, M. Maniaci emphasised that, already at the moment of its creation, a manuscript may be conceived as a multi-functional object and that, as noted before, the use(s) stand in a relationship to the content or to the structure. As far as the content is concerned, it may be important to distinguish between the content-related, the indirectly related, and the completely unrelated additions. In terms of the structure, a medieval book is naturally flexible as it can be enlarged, mutilated, or rearranged several times in its “life”, either intentionally or by mistake.

It seemed appropriate to avoid introducing dichotomies and caesuras between the “first/primary” and “second/secondary” life of a manuscript but rather speak of one complex history of use, a continuum of changes that may be distinguished by the degree of distance from the original project.

It may be easier to understand the book history in terms of multiple layers, similar to the methodology of an archaeologist (C. Moulin). This may pose a considerable challenge for cataloguing the manuscripts appropriately (P. Buzi). A solution may be in getting away from the brief and schematic catalogue entries and producing true “biographies” of books (H. Isaacson).

A publication of the results of the conference is envisaged. For the workshop programme visit http://www.manuscript-cultures.uni-hamburg.de/cal-details/Secondary_Life_of_Manuscripts_Workshop_Programme.pdf.

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Byzantine Prose Rhythm

Byzantine literature, like that of Antiquity, was written mostly for listening, hardly ever for silent reading. Given this highly aural character, taking account of rhythm is one of the necessary tools (of course not the only one) for better understanding the texts, the authors' intentions, and their constraints.

Recently, editors of Byzantine texts have more and more taken into account the punctuation practice of the manuscripts and also, if not as consequent, the relationship between punctuation and rhythm. On various examples it has been shown that for Byzantine authors the criterion for punctuation is, as a rule, not the structure of syntax, but the oral performance of the texts. This tendency, however, does not preclude that here and there both criteria coincide. A certain amount of subjectivity in interpreting the punctuation will inevitably subsist, as with any reconstruction, partly due to the condition of the manuscripts where the punctuation marks may be not clearly readable. This is not really dramatic, given that at least in more voluminous texts some irregularities can be compensated.

One of the means Byzantine authors used in order to shape prose texts rhetorically consists in a certain regulation of rhythm, be it by dividing the texts into small unities (kola) of approximately equal length and rhythm, or by a more or less strict rhythmical regulation of the position of the text most suitable for it, i.e. the end of the clause or of the period.

The question whether, and if so, how such rhetorical cadences should be visualised in modern editions has not yet been answered in a generally accepted way, and as a matter of fact it will have to be treated for each text separately. Shortly after the publication of Wilhelm Meyer’s groundbreaking study Karl Krumbacher made an interesting attempt in this direction. In this respect he found hardly any successor, and only recently did Antonia Giannouli try to follow a similar path.

The phenomenon of prose rhythm in Greek and Latin authors of antiquity is well known. In several publications it was demonstrated that some forms of cadences common in poetry are rather avoided in prose. Though certain accent regulations occur, the crucial criterion in antiquity – in poetry as well as in prose – is quantity, i.e. the regulated sequence of long and short syllables.

A decisive change took place during the centuries of Late Antiquity, well traceable from the fourth century onward. People lost more and more the ability to hear the differences between long and short syllables, therefore in both languages – Latin and Greek – accent replaced quantity as rhythmical criterion. Purely accentual models came into being, and in traditional ancient meters, too, elements of accent regulation appeared.

This development extended also to prose. In Latin it resulted in the well-known model called cursus, in Greek new accentual patterns of cadences emerged. From the fourth century on the norm is valid which we call, after its discoverer, Meyer’s law. It consists in placing at least two unaccented syllables between the last two accents of a text.

2 Giannouli – Schiffer 2011 (with exhaustive bibliography).
3 See particularly Giannouli 2011.
5 For this principle, applied to poetry, see Ps.-Gregorios Pardos, ed. Wazl 1834:560, II. 8–11: πολλὴν γὰρ εὐρυθμίαν ἐμποιεῖ τῷ ὅλῳ στίχῳ ἡ κατάληξις εὔηχος οὖσα, ὡς ἂν καὶ τοίς ἄδουσι τὸ τελευταῖον ἀπήχημα κοσμεῖ τὴν ώδην, καὶ τὸ φθάσαν ίσως ἔκμελῆς ὑποκλέπτει. ‘For if the end is melodious, it provides eurhythmity for the whole verse, just as in singing the final reverberation adorns the chant and may mask any preceding unmelodious parts’. Cf. Hörandner 2012.
7 Krumbacher 1897:583–625.
8 Giannouli 2011.
10 For this phenomenon, mentioned also in ancient theoretical treatises, see Dräger 1998.
11 Meyer 1905:1–58; Grosdidier de Matons 1977.
12 Havet 1892; Nicolau 1930; Pennacini – Odelman 1994.
13 Meyer 1905.
clause. Meyer’s observation found response, and it was soon complemented by the discovery that beside the interval 2 also the interval 4 (sometimes also 6) is preferred whereas the intervals 0, 1, 3 and 5 are, as a rule, avoided.\(^{14}\)

In addition, Edmond Bouvy found a strong tendency in the texts, if not a law in the strict sense, towards placing two unstressed syllables after the last accent and thus creating a dactylic rhythm at the end of the clause.\(^{15}\) This observation is particularly interesting as it goes against the norms of poetry, where – from Late Antiquity on and then consequentially throughout the Byzantine centuries – the end of the verse is, as a rule, marked by a stress on the penultimate syllable.\(^{16}\)

Meyer considered his own observation as being in strong opposition to that of Bouvy – wrongly, because it could be demonstrated that Byzantine authors, more often than not, followed both rules, viz. lex Meyer and lex Bouvy so that a double dactyl became the most widely used cadence.\(^{17}\) Some differences can be observed from author to author, so that, to a certain degree, the rhythmic analysis can furnish arguments in questions of authenticity. Yet rarely are the divergences grave enough to result in the attribution of a given text to a certain author, like in the case of Procopius of Caesarea and his predilection for the interval 0.\(^{18}\) On the whole, in rhetorically refined texts cadences of the interval 2 or 4 combined with a dactylic ending prevail by far, and the cases are not so rare where cadences of this kind are used without exception, at least before strong breaks, i.e. at the end of a period.\(^{19}\)

Most scholars agree that a distinction has to be made between strong and weak breaks (some postulate a three step model “strong – weaker – weak”) and that a cadence can be considered as being preferred if its use is significantly more frequent before strong breaks than before weak ones. But how is a break defined?

Defining strong breaks does not pose great problems. They mark the end of the period and correspond grosso modo with the full stop in the editions. Even here exceptions are possible, if rare, due to different interpretations on the part of the editors. The decision concerning weaker breaks is a far more delicate question. In this point the practice of the editors concerning punctuation is much more varying, partly due to the editors’ national traditions. Therefore it is impossible to use commas in printed texts as reliable criteria for rhythmic analysis. Neither did a strict interrelationship between syntactic structure and position of weaker breaks, as postulated by A. Primmer for the Latin sphere\(^{20}\), prove feasible in Byzantine texts.

The question as to what has to be regarded as accent and what not cannot always be decided in a definite way. However, some progress has been made in this regard. Obviously not every word bearing an accent in editions (and often also in manuscripts) has to be regarded as stressed. Short words like articles, prepositions, conjunctions etc. will, as a rule, remain disregarded. Concerning enclitica it has to be kept in mind that editions often normalise in the sense of traditional grammar and thus do not reflect Byzantine practice.\(^{21}\)

Recently some scholars postulated that not the penultimate stressed syllable, but the beginning of the relevant word should be regarded as the beginning of the cadence.\(^{22}\) It is hard to decide whether this idea is really promising. Yet there are important studies attempting at tracing elements of structure – beyond cadences – in the whole text in order to show by which means the author arrives – consciously or unconsciously – at a rhythm felt as suitable.\(^{23}\) In this respect, viz. concerning rhythm in a comprehensive sense, statements of ancient and Byzantine theoreticians\(^{24}\) can furnish valuable contributions.

**Quoted bibliography**


\(^{14}\) Maas 1902:505–12; Dewing 1910; Skimina 1930; Hördnder 1981 (with further bibliography).

\(^{15}\) Bouvy 1886.

\(^{16}\) Maas 1903; Lauztermann 1998, 1999; Ciccolella 1993.

\(^{17}\) Skimina 1930; Hördnder 1981.

\(^{18}\) Dewing 1910; Maas 1912.

\(^{19}\) Examples in Hördnder 1981.

\(^{20}\) Primmer 1968.

\(^{21}\) See, e.g., Noret 1995.

\(^{22}\) Sideras 2002.


Giannouli Antonia, “Leon Balianites, Exegetische Dida- gens zur Byzanzforschung, 29). (Denkschriften der phil.-hist. Klasse, 431; Veröffentlichun-


Havet, Louis, La prose métrique de Symmace et les origines métriques du cursus, Paris: Bouillon, 1892 (Biblio-

Hörandner, Wolfram, Der Prosarhythmus in der rhetori-


Klock, Christoph, Untersuchungen zu Stil und Rhythmus bei Gregor von Nyssa. Ein Beitrag zum Rhetorikverständ-


Maas, Paul, “Der byzantinische Zwölfsilber”, Byzantini-
sche Zeitschrift 12, 1903, pp. 278–323.


Meyer, Wilhelm, Gesammelte Abhandlungen zur mittella-


Pennacini, Adriano – Eva Odelman, “Cursus”, in: Histori-


Skimina, Stanislaw, Etat actuel des études sur le rythme de la prose grecque, vol. 2, Lwów: Société polon. de phi-

Svalaivitcharska, Vessela, “Byzantine Oratorical Rhythm and the Classical Heritage”, Jahrbuch der österreichi-


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Notes on Armenian Codicology. Part 2.
Armenian Palaeography: Dating the Major Scripts

The present article continues the introduction to Armenian codicology which appeared in COMSt Newsletter 4, 2012, pp. 18–23.

A historical dimension which Armenian writing shares with almost no other ancient language is the secure knowledge of just when and by whom the Armenian alphabet was invented: between 404-406 by Mesrop Maštoc', precocious monk with close ties to the catholicos and king of his time, both of whom encouraged him. Much has been written about the creation of the original thirty-six letters, an invention intimately tied to Christianity and a source of pride to a people who have had a turbulent history. This creation ex nihilo effectively eliminates any discussion of the evolution of Armenian from earlier prototypes, a factor that complicates the study of early Greek, Arabic, and Hebrew writing. Armenian is not unique in this respect, since Georgian and the virtually vanished language of the Caucasian Albanians were invented shortly after by the same monk Maštoc', at least according to contemporary Armenian sources, but fiercely disputed by many modern day Georgian scholars. Later of course there is the somewhat different example of the invention of Cyrillic.

The theoretical result is a precise form for the letters of an alphabet conceptualised at a specific time and place by a religious scholar. Methodologically one can imagine describing the slow changes, perhaps evolution, of the letters over the centuries to produce an intelligible profile of the course of Armenian palaeography. Unfortunately, this is not possible in any linear way, at least for the earliest period of evolution, simply because no example of fifth century Armenian manuscript writing has survived. There are undated fragments of stone inscriptions from the Holy Land of the fifth century, innumerable fifth to seventh century graffiti from the Sinai of Armenian pilgrims traveling to Jerusalem, a couple of metal crosses which bear inscriptions of Saint Sinai of Armenian pilgrims traveling to Jerusalem, and the small document is precious but poses many questions, beginning with its text, which is entirely in Greek, though written with Armenian letters. Furthermore, not only is it unique as the only existing Armenian papyrus, but also the form of its script has no parallel. Scholars, mostly working in Armenia, have dated parchment fragments and at least two whole manuscripts to the seventh and eighth centuries, some even to the fifth, but there is no unanimity on this matter, though recent palimpsest studies reveal pre-ninth century underwriting.

For the palaeographer neat classification and distinct periodisation are easier to work with than a confused tradition. Armenian script styles are neither neat nor clean cut. The use of one type with another is not unusual. The older guard leaves.

As may be expected there is an enormous amount of literature on the invention of the Armenian alphabet. The primary source is a biography of St. Mesrop (362–440) written by his pupil Koriun shortly after his death; for a recent critical translation, see Mahé 2005–07. For a convincing study on how Maštoc' logically constructed the Armenian alphabet, see Mouraviev 2010. On the only surviving Caucasian Albanian manuscript, a palimpsest, see Gippet – Schulze – Alekaidze – Mahé 2008–10.

5 For a careful analysis with full bibliography, see Kouymjian 2002b; for an analysis of the Greek text (a series of grammatical exercises and short literary excerpts), Clackson 2000.
7 Tašian 1898.
of all early dated or datable manuscripts, almost exclusively Gospels, is an upright majuscule called *erkat’agir*, literally iron letters. These were the ones used in the Jerusalem mosaics and on a number of lapidary inscriptions preserved or recorded on palaeo-Christian Armenian churches, but they differ greatly from the script of the papyrus or the graffiti.

If then we are to approach the history of Armenian palaeography from a theoretical point of view, our first interest might be to try to determine or reconstruct the form of Mesrop’s letters and their evolution into the writing we view today on extant manuscripts. Is this a productive exercise toward the goal of producing a useful “Introduction to Oriental Manuscript Studies”, or should one rather work to provide practical tools for reading the scripts used in the vast majority of works in these languages, and thus put aside such pursuits as the history and evolution of scripts or the decipherment of unusual, at times unique, hands? A compromise response might be both, but to decide on what proportion of one or the other to include would predicate a defined goal or at least a sense of who would be the end users of such an Introduction.

On the other hand if our excursion into palaeography is intended to aid the cataloguer of a disparate collection of manuscripts among which there are one or more Armenian specimens, then an overview of the types of scripts used over time and perhaps in different regions would allow for a preliminary classification by a non-specialist. For this perhaps the best approach is to describe the major scripts found in Armenian manuscripts and comment on problems associated with assigning dates and perhaps even elucidating the literature contained in the works.

Armenian script names can be assigned to two categories: (1) those which were used by scribes in ancient and medieval times, perhaps this can be called the received tradition, and (2) those terms which were created by early modern scholars — palaeographers or proto-palaeographers — writing well after the tradition of producing books by hand had given way to printing. In the first category, I would suggest, only three terms qualify: traditional *erkat’agir*, *bolorgir*, and *nōtrgir*. Each has some textual (manuscript) pedigree. In the second group would be variants of the latter: *anc’man gir* (transitional scripts), *mijin* or *ültagic* (intermediate/semi or angular) *erkat’agir*, *p’ok’r* or *manr* (small) *erkat’agir*, and *šlagir* (modern cursive). Even terms like *pun* (original), *boloracev* (rounded), or Mesropian *erkat’agir* are analytical ones of palaeographers. On the other hand, the names of certain decorative scripts have textual antecedents.

This second group represents expressions that clearly describe the type of script: size, geometry of the ductus, thinness or slant or relationship to other scripts (i.e. transitional forms). Confounded by the contradiction between etymological meaning and the appearance of the letters described, Tašian agreed with Hugo Schuchardt that the terms *erkat’agir* and *bolorgir* did not conform to the letters one would expect from the name. Ašot Abrahamyan went so far as to say that even certain terms used to describe scripts of other languages fail to invoke the look of the letters, thus reflecting a generalised situation in palaeographic terminology not unique to Armenian. Only the briefest attention has been given to the origin and exact meaning of the labels used to describe the various scripts, some of them
going back many centuries. The lack of an updated historical dictionary makes the investigation of these terms frustrating.9

More than two decades ago Michael Stone, Henning Lehmann, and I set out to produce the Album of Armenian Paleography in order to present an up-to-date study-manual of the discipline. The large folio volume with 200 full-colour examples in actual size of an equal number of precisely dated manuscripts from the earliest preserved dated Gospel to the twentieth century contains letter analyses for each sample and exhaustive tables of the evolution of each letter of the alphabet over the centuries. We used what was a quarter of a century ago new computer technology to extract the individual letters from high-resolution scans rather than reverting to traditional skillful drawings or photographs. The book was published in 2002 with a near identical Armenian version in 2006, making it accessible to what we might call the target audience, researchers with strong Armenian language skills.

In the Album of Armenian Paleography, I presented in elaborate detail almost everything important on the development of Armenian manuscript writing.10 Nevertheless, there are still questions and problems. Research on the origin of each of the thirty-six letters has provided a reasonable explanation for the source of this extremely flexible and rich collection of consonants and vowels. The name of each of the four main scripts is designated by a word ending in -gir, letter, and preceded by a qualifying term as a descriptive.

A. Erkat’agir

Erkat’agir, iron letters or writing, has perplexed almost all palaeographers.11 In its most majestic form,

Table 1. Sampling of 455 dated manuscripts to 1400. Script: Majuscule (Erkat’agir) vs. Minuscule (Bolorgir).

<table>
<thead>
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<th>Bolorgir</th>
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<td>1376-1400</td>
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</tr>
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</table>

Fig. 2. Erkat’agir. a. Mesropian erkat’agir, Queen Mlk’ē Gospels, 862, Venice V1144, f. 89; b. angular slanted erkat’agir, Gregory of Nyssa, Commentary, 973, Erevan M2684, f. 240; small erkat’agir, Gospels, 986, Erevan M7735, f. 128.

9 The famous Mekhitarist dictionary of 1836–37, NBHL, though a monumental achievement and well ahead of its time, has not been updated. Agatjan 1926–35 (repr. 1971–79) is of some value. Individual concordances of the Bible and Armenian historical texts (the latter hard of access) must be consulted one by one. The Armenian text databases in Leiden and Erevan are quickly becoming the most complete tools for searching Armenian vocabulary in medieval texts.

10 Kouymjian 2002a:12–75.

11 An attempt to resolve the problem can be found in Kouymjian 2002a:66–67.
the script is found in all early Gospel books; it is a grand script in capitals similar to the imposing uncial s of early Latin manuscripts (fig. 2a-c). It is the form employed in most Armenian lapidary inscriptions, though in a more angular style, up through the tenth century. As table 1 shows it was virtually the only script employed for the parchment codex until the mid-twelfth century, and the exceptions include no Gospel or Biblical texts.

B. Bolorgir

Bolorgir, or minuscule, with compact and very regular shapes employing ascenders and descenders (fig. 4a-b), dominated scribal hands from the thirteenth to the sixteenth centuries, and continued well into the nineteenth. Ultimately it became the model for lowercase Armenian type fonts just as erk'at'agir became the prototype for capital letters in printed books. Bolorgir’s use for short phrases and colophons and even for copying an entire manuscript is clearly attested by the late tenth century. It appears even earlier, or at least some of the bolorgir letterforms are found in the pre-seventh century Armenian papyrus (fig. 1). Like medieval Latin and Greek minuscule, bolorgir uses majuscule or erk'at'agir for capitals, resulting in quite different shapes for many upper and lower case letters. Most authorities argue that the spread of bolorgir was due to time and economics: it saved valuable parchment because many more words could be copied on a page, and it conserved time because letters could be formed with fewer pen strokes than the three, four, or even five needed for the ductus of erk'at'agir.

A major question concerning Armenian palaeography is: What letters did Mesrop Maštoc’ use? Most scholars hold that Mesrop invented and used a large, upright rounded majuscule, similar to that found in early lapidary inscriptions, and thus they called it Mesropian erk'at'agir. Indeed Serge Mouraviev’s scientific reconstruction of how Maštoc’ proceeded systematically from a half a dozen basic

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12 The oldest paper manuscript, M2679, a Miscellany of 971 or 981, uses a mixed erk'at'agir-bolorgir script.

13 For instance Mercier 1978–79:53: “Is it not also possible that bolorgir, used at first informally, was elevated to formal status because of considerations of time and expense?”
forms (including two and their mirror images that produced four of the six) to which were added in a consistent manner descenders and ascenders and lateral strokes to the right and left, would in itself preclude any suggestion of evolution.14 It has been argued that this script eventually went through various changes – slanted, angular, small erkat’agir (fig. 2b-c) – and eventually evolved into bolorgir (fig. 3a-b), and in time into nōtrgir (fig. 5) and šlagir (fig. 6), the post sixteenth-century cursive. Doubt about such a theory started quite early; Yakob Tašian himself, the pioneer of the scientific study of Armenian palaeography, hesitated, but Karo Łafadaryan in 1939 even maintained that bolorgir already existed in the time of Mesrop.15

It was also once believed that minuscule gradually developed from earlier formal Latin and Greek majuscule found in inscriptions and the oldest manuscripts. But the late nineteenth-century discovery in Egypt of thousands of Greek and Roman papyri forced scholars to abandon this notion. Some scholars trace the roots of Greek cursive of the ninth century back to the informal cursive of pre-Christian papyri. Latin minuscule is evident already in third-century papyri.16 Is it possible that along with majuscule erkat’agir some form of an informal cursive script, which later developed into bolorgir, was available in the fifth century?17

Uncial was used in the West for more formal writing: Gospels, important religious works, and luxury manuscripts. The data gathered for the Album of Armenian Palaeography point to a similar pattern. The earliest bolorgir manuscripts (tenth century) appear chronologically anomalous until one notes that they are philosophical or non-liturgical texts rather than Gospels.

Examination of pre-Christian Latin papyri shows the origins of Caroline script, which is similar to Armenian bolorgir, in earlier cursive minuscule found in them. But the invention of the Armenian alphabet in the early fifth century precludes any pre-Christian antecedents.18 Greek and Syriac, the languages that most influenced Mesrop Maštoc’ in creating the Armenian alphabet, used both cursive and majuscule in that period. It is difficult to imagine that Mesrop and his pupils, as they translated the Bible, a task that took decades, would have used the laborious original erkat’agir for drafts as they went along. The use of the faster-to-write intermediate erkat’agir seems more than probable, yet it was not a minuscule script nor cursive. Unfortunately, except for the papyrus, no such cursive documents in Armenian have survived before the thirteenth century.19 Deciding between a theory of evolution to bolorgir versus the notion that erkat’agir and more cursive scripts co-existed from the fifth century is still an open question.20

C. Mixed Erkat’agir-Bolorgir Script

From the mid-eleventh to the end of the thirteenth century a somewhat bastardised script was noticed among certain manuscript (fig. 4), mostly from Greater Armenia to the northeast, which employed both uncials and minuscule letters – erkat’agir and bolorgir – in the same document. It was named “transitional script” by early palaeographers, however, my colleague and co-author Michael Stone, during the preparation of our Album of Armenian Palaeography, proposed that it was a separate script and published an article to that effect in addition to his comments in

14 Mouraviev 2010:20-45 with abundant tables.
15 See the discussion in Kouymjian 2002a:70–71.
16 Bischoff 1985:70.
17 Mercier 1978–79:57, seemed inclined toward such an hypothesis, “Si, dès le 10e s., on trouve capitale et minuscule, on n’en peut conclure que ces deux écritures ont toujours coexistent”; yet, there were 500 years between the invention of the Armenian alphabet and the tenth century, plenty of time for an evolution to bolorgir.
18 Indeed, we have no Armenian manuscript writing with a specific date before the ninth century. Some scholars claim that an undated manuscript (M11056) is older and that some fragments in Erevan are from the fifth century, hopefully recent and continuing study of Armenian palimpsests will result in better grounded conclusions on their dates.
19 The earliest Armenian chancellery documents are from the Cilician court (thirteenth century) and by then minuscule bolorgir was already the standard bookhand.
20 Łafadaryan (1939:71) believed a minuscule script existed from Maštoc’s time not in the form of bolorgir, but as nōtrgir or notary script.
I have not fully accepted his argumentation basing my skepticism on what seems to be a trend of more ērkā’tāgīr letters in the earlier mixed script manuscripts of the period, while toward the end, when ērkā’tāgīr is disappearing as a manuscript hand, the majority of the letters seem to be bolorgīr, suggesting a transition. The question is still up in the air, unresolved.

D. Nōtrgīr and Šlagīr: The Cursive Scripts

The secretary working as a scribe (in Latin notarius) at the Armenian royal court or the Catholicosate, by necessity employed timesaving cursive versions of bolorgīr and even smaller nōtrgīr letters (fig. 5). The term could have entered Armenian from either late Byzantine Greek or Latin. Lafadaryan felt there was no convincing antecedent to the script and, therefore, he assumed that it must have had its origins in the early centuries, even in the time of Maštoc'. The script when it became formalised in the late sixteenth and seventeenth centuries was composed of small, but thick, unattached letters made of dots and short lines making those without ascenders or descenders hard to distinguish one from the other.

22 A longer discussion can be found in Kouymjian 2002a:73–75, section entitled “Nōtrgīr (Late Minuscule) and Šlagīr (Ligatured Cursive).”

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Table 2. Sampling of 455 dated manuscripts to 1400. Parchment vs. Paper and Majuscule vs. Minuscule.
Conclusion
By the last quarter of the twelfth century minuscule bolorgir supplanted majuscule, which was to disappear as a regularly used script about a half-century later (table 1). According to the data I have marshaled in table 2, this did not coincide exactly with the disappearance of parchment, which followed nearly a century after (precise moments indicated in blue and yellow). By the end of the thirteenth century one can say fairly safely that the Armenian manuscript was a codex made up of twelve paper folio quires and written in minuscule bolorgir. The only change to be observed in the later period from the seventeenth to the early nineteenth century was the gradual addition of the two cursive scripts, nōtrgir (fig. 5), the so-called notary script, and šlagir (fig. 6), the modern cursive with attached letters.

Addendum: Guide for Cataloguers
Below are some basic rules for Armenian manuscripts that can help in supplying rough dating, if the principal colophon is lacking or there is no one to decipher what is written. For a text written on paper, nine chances out of ten the script is not erkat’agir and the date texts to after 1200. Fly or guard leaves in parchment are almost always from manuscripts dating before that year, thus written in erkat’agir (fig. 2a-c). Paper manuscripts exist in abundance in the three other scripts, bolorgir, nōtrgir, and šlagir. In general the last of these would only be found for modern writing of the nineteenth and twentieth centuries, usually letters or documents rather than texts, but if texts, they would be unique items, dictionaries, practical manuals, memoirs, novels, poetry and other modern literature. A manuscript in bolorgir (fig. 3a-b) would almost certainly date from the thirteenth to the eighteenth century after which scribal manuscript copying stops; it would be the preferred script for liturgical works. Finally, a codex in nōtrgir (fig. 5) would most likely be of the seventeenth or eighteenth century. Though these are very approximate guidelines, they would in fact be accurate in more than 85 per cent of cases and could be controlled by comparing an unknown item with the plates or charts in the Album of Armenian Paleography, or, if one needs a minimalists guide, four good photos, one each of the principal scripts discussed above.

Quoted bibliography
Lafadaryan, Karapet (Karo), Haykakan gri skzbnakan tesakner (‘The Original Types of Armenian Letters’), Erevan: FAN-i hratarakč’ut’yun, 1939.  
Mouraviev, Serge N., ERKATAGUIR téqč’etqč’ir’h ou Comment naquit l’alphabet arménien, with a preface by Dickran Kouymjian, Sankt Augustin: Academia Verlag, 2010.  
Tašian, Yakob, Aknark mə hay hnagrut’ean vray. Usmnasiru’t’wm Hayoc’ grč’ut’ean aruestin (‘An Overview of Armenian Palaeography: A Study of the Art of Armenian Writing’), Vienna, 1898 (extract from Handős Amsorya 11/2–12, 1897, 12/1–6, 1898).  
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Paris  
California State University, Fresno, Emeritus

The present essay continues the series of articles dedicated to the study of the “Golden Gospel” of the church Däbrä Maʿṣo Yoḥannes (Gulo Mäḵäda, East Tegray, Ethiopia), which were published in the previous issues of the COMST Newsletter.1 In this contribution, I discuss another additional note included in the manuscript.2 The note is of significant historical interest,3 today, however, I focus my attention on its scribal features, using it as an illustration of a practical exercise in palaeography.

In the field of Ethiopian studies, in particular in the practice of manuscript cataloguing, the analysis of the script has been usually limited to a very general “applied palaeography”: assigning the hand to a certain chronological period and briefly referring to its quality or aesthetic aspect. The scope of such an enquiry remains narrow partly because of the state-of-the-art of the field,4 and partly because of the fragmentation and dispersion of the material.5 Issues remaining completely unattended include the detailed analysis of the scripts, their localisation and geographical classification, study of the scriptoria or centres of scribal activities, as well as the identification of individual scribes and their styles.6

The project Ethio-SPaRe7 attempts to achieve a new state-of-the-art in the area, thanks to its documentation method that implies a thorough and systematic recording of ecclesiastical libraries in specific localities. Accumulating sufficient data on the local scribal practices, one can achieve a better evaluation for any type of the local written evidence, in particular through identification of the local scribes. This was, in fact, the case of the note in question, additio 10 in the “Golden Gospel” of Däbrä Maʿṣo.

The additio is placed in the empty space between the “Tituli” of the Gospel of Luke and Gospel of Luke itself (fig. 1). It is easy to see that the note is not one homogeneous text, but contains a few distinct documents (charters) which were copied into the “Golden Gospel” from one or more models by the same hand, apparently at the same time. The general paleographic features of the handwriting attested in the note correspond to the nineteenth century. It clearly represents one of the numerous local styles of the post-Gondärìne period.8

Among the manuscripts preserved in other collections in the area around Däbrä Maʿṣo, several have been discovered that feature a scribal profile apparently identical to the one of the additio. It has been thus possible to propose an identification of the scribal hand of the charters. Besides providing a basis for dating the note, and thus an additional terminus ante quem for the manuscript, this finding helps establish internal connections between the ecclesiastical institutions and areas where the scribe was demonstrated to have been active, and thus contributes significantly to our knowledge of the cultural history of the region.

The scribe Wäldä Muse, who left his name in the colophons to several codices he copied, resided in the area of Madrā Ruba Śellase, a close neighbour of Däbrä Maʿṣo Yoḥannǝs. He must have been active over a long period, from ca. 1865 to well into the 1890s, his activity peaking during the reign of King Yohannas IV (r. 1872–89). He mostly copied liturgical books, but also a few other texts.9 Nearly all his products are fairly modest codices of medium or small size, without leather covering, devoid of images or any other decoration. Wäldä Muse was a

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2 Additio 10 in Nosnitsin 2012:27.
3 For an annotated translation and a short stylistic and historical analysis of this relatively recent but exceedingly difficult text referring to an early period, see Nosnitsin 2013.
4 The studies on Ethiopian palaeography have been very few, also after the major contribution by Uhlig 1988 (which defined the main historical periods in the development of the Ethiopian handwriting). They mostly deal with the origin of the Ethiopic script or the ancient stage in its history (e.g., Davies 1987, Lusini 1999).
5 Despite the considerable number of Ethiopian manuscripts gathered in the European libraries, most of the major collections in Ethiopia in the places that might have been historical centres of scribal practice in the past are insufficiently documented or still very difficult to access. Some large gaps in the documentation can never be closed because a large share of the Ethiopian manuscript heritage has been lost.
6 Despite the recent progress in the cataloguing of the Ethiopian manuscript collections in Europe, no inventory of Ethiopian scribes has ever been attempted – similar to the “repertoire of the Greek scribes for 800–1600” (see Gammilscheg – Hartfinger 1981 and further two sets) or preceding works of a lesser scale (e.g., Wilson 1972), – neither have scientific discussions on individual scribes been ever developed – similar, e.g., to that concerning the fifteenth-century Jewish scribe and illuminator Joel ben Simeon (see Beit-Arié 1977 and 1993, esp. pp. 93–108). It is beyond doubt that there must have been quite a few productive and skilful scribes in Ethiopian history, but their names and places and times of activity remain unknown.
9 For a preliminary analysis of the manuscript library of Madrā Ruba Śellase and the first survey of books attributed to Wäldä Muse, see Pisani 2013. Magdalena Krzyżanowska presented the scribes of Gulo Mäḵäda, and, in particular, Wäldä Muse’s “scribal profile”, in her talk “Scribes of East Tigray (North Ethiopia)” at the COMST workshop “The Shaping of the Page, the Scribe and the Illuminator at Work”, Arles, 9–11 October 2012.
Fig. 1. MY-008, ff. 74v-75r, 75v-76r, with additiones ff. 74vb-75vb.
Wäldä Muse’s products, in Mǝdrä Ruba Śǝllase and more than ten books that have been identified as conducted by the project Ethio-SPaRe revealed documentary writing attributable to him has been discovered so far. Systematic cataloguing efforts conducted by the project Ethio-SPaRe revealed more than ten books that have been identified as Wäldä Muse’s products, in Medrā Ruba Śellase and four more churches in the surroundings.10

On the basis of a careful study of the manuscripts securely attributed to Wäldä Muse, a set of individual handwriting features have been identified. These have been used to define the authorship of additio 10 in manuscript MY-008. Some of the general characteristics are:

- the hand is not very well trained; the handwriting appears somewhat irregular and uneven;
- for rubrication, the scribe always used red ink of a special, reddish-brown tone, in particular in all books that are today in the collection of Medrā Ruba Śellase (unfortunately, there is no rubrication in the note);
- nearly consistent use of ligatures (word ‘ǝgzi’abaḥer ”Lord”, ‘ǝgzi’o etc.);
- broad letters (s. the dimensions of the script above), with the rate width to height being ca. 1:1 in very many cases; in some cases (d, m, d, u, m) the width of the letter significantly exceeds the height (in 1–3 mm);
- strongly pronounced square shapes (at joints, vertical and horizontal strokes produce neatly cut corners);
- contrast between very thick vertical strokes and very thin horizontal strokes (accented “shading”);
- “hairlines” − tiny, short lines extending the elements of some letters to the left.

As an identikit, several illustrative shapes have been chosen: nine separate signs, three examples of frequent words, the divider, and sample passages.11 Table 1 shows these features as they appear in MY-008 in comparison to three other manuscripts copied by Wäldä Muse:

- MR-023: Gādlā Qirqos, “Vita of Cyprian”, 45 fols. in 5 quires, (H)18.0 x (W)12.5 x (T) 4.5. The colophon ascertains the identity of the scribe, Wäldä Muse, and the completion of writing sometime in 1872–76, mentioning King Yoḥannäs IV (r. 1872–89) and Metropolitan ṣabunä Ṭenayetawos (in office 1869–76). Approximate dimensions of the script are: (H) 4–6mm x (W) 4–8 mm.
- MR-007: Mašhaḥā qǝddase “Missal”, 96 fols., in 11 quires, (H) 22.0 x (W)17.0 x (T) 6.0. An ownership note mentions the scribe Wäldä Muse. The manuscript was completed sometime in 1869–76, as follows from the mentions of ‘Ṭenayewos the Metropolitan of Ethiopia (in office 1869–76).12 Approximate dimensions of the script are: (H) 4–5mm x (W) 4–7 mm.
- UM-023: Mašhaḥā qǝddase “Missal”, 114 fols., in 13 quires, (H) 21.7 x (W) 17.3 x (T) 5.5. A donation note mentions the scribe Wäldä Muse as well as King Yoḥannäs IV (r. 1872–89), Metropolitan Ṭenayewos (in office 1869–76) and a local ruler bahr nāgäsi Täwäldä Mädḥon.13 The manuscript was completed sometime in 1869–76.14 Approximate dimensions of the script are: (H) 4–5mm x (W) 4–7 mm.

These features highlight the identity of the hand in a sufficient way, despite some irregularities. As the handwriting is not very regular, some of the traits appear to a slightly varying degree, also within the same witness. The deviations may have been caused by a variety of reasons, such as differences in the quality of writing materials (parchment, pen, etc.) and natural transformation in the scribe’s style (e.g., conditioned by tiredness, aging, etc.). Besides, there is a slight difference between the writing on the hair and on the flesh sides of the folio; on the flesh side, some features appear less conspicuous (e.g., the corners of the letters are less sharp).

It should be noticed that the handwriting of the note is on the whole less careful than that of the main texts in Wäldä Muse’s manuscripts, and its quality further declines starting from fol. 75rb. Besides, the script of the note appears more slender than in other samples. Such letters as d, m, d, u, m,
Table 1. Distinctive features of the hand of Wäldä Muse.

<table>
<thead>
<tr>
<th>Feature</th>
<th>MY-008</th>
<th>MR-023</th>
<th>UM-023</th>
<th>MR-007</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. wä</td>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>2. mä</td>
<td><img src="image5.png" alt="Image" /></td>
<td><img src="image6.png" alt="Image" /></td>
<td><img src="image7.png" alt="Image" /></td>
<td><img src="image8.png" alt="Image" /></td>
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<tr>
<td>3. ba</td>
<td><img src="image9.png" alt="Image" /></td>
<td><img src="image10.png" alt="Image" /></td>
<td><img src="image11.png" alt="Image" /></td>
<td><img src="image12.png" alt="Image" /></td>
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<tr>
<td>4. ṣa</td>
<td><img src="image13.png" alt="Image" /></td>
<td><img src="image14.png" alt="Image" /></td>
<td><img src="image15.png" alt="Image" /></td>
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<tr>
<td>5. ḥa</td>
<td><img src="image17.png" alt="Image" /></td>
<td><img src="image18.png" alt="Image" /></td>
<td><img src="image19.png" alt="Image" /></td>
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<tr>
<td>6. là</td>
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<td><img src="image22.png" alt="Image" /></td>
<td><img src="image23.png" alt="Image" /></td>
<td><img src="image24.png" alt="Image" /></td>
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<tr>
<td>7. dä</td>
<td><img src="image25.png" alt="Image" /></td>
<td><img src="image26.png" alt="Image" /></td>
<td><img src="image27.png" alt="Image" /></td>
<td><img src="image28.png" alt="Image" /></td>
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<tr>
<td>8. ya</td>
<td><img src="image29.png" alt="Image" /></td>
<td><img src="image30.png" alt="Image" /></td>
<td><img src="image31.png" alt="Image" /></td>
<td><img src="image32.png" alt="Image" /></td>
</tr>
<tr>
<td>9. ye</td>
<td><img src="image33.png" alt="Image" /></td>
<td><img src="image34.png" alt="Image" /></td>
<td><img src="image35.png" alt="Image" /></td>
<td><img src="image36.png" alt="Image" /></td>
</tr>
<tr>
<td>10. ligature</td>
<td><img src="image37.png" alt="Image" /></td>
<td><img src="image38.png" alt="Image" /></td>
<td><img src="image39.png" alt="Image" /></td>
<td><img src="image40.png" alt="Image" /></td>
</tr>
<tr>
<td>11. ěnzä</td>
<td><img src="image41.png" alt="Image" /></td>
<td><img src="image42.png" alt="Image" /></td>
<td><img src="image43.png" alt="Image" /></td>
<td><img src="image44.png" alt="Image" /></td>
</tr>
<tr>
<td>12. kämä</td>
<td><img src="image45.png" alt="Image" /></td>
<td><img src="image46.png" alt="Image" /></td>
<td><img src="image47.png" alt="Image" /></td>
<td><img src="image48.png" alt="Image" /></td>
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<tr>
<td>13. divider</td>
<td><img src="image49.png" alt="Image" /></td>
<td><img src="image50.png" alt="Image" /></td>
<td><img src="image51.png" alt="Image" /></td>
<td><img src="image52.png" alt="Image" /></td>
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</tbody>
</table>

1. Letter wä (ወ) tends to a rectangular shape. The horizontal strokes are parallel to the ruled lines. The vertical strokes are parallel. In MY-008, the letter appears less broad (see above and table 1).

2. Letter mä (መ) tends to a rectangular shape. If executed carefully, the upper horizontal stroke is parallel to the ruled line. The loops are square, of equal size; the vertical strokes are parallel.

In the 6th order (ም), the left loop is significantly smaller than the right loop; and vice versa in the 4th order (ማ).

3. Letter ba (ብ) has a bulky vowel marker ending with bifurcation (“serif”), which frequently has a modified shape: a thick short stroke oriented downwards is set on a very thin line which extends to the left (“hairline”; the same happens also with some other letters, like ማ, ሗ, etc.).

4. Letter ṣa (ሄ) has the vowel marker constructed of two separate strokes.

5. Letter ḥa (ሐ) is shaped similarly to wä, with legs parallel to the vertical stem and set on a thin horizontal bar.

6. Letter là (ለ) has a structure that appears to be a distinct feature of Wäldä Muse’s hand: the right (shorter) stroke is very finely aligned to the left.
stroke and touches it – if at all – only with one corner (the same principle is valid for 俐).

7. Dä (נייד). The base line of the letter is highly raised, the stem is mostly straight (s. below).

8. Letter ya ( ': ). In MY-008, the 4th order marker is extended by a curve line reaching far to the right. The feature does not appear in MR-023, but its emergence can be already anticipated in UM-023, and it becomes quite visible, even though in a less pronounced form, in MR-007.

9. Letter yǝ (የ). The stem of the letter is straight and slanted in the same way as the stem of dä (see above). The right element of 6th order marker looks like an open loop, in the same way, in all witnesses (which makes the letter appear similar to the sign for “2”, ﯷ). The left short stroke is aligned to the main stem directly or through a thin line, but has a less regular shape.

10. Ligatureʾǝgziʾ or ʾǝgziʾo “Lord”, “oh Lord” (አግዝል, እግዝירו). Note the bulky 6th order marker (ና), composed of a semicircle set on a thin line which extends downwards to the left (“hairline”).

11. Word ʾonǝzä (አንዛ). Note the same feature at the 6th order marker of ne, transformation of the “bifurcated” end, “hairline” extending downwards to the left.

12. Word kǝmǝ (ከመ). Note the typical shape of kǝ, with two thick vertical parallel strokes.

13. Text divider/ornamental band/filler. Executed in red ink (sometimes partly), very unsophisticated, composed of a zigzag-line enclosed between two straight lines or dotted lines.

The established identity of the scribe provides a sound foundation for the dating. The activity period 1865–90s, suggested for Wäldä Muse, is still quite a broad span, but there are further hints (from the analysis of the content of the note) pointing to ca. 1892 as the time when the note might have been written down. During that period Wälda Muse, one of the most prolific local scribes, was probably about to conclude his scribal career.

**Conclusion**

The cursory essay illustrates the range of research possibilities that can open if an item is looked at in its original context. It shows that a systematic analysis of manuscript collections in situ can contribute to our knowledge of local cultural history not only by mere content reading but also by a close study of codicological and palaeographical features of the surveyed manuscripts. Knowing the development of the scribal practice can enhance significantly our understanding of the manuscript tradition.

**Quoted bibliography**


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15 See Nosnitsin 2013.
Thinking of the stemma one should try to avoid thinking of a tree and its branches. The few disparate textual witnesses that we do have are often nothing more than a small pile of twigs and branches, of which we will probably never know where in the tree(s) of transmission they had their place. Lachmann’s method, the stemmatological approach in textual criticism is the other extreme, as it promises its adepts a beautiful tree, even if many of the branches remain invisible forever. It can be summarised as follows: “The steps in preparing a new edition are: identifying and studying comparatively the surviving manuscripts of the text (exemplars); identifying the characteristic errors that appear to distinguish the major branches of the stemma; reconstructing the stemma in detail by seeking the tree that accounts most parsimoniously for the occurrence of characteristic errors in terms of the relative recency of common descent among exemplars; selecting for further analysis only those readings evidently closest to the author’s original, and eliminating from further consideration those variants that contain no additional information; collating the selected manuscripts word by word; and finally, choosing among the alternative wordings in the effort to reconstruct the closest possible approximation to the original text, footnoting the rejected alternatives in the new edition’s apparatus criticus …”.¹

A quarter of a century ago I wrote an article with the title “Establishing the stemma: fact or fiction?”.² The question in the title was a rhetorical one, of course. I had become convinced of the fictional qualities of most traditional stemmatology. The reason for writing that article was primarily rage. I was angry because I felt that, while I was editing an Arabic text, I had been left in the lurch by the existing scholarly literature on editorial technique. After having lost much valuable time I came out with a few ideas of my own with special reference to medieval Arabic literature, and wrote these down. The article became, quite to my amazement, rather popular and it was placed on a number of academic reading lists. It has even been translated into Turkish.³ The publisher in Istanbul had made a collective volume, with texts by Paul Maas (about him more, hereafter) and the Canadian scholar Barbara Bordalejo (University of Saskatchewan). How the Turkish publisher came to this combination of authors I do not know, nor did I question it, although I can understand the publisher’s idea to take an old voice, a modern voice and a counter-voice. Yet, between the two professionals, Maas and Bordalejo, I felt as the odd man out. I am not present in a professional stemmatological gatherings, such as Studia Stemmatologica, which is a series of international workshops on stemmatology,⁴ nor do I show up in settings of the Textual Communities Project, or other places where the stemma is revered, and where digital humanities pop up like mushrooms.⁵ I am not proud of my ignorance and my anti-social behaviour, but sometimes I just want to edit a text, and therefore I need method. So my orientation towards stemmas is mainly a practical and pragmactical one, while I do take into account the peculiarities of textual transmission in an Islamic context.

Here is what happened a long time ago. I worked, intermittently between 1972 and 1989, on what I wished to be the critical edition of a short work on the division of the sciences by the Egyptian polymath Ibn al-Akfānī (d. 749/1348).⁶ He was an interesting intellectual in Mamluk Cairo, and is now completely forgotten. His booklet on the sciences is a relatively short text of under twenty thousand words. With a “critical edition” I meant to bring out a version of the text that the author might recognise as his own (if I may paraphrase the concept of archetype in this way). While working on this edition I was, quite to my surprise, confronted with an extensive transmission of that text. As a result of my bibliographical homework the existence of some sixty-six manuscripts in countries on four continents had come to my knowledge. That was about five times as much as the number mentioned by Carl Brockelmann.⁷ Among these manuscripts

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³ Witkam 2011.  
⁴ Apparently based in Helsinki.  
⁵ As long as these initiatives result in something tangible and verifiable, such as Digital Philology: A Journal of Medieval Cultures, which started to appear in Spring 2012 from Johns Hopkins University Press, I have no objection.  
⁷ Brockelmann 1937–49, II:137; Supplementband II:169–70.
was a branch of summaries, which in course of time had been, quite falsely, attributed to Avicenna. There was also some evidence of a Judaeo-Arabic version, which may somehow have a connection with the outspoken anti-Jewish opinions of Ibn al-Akfānī. With these sixty-six manuscripts, one would say, there was enough material to come out with a critical edition, which eventually I did, but not as I had thought I would do. However, the large number of surviving manuscripts implied an unexpected and unpleasant paradox, which I will describe in a moment.

Sixty-six manuscripts is a lot and that large number posed several problems, not only in the initial stages of the recension of the available material. The first practical question I asked myself was: “Will I be able to get hold of copies or microfilms of all these manuscripts, if I cannot inspect them by autopsy?” Practice proved to be even more recalcitrant than I had anticipated. Of sixteen of these sixty-six manuscripts I could not get hold of any other sort of reproduction. For some of these sixteen hard-to-get manuscripts I even had to acquiesce in the fact that they apparently were lost between the moment that they were described in a printed catalogue and the day I wished to obtain a microfilm or to inspect them in situ. These unviewable and invisible manuscripts were kept in Cairo, Hyderabad (Deccan), Kastamonu, Marrakech, Paris, Rampur, Salé (but I saw the two Salé manuscripts later on in the private library where they had been kept all along), and Tehran. These are all places where special instructions for use apply. Thus, my number of textual witnesses had, for entirely practical reasons, slimmed down to fifty, which is still a considerable number.

Another question which I asked myself was: “If there are now sixty-six manuscripts known to exist, at least bibliographically, how many have existed in all?” The answer to that question is relevant to the reconstruction of the archetype(s) of the text. The number of intermediary manuscripts is important there and we must form ourselves an idea about these. Some work on this subject has been done recently. The Dutch statistician Eltjo Buringh has offered several ways to calculate loss rates and survival rates for medieval manuscripts in the West, but for the moment he has refrained from doing so for manuscripts from outside the Latin West, or from the non-Latin West.8 His gut feeling tells him that the loss rate outside the Latin West is ‘at least similar and possibly considerably greater’ than in the Latin West.9 Calculating these rates is a complicated affair and the result will always remain very imprecise, at best. Expertise, gut feeling, sound taste10 of the editor, or whatever you will call the subjective element in editing, they all play an important role in the editorial process, but only in the second phase, during the emendation. I did not come further in the first phase, the recension of the available material and the construction of a stemma. I assumed that when there is an abundance of manuscripts of a certain text, that text must have been popular somewhere, sometime. The contrary is probably also true: texts preserved in unique manuscripts were not popular, which says nothing about their historical or cultural importance on the long run. But apart from this, when numerous witnesses of a text have been preserved, and when we assume this large number to be the outcome of survival at a relatively modest survival rate, say of 10%,11 it is evident that many more have been lost. The paradox then becomes as follows: The more witnesses have survived, the less intermediary witnesses have been preserved. One can say it even more provocatively: With each newly discovered manuscript, the chances that it is possible to produce a critical edition decrease.12

To look at my sixty-six manuscript witnesses of Ibn al-Akfānī’s treatise from the perspective of a realistic survival rate of 10% would imply that at all stages of the text’s transmission history, ever since the author published his book in the 1320s or 1330s, there may have existed at least some six hundred copies of the book in all. That is, if we can extrapolate the survival number in a linear way – which maybe we cannot, if only because the rough total of sixty-six hides information that is far more complex than can be caught within that single number. A matrix between dates and places of copying would already give a more nuanced image. In course of time, the loss rates of the older, medieval manuscripts increase. The circumstance that I had to consider was that more than ten out of a total of sixty-six bibliographically attested manuscripts were lost or unavailable, told me something about survival rates in recent times.

Another approach is to try to calculate an average life span for Islamic manuscripts. For reasons that I will not now elaborate on (and

8 Buringh 2010:54-57, gives a formula for calculating loss rates, and he further explains this in his chapter 4 “Losses of Medieval Manuscripts”, pp. 179-251.

9 Buringh 2010:249.

10 The al-Dhawq al-Salīm of the modern Arab philologists.

11 With my sincere apologies to Mr. Buringh for such a blatant simplification of his carefully worded arguments and ingenious calculations.

12 In the long run, the linear argument does not hold, of course.
most of it is guesswork, anyway) I estimate the average life span for manuscripts in the Middle East from the pre-modern period before I published my edition in 1989. Two of these early editions had in the meantime become as rare as manuscripts. Nor was my critical edition of 1989 the final one. At least two more uncritical or rather “not so critical” editions were published afterwards,

But there is more to be said. My philological ambitions in this project went further than producing a critical edition tout court. I also wanted to reconstruct the life and work of the author and to place him within an intellectual history. My bibliographical research resulted in a list of forty-nine titles of works that, with different degrees of certainty, could be associated with Ibn al-Akfānī.

In the early stages of my search for manuscripts of Ibn al-Akfānī’s works I had, more out of ignorance than anything else, made a fatal mistake. I had assumed that Cairo, where he had died in 1348 of the plague, would be the place where the most important manuscripts of his work were preserved. After a prolonged stay in Cairo in the winter of 1973–74 this assumption proved to be untrue. The manuscripts that I was looking for simply were not there, and that could not only be explained by the xenophobia of Egyptian librarians. My mistake had been that I had not sufficiently realised that not only people travel but that they take their manuscripts with them. Many of Cairo’s great book collections of the Mamluk period had, after the Ottoman conquest of 1517, been unable to resist the centripetal forces of the new Islamic metropolis, Constantinople. It is quite possible that the presence of these Egyptian, and Syrian, libraries in Constantinople has contributed to the intellectual and scholarly golden age of the Ottoman capital in the second half of the sixteenth century. In my research on Ibn al-Akfānī this proved to be the case as well. Only after I had been able to consult the extensive manuscript holdings in the Süleymaniye library in Istanbul, it

I prefer the term “pre-modern” over “medieval”. The periodicity of Western and Oriental history has too little in common to allow for an overall use of the word “medieval”.

Nor does one see very often a reference to the Arabic translation (Tārīḥ al-adab al-‘arabī) made under the supervision of Maḥmūd Fākhūrī, Muhammad Kamāl and Husayn al-Ṣiddiq (Beirut, Maktatāb Lubnān Nāṣīrīn).

Witkam 1989:50–52. I divided the works into four categories: preserved works with certain attribution (19), works with certain attribution of which no manuscripts are presently known to exist (11), loosely associated works, but probably not written by Ibn al-Akfānī (16), loosely associated works and certainly not written by Ibn al-Akfānī (3). The first two categories show yet another type of loss rate.

Examples of that are quoted in Witkam 1987:111–25. Not much has changed since the twenty-five years that have passed since then.

15 See the description of these editions in Witkam 1989:118–27.

16 In 1990 there appeared the edition by ‘Abd al-Mun im Muhammad ‘Umar and Ahmad Hilmi’ Ab al-Rahmān (Cairo, Dār al-Fikr al-‘Arabī), and in 1998 appeared the edition by Maḥmūd Fākhūrī, Muhammad Kamāl and Husayn al-Ṣiddiq (Beirut, Maktatāb Lubnān Nāṣīrīn).

17 Witkam 1989:50–52. I divided the works into four categories: preserved works with certain attribution (19), works with certain attribution of which no manuscripts are presently known to exist (11), loosely associated works, but probably not written by Ibn al-Akfānī (16), loosely associated works and certainly not written by Ibn al-Akfānī (3). The first two categories show yet another type of loss rate.

Examples of that are quoted in Witkam 1987:111–25. Not much has changed since the twenty-five years that have passed since then.
was evident that my study of the life and work of Ibn al-Akfānī could somehow be completed.

With my fifty available manuscripts of Ibn al-Akfānī’s *Division of the Sciences* I started to make collations in order to find out the relationship between the manuscripts. I would try to eliminate as many direct copies of manuscripts as possible from my list of textual witnesses, as from the beginning it was clear to me that even fifty manuscripts was just too much to work with. This was a practical consideration about work that, at the time (in the 1970s) had to be done entirely by hand. If one wishes to write the history of the transmission and reception of a work, it is important to have an abundance of witnesses, yes, but when the purpose is to produce a critical edition, elimination of witnesses is an absolute must. In my simplicity I had assumed that out of the fifty available manuscripts a considerable number could be eliminated, leaving me with a limited number of manuscripts that together could get me nearer to the archetype. This proved to be untrue as well, due to the paradox that I have just formulated, but of which I was not aware at the time. Only some ten percent of the fifty manuscripts proved to be direct or indirect copies of other manuscripts known to me. That too could be useful information for the calculation of loss rates of manuscripts. What I had on my table were in fact a few stages only of a large transmission history, most of which remained invisible.

This resulted in a methodological impasse. My theoretical framework at the time was the small book by Paul Maas on textual criticism. I had been told by several philologists whom I greatly respected, and also by a number of their students, that Maas’ book gave the sure recipe for stemmatology, and to the inexperienced reader it does give the impression that the stemmatological method is always successful. However, it only describes the idea of stemmatology and philological practice in its most ideal form. Maas neglects to tell this to his readers. The elements of textual criticism that he describes are valuable enough but the result that he describes, the reconstruction of the archetype of a text, is only exceptionally attainable. However, to come to that simple conclusion took me several years (1972–79) of collation and vain attempts of stemma construction. The archetype all the time remained an elusive mirage. The model offered by Maas is beautiful and elegant, but it has not much to do with practical reality. On the contrary, philological practice proves to be that recensions are not closed, but open. That idea was successfully followed up by the book by Martin West, which was meant to replace Maas’ *Textkritik*. West describes the “open recension” as “when […] all those manuscripts in which worthwhile variants […] appear for the first time, are not related perspicuously and do not allow us to construct an archetype”. Once the archetype cannot be reconstructed, which is the first phase, the second phase, the emendation, changes in a considerable way. Maas had had his critics as well, however, but these are much less known than Maas’ book on textual criticism, and at the time I was not sufficiently aware of the stemmatological discussions. How controversial Maas’ work in fact was, immediately upon publication, becomes clear from the review of *Textkritik* by Giorgio Pasquali, a text much longer than the reviewed book. An example of Pasquali’s criticism make this clear. On the *recensio* Maas writes: “When a witness, J, shows all faults of another preserved witness, F, plus at least one more, then J must descend from F”. To this Pasquali comments that in such a case J does not necessarily descend from F, because the extra fault can be accidental. It is a typical passage, as such accidents do not exist in Maas’ universe, where everything is complete and predetermined.

My plan B, the next-best solution, was to restrict myself for my edition of Ibn al-Akfānī’s *Division of the Sciences* to old manuscripts or manuscripts that somehow could be directly linked to the author. I consciously neglected thereby the possibility that there would be a young manuscript directly copied from a witness with the best readings. This resulted into my selection of seven manuscripts (out of the fifty-five available ones). These seven manuscripts were kept in Bologna, Cambridge, the Escorial, Jerusalem (in a private library that was hidden after the Israeli occupation of old-Jerusalem, but a microfilm of it was available in the library of the Arab League in Cairo), Leningrad, Paris and Princeton. All seven manuscripts could somehow be linked to the era or entourage of the author. Of the seven

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19 I used Maas 1950.

20 The main culprits are the learned Aristotelian scholar, H.J. Drossaart Luluofs (1906–98), and my revered teacher, the Arabist Jan Brugman (1923–2004). They themselves, while working together in the Aristotelles Semitico-Latinus project, had not bothered to indulge in stemma making.

21 West 1973. A similar approach is proposed by Robson 1988, who goes, however, much further than textual criticism in the narrow sense of the word.


23 See the explication of the two-phase concept in the Lachmannian method by Berschin 2007:251–57.

24 Originally published as Pasquali 1929, also available in Pasquali 1986. With thanks to Alessandro Bausi for this reference.

manuscripts, the one from Princeton was selected on paleographical grounds only, and I have never lost my doubts about its textual value, or rather lack thereof. The critical apparatus of my edition shows some recurrent clusters of sigla, but not sufficiently for a safe elimination of one or more of the selected manuscripts. A typical case of an open recension.

During the collation I had observed that all seven manuscripts contained smaller or larger lacunae. All were slightly incomplete, mostly so the Jerusalem manuscript where the copyist had skipped the entire epilogue which contained an explanation of basic philosophical terminology. He wrote: “I suppressed the definitions here, and who wants to know these can find them in books on logic, philosophy and the natural sciences, as these are loaded (mashhūna) with this”. So here I had an intelligent copyist, who did not wish to waste his time on elementary matters. The final result of my work was an eclectic edition of Ibn al-Akfānī’s Division of the Sciences. In it, justice was done to the wealth of manuscript witnesses, both in the body of the text and in the critical apparatus, but it was in no way the archetype or anything near that. Once I had decided, more by circumstance than by choice, to produce an eclectic edition I felt free to convert the entire text into the orthography of Modern Standard Arabic. Editors in the Arab world do so anyway. I felt justified to impose a modern orthography onto an old text because the orthography of all seven selected manuscripts was incomplete, inconsistent, different and mutually exclusive. The choice for the orthography of Modern Standard Arabic was the only way out of that problem.

Then I wrote the article “Establishing the stemming, fact or fiction?”. I was really angry, at my teachers, and, indirectly also at Paul Maas, for not having warned me for the enormous divide between theory and practice, between ideal and reality. I certainly had lost time, but in it, I had acquired experience by trial and error.

Quoted bibliography

Berschin, Walter, “Lachmann und der Archetyp”, in: Theoretical Approaches to the Transmission and Edition of

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28 At the time, he was nothing but an iconic name for me. After I had read more about his life, notably how he had been persecuted by the Nazis (see Mensching 1987), and after the quarter century that has passed since my initial stemmatological work, I have become both milder and more sceptical.
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