Ethio-SPaRe
Cultural Heritage of Christian Ethiopia: Salvation, Preservation and Research

Ethio-SPaRe Manuscript Conservation Programme (2010-15) Report
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Ethio-SPaRe Manuscript Conservation Programme (2010-2015)

Public report

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The project Ethio-SPaRe1 has been active in northern Ethiopia (Tigray) in the years 2010-2015. The study of the local ecclesiastic libraries and the manuscript culture in its original context were the overall aims of the project. Improving the conditions of some ecclesiastic libraries and conservation of some selected manuscripts were not central but still essential parts of the project’s plan of work. The project’s “conservation programme” cost the involved parties and people a lot of time and energy. Being a result of collaboration between the project, the Ethiopian institutions and individual professionals, it was successfully accomplished within five special missions carried out by a team of invited specialists, in parallel to research and digitization missions of the main team. My cordial thanks go, once again, to all those who participated in the work or assisted in it in any way.

The report below has been anticipated by at least two publications2 and a few conference presentations3 that give an idea about the progress of the work, the strategy implemented by the conservators and the most valuable experiences. The report is not a detailed exposition of the conservation work done; rather it is meant for presenting the main stages of the process and making accessible a large photo material gathered during the conservation missions, informative as it is. It allows glimpses into the most complex work of the manuscript conservator that in this case was done under very special conditions, and shows some close details of the Ethiopic manuscripts otherwise rarely seen. It contributes to further sharing the professional experience and, last but not the least, demonstrates that the work was done in a completely transparent way, with consent and full satisfaction of all sides involved.

In the beginning, a few words should be said about the current situation of the conservation of parchment manuscripts in Ethiopia from the point of view of the project experience. It is well known that until now the material basis for the expensive and professionally very demanding work of manuscript conservation has hardly been provided for in Ethiopia. The authorized institution of the Ethiopian Orthodox Church and state, on the federal and regional levels, employ a number of experts in cultural heritage, but, to my knowledge, none of them has been properly educated as conservator in Europe or elsewhere to the extent that they would be fully capable of carrying out con-

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servation of parchment manuscripts, independently and on a descent level⁴, and to be responsible for the results. As far as I know, there has been no specialized manuscript conservation workshop in Ethiopia up to now, not even in the premises of the central modern libraries of Addis Ababa, such as those at the Institute of Ethiopian Studies and the National Archives and Library of Ethiopia which host large and very important collections of Ethiopic manuscripts⁵, or at the Authority for Research and Conservation of Cultural Heritage (ARCCH). With a few exceptions, materials and devices used in manuscript conservation cannot be purchased in Ethiopia. At “grass roots” level, the communities that own manuscript collections admit that many of the books require conservation measures, but do not recognize the scope and gravity of the problem. Frequently they fail to see much difference between the traditional book binders and the professional conservators, since, at the end, “both bind books”.

As a matter of fact, the largest part of the Christian Ethiopian manuscript heritage is still preserved in traditional libraries and will unlikely be moved into special storages in any close future. We can say today that the conditions of the manuscripts preservation have been somewhat improved in the last couple of decades, and the awareness of the population about the value of the manuscripts has been growing. However, from my experience, nearly all pre-16th-century manuscripts that I have seen in the ecclesiastic libraries visited by the project team are damaged or are in the state of gradual disintegration, and require professional treatment by professional manuscript conservators and special preservation conditions⁶. Contrary to all expectations, very few projects aiming at conservation of parchment manuscripts that are still preserved in the traditional libraries have been realized in the recent ten to fifteenth years⁷. Due to different reasons, in the last four or five years any attempt at organizing such work encounters immense difficulties and stops before commencing⁸. The authorized Ethiopian institutions and intellectuals recognize the problem but the situation is unlikely to change in the near future. The institutions mostly focus on other types of cultural heritage. As far as parchment manuscripts are concerned, the measures are mostly limited to creating legal regulations for administering the cultural patrimony, raising awareness, inventorying

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⁶ In addition to that, constant renovation of the ecclesiastic libraries, which is a feature of the living manuscript culture of Ethiopia, is taking place everywhere and leaves not many chances of survival for many old parchment manuscripts, especially those which, from the point of view of their owners, do not represent any exceptional value (D. Nosnitsin, ‘Ecclesiastic Landscape of North Ethiopia: Remarks on Methodologies and Types of Approach’, in D. Nosnitsin, ed., Ecclesiastic Landscape of North Ethiopia: Proceedings of the International Workshop, Ecclesiastic Landscape of North Ethiopia: History, Change and Cultural Heritage Hamburg, July 13-16, 2011, Supplement to Aethiopica, 2 (Wiesbaden: Harrassowitz, 2014), pp. 9-10, esp. footnote 25).

⁷ The undertakings known to me are the conservation work on Enda Abba Garima Gospels, see Lester Capon, “Extreme Bookbinding – a fascinating preservation project in Ethiopia,” Skin Deep 26 (2008), pp. 2-11 and M. Winstanley, “Tsbook (Tigrinya for Good) – The Gospel of Abba Garima”, Skin Deep 23 (2007), pp. 2-12, see also http://www.ethiopianheritagefund.org/completed-project-3-the-abuna-garima-gospels. Some work on manuscripts – which is rather improving the conditions of preservation than the proper conservation – has been done in the framework of the project “The monastery of Däbrä Sahel (Ethiopia, Tigré): the study and preservation of an historic site” (http://www2.lingfil.uu.se/projects/Dabra_SahelQ/); cp. also J. Tomaszewski – M. Gervers, “Technological aspects of the monastic collection at May Wäyni, Ethiopia”, in: M. Kominko (ed.), From Dust to Digital: Ten Years of the Endangered Archives Programme, Cambridge: Open Book Publishers, 2015, pp. 89-133. On the web-site of “The Ethiopian Heritage Fund” (http://www.ethiopianheritagefund.org>, accessed 01.05.2019), two manuscript conservation projects are presented as “current”: the aforementioned “Garima Gospels”, and “Manuscripts at Aksum Cathedral”, with very few details. Under “completed projects” stand again “Gärima Gospels”, as well as “Asir Metra” (conservation of a Four Gospels book from the monastery of Däbrä’/Alama Asir Mätira Maryam) and “Maaqudi Book” (conservation of two old parchment leaves with miniatures, inserted into the Four Gospels book, the church at Mäˁaquddi, Gərˁalta). All the projects are described with minimum details.

⁸ Equally difficult is also establishing digitization projects that would record manuscripts and endorse further steps in preserving them, and generally getting access to manuscripts for research purposes.
church libraries, preventing illegal trafficking and thefts, and, in the best case, improving preservation conditions. Ethiopian intellectuals play a significant role in the ongoing debate on the restitution of the cultural heritage which was taken out of the country. All these measures are important, but they do not recuperate the damage that has been already done to parchment manuscripts in the course of time. In this respect, the project Ethio-SPaRe addressed exactly the urgent needs of the country and was very effective in doing that, and it will probably remain the biggest and the most productive undertaking of its kind in the years to come. I hope that conservation of manuscripts in Ethiopia, in whatever form, will be resumed before it is too late.

The search for manuscript conservators for Ethio-SPaRe was launched in 2010, but it took a good while before people ready to work in Ethiopia could be found. Three European specialists who were contacted in the first instance declined the proposal because of various concerns, such as impossibility to work in a properly equipped studio, lack of materials, payment, climate, security issues etc. Around mid-2011, two specialists, Dr. Nikolas Sarris (Greece) and Marco Di Bella (Italy), both highly qualified professional conservators with rich experience of working in the Orient, were approach by Mrs Eugenia Sokolinski, the coordinator of the COMSt networking project. They both got interested in the proposal and kindly agreed to cooperate. In the meantime, two other persons made the work of the project in Ethiopia possible and greatly facilitated it, Mr Kebbede Amare Belay, the then head of the Tigray Culture and Tourism Agency (TCTA), who expressed vivid interest in manuscript conservation, and Abunä Mäqaryos, the then Bishop of East Tigray with the Diocese seat in ˁAddigrat. They realized the importance and innovative character of the undertaking, and assisted the project Ethio-SPaRe also in a number of other ways. An agreement on the scale, stages and process of the work was reached between the project and the two institutions. The institutional support created the legal framework for the conservation undertaking. Also the contribution of senior workers from the both offices, assigned to the conservation group, was crucial for the success of the work.

Those who want to learn more about the strategy of the conservation pursued in this specific case can turn to the 2014 article by Marco Di Bella and Nicolas Sarris. Only a few details might be added here. The process of selection of manuscripts for treatment went through several stages. Some thirty manuscripts were initially proposed by me, all of them from the sites studied by Ethio-SPaRe and digitized by that time, and there was enough information for making preliminary evaluation of their condition. A few manuscripts were dropped already at the early stage. It was important to look from the very beginning for a proper balance between what was reasonable (given the limited financial means and duration of the project), what was necessary and what was possible in Ethiopian conditions. The manuscripts in very poor state, whose conservation treatment would be too complex and exceed the possibilities of the project, had to be left behind for the future. At the
same time, the work had to be arranged in such a way that once commenced, it should be finished to the very end. Twenty five manuscripts were selected as direct candidates for treatment, all belonging to the category of old and valuable, and endangered; and a still smaller group of “favorites” was chosen among them. A preliminary plan of conservation was designed by N. Sarris and M. Di Bella, and a certain amount of the materials was purchased. However, the final decisions could be done only after a direct physical inspection of the manuscripts. Also it was assumed that the first season would be necessary for adapting to the conditions of northern Ethiopia and establishing a smooth work flow.

It became clear at an early stage that the involvement of philologists versed in the Ethiopic language and able to quickly find the way in the contents of the manuscripts will be indispensable and at some points crucial if the aim of the conservation undertaking is to reestablish the original order of the folios and quires, and to come as close to the original shape of the textblock as possible. Therefore, a close cooperation of specialists in different fields became later a distinguishing feature of the Ethio-SPaRe conservation work. Unfortunately, it soon became pretty clear that after the termination of the project no one can guarantee that the “elevated” status of the treated manuscript will be kept, or that it would be easily accessible for checking its conditions or for research purpose. An involvement of a specialist in material studies, Prof. Ira Rabin, at a later point, made therefore much sense and was very necessary for collecting as much information about the manuscripts as possible exactly for the preservation purposes.

I. 11-29 November 2011

After careful elaboration of the conservation strategy, the realization of the conservation programme started in November 2011. Accompanied by the representative of the TCTA Mäkonnan Asfaw, N. Sarris and M. Di Bella came to ˁAddigrat and began, in coordination with the project team, the direct physical evaluation of the parchment manuscripts pre-selected for conservation. Apart from making detailed physical descriptions of the items, of the damage and its scale, the aim was to realistically calculate the time needed for treatment and to set up the final priorities. Some twenty five manuscripts coming from four ecclesiastic libraries – Qəfrəya ˁUra Qirqos, ˁAddi Qolqʷal, Däbrä Mašo, Mākālo Maryam – were inspected in situ, within three days. After careful considerations, five items from Däbrä Mašo and Qəfrəya ˁUra Qirqos were selected for the first working season.

An improvised studio was set up in the city of ˁAddigrat, in one of the rooms of the Diocese of East Tigray, and the entire load of necessary materials and equipment was brought there. Despite the strong support of the authorities, a great deal of negotiations was necessary before the communities of Qəfrəya ˁUra Qirqos and Däbrä Mašo and their key persons were fully convinced and gave their consent for temporary transfer of the manuscripts to ˁAddigrat. Three manuscripts from Däbrä Mašo were brought first (MY-001, MY-002, MY-004, MY-008), accompanied by a representative of the community who always stayed in the studio during the work. The books from Qəfrəya ˁUra Qirqos followed (UM-032, UM-026). The treatment of these manuscripts was completed within ten days. The consolidation measures were board attachment repairs, sewing repairs, boards and leaves repairs; several misplaced leaves of MY-008 were returned to their original position. Dispersed leaves of MS UM-032 were reassembled, the damaged boards repaired; the book was resewn and an elegant satchel was produced for it. The interventions were minor but still of great importance for the further safe preservation of the manuscripts, in particular for MSS MY-001, MY-002, MY-002

12 All the manuscripts had bindings partly or fully disintegrated, and all or nearly all leaves still in place though partly damaged and in disorder.
14 MY-002, MY-004, MY-008, UM-032, UM-026.
15 The then manager of the office insisted that the room be rented by the project, and charged the project for the electricity.
and MY-004 that are kept at the remote and hardly accessible church of Däbrä Ma'šo Yohannä; any future inspection of these items seems to be very difficult or just impossible. At the end of the work all books were placed in archival boxes, brought back and duly received by the representatives of the local communities. It was decided that the work would further focus on manuscripts preserved in the church of Qəfrəya ˁUra Mäsqäl where the ecclesiastic library was greatly disturbed during the Ethio-Eritrean border conflict. Provisions and preparations were made for the next working season.

II. 25 May – 3 June 2012
In this period, the team was composed of N. Sarris and M. Di Bella, and the assistant Mäkonnän Asfaw. The conservation studio was moved to the then seat of TCTA, a big multi-story building that accommodated a number of institutions. A room for the studio was kindly made available by the Agency and the necessary furniture was also provided. The accommodation was spacious and safe but climatically not very satisfactory, and an improvised air moisturizer had to be applied all the time. The electricity, water supply and internet were an issue, as before and after, pretty annoying, though not really endangering the entire work. This time, MS UM-039 (“Aksumite liturgico-canonical collection”) was treated: remains of the old sewing were removed, damaged leaves were repaired, and quires were reassembled following the reconstruction made by Prof. Alessandro Bausi. At the end, the textblock was resewn and new wooden boards brought upon it. On the day when the manuscript was returned to the church of Qəfrəya ˁUra Qirqos, another one, the massive UM-018 was inspected, and its further treatment considered. For this, the team was joined by Dr. Antonella Brita who had studied the manuscript, reconstructed the quire and leaves sequence in the textblock, and greatly contributed to the elaboration of the conservation strategy.

The manuscript UM-018 can be considered as a representative of an entire category of the manuscripts, containing parts of the collection “Acts of the Martyrs” (Gädlä sämaˁtat). These large volumes, found in several dozens of ecclesiastic collections in northern Ethiopia, very heavy and fragile, represent a remarkable feature of the late 14th – early 16th Ethiopian manuscript culture. Most of them are in deprecated condition today and badly need special care.

III. 19 November – 2 December 2012
The work on MS UM-018 continued in the premises of TCTA but in a different building as the Agency moved in the meantime. The climatic conditions inside were slightly more favorable than in the previous place. For this mission, the conservators’ team was joined by two more colleagues, Mr Robert Proctor and Mrs Theresa Zammit Lupi, and from the side of TCTA by Yonas Taddälä who was appointed as assistant. The properties of the manuscript UM-018 and the conservation process have been aptly described by Antonella Brita (see Brita 2015, above, footnote 2).

IV. 27 January – 8 February 2014
For this season, Mrs Niki Pantazidou (Greece) and Mrs Desiree Domec (Venezuela) joined the team as volunteers, and Mäkonnän Asfaw substituted for Yonas Taddälä for this and the next mission. The studio was moved to another building as a result of another transfer of the headquarters of the TCTA. The work on massive textblock of the MS UM-018 continued (repairing, humidifying, and stretching of the parchment leaves).

V. 21 May – 9 June 2014
The conservators’ team was composed of N. Sarris, M. Di Bella, N. Pantazidou and D. Domec. The work on the parchment leaves of UM-018 was completed. After that, the textblock of the manuscript was reassembled and a new binding (two wooden boards, spine protection) was brought onto it. In the meantime, the ultimate leaf of the textblock (with a subscription!) was accidentally discovered, dumped in a corner of the book storage of ˁUra Qirqos, and re-introduced into the volume. The condition of UM-018 had been captured before the start of the conservation work; after its
completion the manuscript was photographed again. A special archival box of a very large size was constructed for the manuscript. The conservators spent the last two days at the site of Qəfrəya ˁUra Qirqos, placing the manuscripts in the archival boxes, wrapping them in Japanese paper, and arranging them in a better order in the storage. At the end, the conservators took part in the material studies and made presentations at a workshop in the Mekele University.\textsuperscript{16}

\textsuperscript{16} https://www.aai.uni-hamburg.de/en/ethiostudies/research/ethiospare/missions.html.
PLATES

Conservation Mission 1
11-29 November 2011
1: N. Sarris, M. Di Bella inspecting the condition of the manuscript UM-039, with representatives of the local community, Ḥura Qirqos

2: MS UM-39

3: MS UM-39, old repair of the back board
4: M. Di Bella inspecting the condition of MS UM-27

5 and 6: MS UM-27, damage and old repair on the back board
7: MS UM-52, condition of the sewing

8: MS UM-52, the spine

9: MS UM-52, the textblock
10: Conservators inspecting the condition of MS UM-27

11-12: Conservators, Mäkonnan Asfaw inspecting MS MY-008, in the vicinity of Däbrä Mašo
13-15: Conservators, Mäkonnn an Asfaw inspecting the condition of manuscripts, 'Addi Qolqwal
16-17: Conservators, Mäkonnən Asfaw inspecting the condition of manuscripts, ˁAddi Qolqwal

18: The first manuscript brought into the studio, ˁAddigrat
19: Manuscripts in the studio, ከወድወር ላይ}

20-21: Cleaning, marking the damaged leaves
22-24: Cleaning, marking the damaged leaves
25: Dealing with MSS MY-008 (left, N. Sarris) and MY-004 (right, M. Di Bella)

26: N. Sarris dealing with MS MY-008

27-29: Repairing the split board, MS MY-008
30-32: Repairing the parchment leaves
33-35: Repairing the parchment leaves
36-37: Repairing the parchment leaves
38-39: View of the studio
40: The split upper board of MS MY-004, remains of the leather cover visible

41-42: Repairing the split upper boards of MS MY-004
43-45: Inspecting remains of the leather cover, MS MY-004
Conservation Mission 1: 11-29 November 2011

46-47: Board repaired, MS MY-004

48: MS MY-004 before the repair of the sewing
49-51: Resewing MS MY-004
52-54: Resewing MS MY-004
55-56: MS MY-004 after consolidation measures

57: MS MY-004 after consolidation measures, placed in the archival box
58-60: MS MY-008 after consolidation measures
61-64: MS MY-008 after consolidation measures
65: N. Sarris inspecting MS UM-32

66: MS UM-32

67-69: Damaged boards, loose quires of MS UM-32
70-72: Damaged boards of MS UM-32
73-76: Boards of MS UM-32 being repaired
77-79: Boards of MS UM-32 being repaired
80-81: New satchel for UM-032

82: Representative of the community of ‘Ura Qirqos with MS UM-032
83-88: N. Sarris attaching the back boards of MS MY-008
Conservation Mission 1: 11-29 November 2011

89: M. Di Bella inspecting MS MY-001

90: Stretching a leaf of MS MY-001

91: Preparing the manuscripts for return
92-95: D. Nosnitsin placing manuscripts in archival boxes at Ṣura Qirqos
Conservation Mission 1: 11-29 November 2011

96-97: S. Dege-Müller, V. Pisani placing manuscripts in archival boxes at ‘Ura Qirqos
98-100: Manuscripts in the archival boxes, ‘Ura Qirqos
PLATES

Conservation Mission 2
25 May – 3 June 2012
1: Work in the studio, the premises of the Tigray Culture and Tourism Agency

2-5: Repairing parchment leaves
6: D. Nosnitsin, N. Sarris inspecting MS UM-39
7: Boggalä Täsämma with improvised humidifier

8-10: Repairing the leaves of MS UM-39
11: The old sewing of MS UM-39, thread of animal origin

12: View of the studio

13: Work on the textblock of MS UM-39
14: Work on the textblock of MS UM-39

15: Old repair of parchment (made before writing)

16: The only preserved (back) board of MS UM-39
17-19: A guard quire of MS UM-39 stretched, humidified
20: Condition of a parchment leaf of MS UM-39

21-22: Resewing MS UM-39, attaching new boards
22-25: Resewing MS UM-39, attaching new boards
26-28: Resewing MS UM-39, attaching new boards
29-31: Resewing MS UM-39, attaching new boards
32-34: Resewing MS UM-39, attaching new boards
35-37: Resewing MS UM-39, attaching new boards
38-42: Preparation of a special archival box
43-45: Remains of the original sewing and the survived back board, placed in the archival box.
46-49: MS UM-39 after the work is completed
50-54: MS UM-39 after the work is completed
55-58: MS UM-39 after the work is completed
59-61: MS UM-39 after the work is completed
62: MS UM-39 after the work is completed

63: N. Sarris, M. Di Bella with the representative of the community of ˁUra Qirqos holding MS UM-39

64: Representative of the community of ˁUra Qirqos with MS UM-39, ready to return home
PLATES

Conservation Mission 3
19 November – 2 December 2012
1: Condition of MS UM-18 before the conservation

2: V. Pisani, A. Brita, N. Sarris with a member of the local community of ‘Ura Qirqos, discussing the strategy of conservation

3 (left): A. Brita, N. Sarris reassembling the textblock of MS UM-18

4 (right): N. Sarris, V. Pisani reassembling the textblock of MS UM-18
5: M. Di Bella, repairing leaves of MS UM-18

6: R. Proctor, T. Zammit Lupi, M. Di Bella repairing the leaves of MS UM-18

7-8: Repairing the leaves of MS UM-18
9-12: Repairing the leaves of MS UM-18
13-16: Repairing the leaves of MS UM-18
17-20: Repairing the leaves of MS UM-18
Conservation Mission 3: 19 November – 2 December 2012

21-24: Repairing the leaves of MS UM-18
25-26: Repairing the leaves of MS UM-18

27: Yonas Taddälä with the representative of the community of ˁUra Qirqos attending the work

28: Remains of the original sewing of MS UM-18
29-32: Repairing the leaves of MS UM-18
33-37: Repairing the leaves of MS UM-18
38-42: Repairing the leaves of MS UM-18
43: The provisional condition of MS UM-18 being thoroughly documented.

44-45: Placing the quires of MS UM-18 in a provisional archival container, before return to ˁUra Qirqos.
PLATES

Conservation Mission 4
27 January – 8 February 2014
1: View of the workshop

2: N. Pantazidou, D. Domec repairing the leaves of MS UM-18

3: D. Domec repairing the leaves of MS UM-18

4: N. Sarris, M. Di Bella repairing the leaves of MS UM-18
5-9: Repairing the leaves of MS UM-18
10-13: Repairing the leaves of MS UM-18
14-17: Repairing the leaves of MS UM-18
18-22: Repairing the leaves of MS UM-18
23-25: Repairing the leaves of MS UM-18
26-28: Repairing the leaves of MS UM-18
29-31: Stretching the leaves of MS UM-18
32-35: Stretching the leaves of MS UM-18
36-39: Stretching the leaves of MS UM-18
40-43: Stretching the leaves of MS UM-18
PLATES

Conservation Mission 5
21 May – 9 June 2014
1-4: Further work on the leaves of MS UM-18
5-8: Further work on the leaves of MS UM-18
9-12: Further work on the leaves of MS UM-18
13-16: Further work on the leaves of MS UM-18
17-20: Further work on the leaves of MS UM-18
21-25: Further work on the leaves of MS UM-18
26-30: Further work on the leaves of MS UM-18
31-34: Further work on the leaves of MS UM-18
35-39: Further work on the leaves of MS UM-18
40-43: Further work on the leaves of MS UM-18
44-47: Further work on the leaves of MS UM-18
48-51: Further work on the leaves of MS UM-18
52-55: Further work on the leaves of MS UM-18
56-59: Further work on the leaves of MS UM-18
60-61: Further work on the leaves of MS UM-18

62: Improvised device for preparing the glue
63-68: Repairing the original back board of MS UM-18
69-74: Repairing the original back board of MS UM-18
75-80: Repairing the original back board of MS UM-18
81-86: Repairing the original back board of MS UM-18
87-93: Repairing the original back board of MS UM-18
94-98: Mounting the spine protection patch upon the back board
99-104: Reassembling the textblock
111-116: Reassembling the textblock
117-122: Reassembling the textblock
123-128: Reassembling the textblock
129-134: Reassembling the textblock
135-140: Reassembling the textblock
141-146: Reassembling the textblock
Reassembling the textblock
153-158: Reassembling the textblock
165-170: Reassembling the textblock
171-177: Reassembling the textblock
178-183: Reassembling the textblock
184-189: Reassembling the textblock
190-195: Reassembling the textblock
196-201: Reassembling the textblock
202-207: Reassembling the textblock
208-213: Reassembling the textblock
214-219: Reassembling the textblock
220-225: Reassembling the textblock
232-233: Reassembling the textblock

234-237: Mounting the guarding quire on the textblock
238-243: Mounting the guarding quire on the textblock
244-249: Mounting the guarding quire on the textblock
250-255: Mounting the guarding quire on the textblock
256-261: Mounting the guarding quire on the textblock
262-264 (Above and left): Mounting the guarding quire on the textblock

265-266: The textblock reassembled, resewn
267-273: Matching and fixing the newly made front board
274-279: Matching and fixing the newly made front board
280-286: Matching and fixing the newly made front board
287-292: Matching and fixing the newly made front board
293-298: Matching and fixing the newly made front board
299-304: Matching and fixing the newly made front board
305-310: Matching and fixing the newly made front board
311-316: Matching and fixing the newly made front board
317-322: Matching and fixing the newly made front board
323-328: Matching and fixing the newly made front board
329-333: Matching and fixing the newly made front board

334: The conservation work has been completed
335-341: MS UM-18 after the conservation work
342-348: MS UM-18 after the conservation work
349-354: MS UM-18 after the conservation work
355 (left): MS UM-18 after the conservation work

356-359: Adjusting the individual archival box for MS UM-018
360-364: The archival box is ready; the remains of the old sewing are accommodated inside
365-369: The archival box is ready; the remains of the old sewing are accommodated inside

370: The manuscript placed in the archival box, closed
371-374: The manuscript placed in the archival box, closed
375: The group inspecting the last leaf of the manuscript found later, brought by the priests

376: Treatment of the last leaf, its insertion into the textblock
377-382: Treatment of the last leaf, its insertion into the text-block
383-384: Treatment of the last leaf, its insertion into the textblock

385-388: Spectrometry of the inks of MS UM-18 by I. Rabin, assisted by M. Di Bella, N. Sarris
389-391: The last inspection of MS UM-18 by A. Bausi, S. Dege-Müller, M. Di Bella, N. Sarris, A. Brita, the representative of the local church administration
IMPRESSUM

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