

The enhancement of the Mingana-Lewis
palimpsest (CUL Or.1287)

Reading between the lines of its post-processed
images

Alba Fedeli

Project report

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1. Schedule aspects and work supported by the grant

In 2011, the Islamic Manuscripts Association funded the technical support for the post-processing of the images of the Mingana-Lewis palimpsest (MS CUL Or.1287) obtained in 2010 thanks to a previous grant from the Islamic Manuscript Association (see <http://www.islamicmanuscript.org/grants/grantscheme/pastprojects/2009-1.aspx>).

The technical support included the work needed for a first stage (from April to July 2011) for:

- developing the technique for processing the palimpsest images;
- creating one digital file for each leaf by matching the different images, i.e. colour images using flash lighting, greyscale images using flash lighting, colour images and greyscale images using a B+W 420 filter and UV lighting, greyscale images using a B+W 092 filter and infrared lighting;
- obtaining the registration of the misaligned images;
- training Alba Fedeli in using image-processing software to trace the selection masks of the upper-writing and under-writing of the palimpsest.

In the second stage (July 2011 to October 2015), the support provided:

- technical support during the image processing and creation of selection masks;
- creation of the final online display of the interpretation of the images and their storage.

2. Original scope and method of the project and its further development

The original proposal presented to TIMA planned to fund the virtual reconstruction of the under-writing of the Qur'ānic leaves, hiring Fabrizio Fenucci and Elisabetta Panceri who had already done the same work on the Sana'a palimpsest. However, during the initial development of the technique for processing the palimpsest images, Alba Fedeli decided to perform the physical work of tracing the selection masks of the upper-writing and under-writing of the palimpsest by using image software, a tablet and pen technology. The intervention of the scholar produced better results which demanded training in using image-processing software and caused an unexpected change to the original schedule. Moreover, differently from the proposed plan, Alba Fedeli created an electronic edition of the manuscript text as part of her PhD research as well as the hypothetical retracement of the under-writing going beyond the original objectives.

The schedule of the original plan was based on the previous experience with the Sana'a manuscript which did not involve scholars physically retracing the selection masks of the under-writing and upper-writing and using image-processing software.

3. Outcomes

- Display of the hypothetical retracement

The Cambridge University Library received the set of processed images for each Qur'ānic leaf (original image, remnants of the *scriptio inferior* and hypothetical retracement of the *scriptio inferior*) on 16 October 2015 and they should upload the images together with a short explanation and the online editions of the text at the end of November 2015.

- Books

PhD thesis on the early Qur'ānic manuscripts of the Mingana collection (defended on 24 February 2015) which included the analysis of the Mingana-Lewis palimpsest and the verification of the Mingana-Lewis edition published in 1914.

Book based on this dissertation to be published after revision of the PhD thesis.

- Papers and lectures

Interpreting the Physicality of Destroyed Artefacts: A Few (Incomplete) Traces from MS CUL Or.1287, 14 May 2015: lecture at Cambridge University Library, Symposium on the Codicology and Palaeography of Early Qur'an Manuscripts

Tischendorf and the Mingana Collection: Manuscript acquisition and Qur'ānic Studies, 21 February 2015: paper delivered at 'Studies on Johann Gottfried Wetzstein (1815-1905): Manuscripts, Politics and Oriental Studies', Staatsbibliothek zu Berlin

Early Qur'ānic Manuscripts: Accessing Artefacts in the Digital Age, 26 August 2014: presentation at the 'International Association for Religious Freedom' World Congress 2014, University of Birmingham

The Mingana-Lewis Qur'ānic palimpsest: a manuscript, and edition and their reception (1914-2014), 16 May 2014: Cambridge University for the first Cambridge Qur'ān Seminar

The Birmingham-Cambridge Qur'an Palimpsest : Rumours and Studies, 8 May 2013: lecture at The Institute of Ismaili Studies, London

The Qur'anic manuscripts of the Mingana Collection and their electronic edition, 17 October 2012: lecture at INALCO, Paris for the workshop *Manuscripta coranica: contribution à l'histoire du Coran*, 17-18 October 2012

Qur'ānic studies and projects between Cambridge and Birmingham, 17 March 2012: presentation at Europäische Akademie Otzenhausen (Saarland, Germany) for the Inārah Institute for Research on Early Islamic History and the Koran, 16-19 March 2012

Re-imaging MS Mingana Christian Arabic Additional 150: circulation of Christian texts in preserving Qur'ānic fragments, 6 June 2012: paper delivered at 2nd University of Birmingham Biblical Studies Postgraduate Day Conference 'Biblical texts and reception history: Retrospect and prospects'

4. Conclusions

Thanks to TIMA's grant, the criticism of the edition published by Agnes Smith Lewis and Alphonse Mingana in 1914 has been verified. Some of this edition's variants discussed by scholars in the last century do not exist, as they are the result of the 'noise' of the palimpsest, with its faded ink, spots and holes, besides the overlapping layers of ink. Despite the impression of a mathematically perfect correspondence with the original artefacts given by the use of digital images and retracements proposed during this project, the reading keeps its intrinsic nature of interpretation.

Costs of the project

| Description of the work | euro | GB pounds |
|--|-------------------------|--|
| <p>First stage (from April to July 2011)</p> <ul style="list-style-type: none"> • development of the technique for processing the palimpsest images; • creation of one digital file for each leaf by matching the different images, i.e. colour images using flash lighting, greyscale images using flash lighting, colour images and greyscale images using a B+W 420 filter and UV lighting, greyscale images using a B+W 092 filter and infrared lighting; • registration of the misaligned images; • training course of Alba Fedeli in using image-processing software for tracing the selection masks of the upper-writing and under-writing of the palimpsest. | <p>4200</p> <p>euro</p> | <p>payed in July</p> <p>2011 = 3797,13</p> <p>GBP</p> |
| <p>Second stage (July 2011 to October 2015)</p> <ul style="list-style-type: none"> • technical support during the image processing and creation of selection masks; • Creation of the final online display of the interpretation of the images and their storage. | <p>1380</p> <p>euro</p> | <p>payed in October</p> <p>2015=</p> <p>989.11 GBP</p> |
| | | <p>TOT.</p> <p>4786.24 GBP</p> |

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