Safeguarding the manuscripts from Timbuktu –

A report on the current situation and a proposal for a larger preservation project

First Draft

09 May 2013

Dr Dmitry Bondarev
Dipl.-Rest. Eva Brozowsky, B.A.

Centre for the Studies of Manuscript Cultures
Warburgstraße 26
20354 Hamburg
Germany

www.manuscript-cultures.uni-hamburg.de
1. The rescue operation

Following the civil unrest in the North of Mali that broke out in March 2012, the keepers of many manuscript libraries in Timbuktu took urgent measures to salvage the Timbuktu manuscripts from the threat of radical Islamic fighters. Dr. Abdel Kader Haïdara, the director of the Mamma Haidara Memorial Library and Executive President of the ONG SAVAMA-DCI (Sauvegarde et valorisation des manuscrits pour la défense de la culture islamique) was the principal organiser of the rescue operation. In order to get the plan running, he gained financial support from several foreign governments and organisations such as the Embassy of Germany, the Ministry of Foreign Affairs of the Netherlands, the Juma’a al-Masjid of Dubai, Prince Claus Fund, the Netherlands, DOEN Foundation, the Netherlands, and the Ford Foundation.

Abdel Kader Haidara then agreed with the majority of the owners of the manuscripts that they would delegate him the responsibility for rescuing their collections.

The manuscripts were transported in stages, in order to minimise suspicion from the insurgents. First it was decided that large wooden chests ca. one cubic meter each were to be made in order to accommodate as many manuscripts as possible. Very quickly this proved impractical and unsafe, because the huge boxes immediately attracted attention on the road, were hazardous in canoes on the river, and since – because of their heavy weight – a team of people was required to move them around. An intermediate solution was to buy smaller metal chests which were still too large, four people being needed for loading and unloading them. Finally, it became clear that a metal chest a size of a large suitcase was the optimal means of transportation. Two such cases were usually a maximum load for a single vehicle. Given that the final number of chests of different sizes transported to Bamako totalled about 2,400, the maximum average load (i.e. two chests per car) entailed approximately 1,200 single-car transits.

The transportation itinerary was intricate and it changed many times to make the mass exodus of the manuscripts less conspicuous.

Since the manuscripts were gathered from almost every significant library (more than thirty by Abdel Kader Haidara’s count), their amassed number reached 285,000 individual items. Understandably, this dramatic operation took a full six months to complete, with many challenges on the way.
According to Haidara’s estimate, thanks to the urgent transfer of manuscript collections to Bamako and some other locations, at least 95% of the Timbuktu manuscripts have been saved.

At the moment the manuscripts are deposited in various locations around Bamako and still locked in the chests in which they arrived (see report below).

2. The historical importance of the manuscripts from Timbuktu

The manuscripts of Timbuktu have always been an aspiration for scholars working on the intellectual history in Africa. In the fourteenth century Timbuktu stood at the crossroads of trade routes between tropical Africa and Saharan and Mediterranean Africa. Starting from the fifteenth century the city grew into a centre of scholarly activity, attracting learned men from all corners of the Islamic Maghreb and sub-Saharan Africa. They were of different ethnic and linguistic identities, including Berber Sanhaja, the Manding Soninke (Juula & Jahanke), Fulani, Bambara and even Visigoths. One of the Timbuktu families – The Ka’tis – trace their descent to the Goths of Andalusia through an ancestor who left Granada in 1468 and settled in Timbuktu.

These cultural links are lavishly reflected in the relatively small number of the manuscripts that were subjected to study during the last twenty-odd years. (Catalogue of Mamma Haidara = ca. 4000 items, Catalogue of Ahmad Baba = 9000 items of total ca. 30,000, which is 13,000 out of a total of 285,000 for all Timbuktu manuscripts).

It should be noted that during the lifetime of the city until 2012, the Timbuktu manuscripts had been amassed from different nearby and remote towns, and therefore not only represent the emblematic city itself, but also the scholarly and scribal activity in the whole region of Mali and neighbouring countries.

2.1. An initial assessment carried out from 24th to 27th April

The manuscripts seen were contained in just six chests – making up about 2,000 items on a very rough estimate. They reveal the multiplicity of scholarly networks and trans-Saharan book exchange, as well as diversity of disciplines and subjects fashioned by the scholars, scribes and book-lovers of the time. Mundane matters of governance and commerce found in these manuscripts constitute another invaluable source for the history of West Africa.
Thus, one of the six chests (marked MB 151, MB = Ministère des Affaires étrangères du Pays-Bas) contains hundreds of commercial documents and diplomatic letters addressed to the rulers of Masina, both types dating from at least the 17th century to the early 20th century.

It is common wisdom among the scholars of Islamic history that dates occur very rarely in Islamic manuscripts. However, the fraction of the collection represented in the six chests is surprisingly rich in dated manuscripts. These include manuscripts from both the Islamic West (Maghreb and West Africa) and the Islamic Middle East, which make them an invaluable resource for historians.

The manuscripts in the selected part of the collection also contain important historical evidence for paper production and trade. Many manuscripts written on European watermark paper have dated colophons and thus they provide us with corroborating evidence for the accurate chronology of paper production and, in turn, for dating undated manuscripts on the basis of this chronology.

A significant part of the manuscripts from the six chests were written outside West Africa and the Maghreb (about 15-20% of two of the chests), their eastern origin being established on the basis of distinctive features of their calligraphic hands. Subject matter represented in these eastern manuscripts covers commentaries on the Qur'an, Arabic linguistics, jurisprudence and rhetoric to mention just a few. This shows that the scholars of the Timbuktu region were well aware of intellectual trends in the Muslim East and were involved in scholarly subjects of the time at an 'international' level.

One of the chests has an abundance of manuscripts with annotations in the African languages Soninke and Maninke. This is just a fraction of the estimated 6,000 or so manuscripts (p.c. A.K. Haidara) written in African languages in Arabic script.
3. Examples from the manuscripts

The following manuscripts have been randomly selected to represent some mentioned features of the Timbuktu collections.

3.1. Manuscript 1

The earliest dated manuscript (14th century) found among the mss in the six chests. This is a commentary on Mukhtasar al-Wiqaya – a treatise on jurisprudence. It is written in the eastern calligraphic script, dated 767 Hijra /1365-1366 AD (image on the left).

A zoom-in of the bottom left corner of the manuscripts with the date 767 Hijrah (=1365-6 AD).
3.2. Manuscript 2

Another dated manuscript written in the eastern hand. In the colophon, the scribe gives the date of completion of the text (25th of Rajab 933 H/26th April 1527 AD), his name (al-Faqir ‘abd al-Baqi al-Bulqatri) and also the name of the recipient of the manuscript who is Sheikh al-Amani al-Taib, the imam of the Friday mosque in Tunis.

This manuscript seems to have had a turbulent life. Somewhat 250 years after the scribe wrote his colophon the manuscript lived through an obscure episode which eludes to a European traveller. The stuffing of the leather folder was made of paper from a document written by someone Fernando Muentous (a Spaniard?) who put the date 1771. Could this be a captain’s log book?
3.3. Manuscript 3

A commercial letter dealing with the sale of salt and tobacco. It was written around the 17th or early 18th century, folded into a square-format “envelope” and sent with goods that were labelled by the number 7 clearly seen on the address section of the letter.

3.4. Manuscript 4

An old manuscript (no date, possibly 13th century) that deals with matters of literature is written in a distinctive eastern calligraphic type (lower part of the image with a flower-shape decoration) betraying its middle-eastern origin.

*According to the information given on a separate piece of paper (upper half of the image), in the year 1159 H/1746 AD the manuscript was bought for 3 and 1/6 miskals (1 miskal was ca. 7 mg of gold). This ownership record is written in the Maghribi (Western) style of script typical in the Timbuktu region.*
3.5. **Manuscript 5**

The creed of faith al-‘Aqida al-Wusta by the 15th-century scholar al-Sanusi who composed it for advanced Muslim readers. The manuscript features many commentaries in a Manding language, possibly Soninke, written between the lines.

4. **Setting up networks in Bamako**

During our assessment visit to the Timbuktu collections in Bamako, three meetings were conducted so as to establish coordination and contacts with potential collaborators.

4.1. **A meeting at the German Embassy, (23 April)**

Participants: Günter Overfeld, the Ambassador, Abdel Kader Haidara, SAVAMA-DCI, Michael Hanssler, Chair of the Executive Board, Gerda Henkel Stiftung, Felix Kroll, Pressereferent / Attaché de Presse, Deutsche Botschaft Bamako, Dmitry Bondarev, Manuscriptkulturen in Asien, Afrika und Europa, University of Hamburg, Eva Brozowsky, Restaurierung, Berlin.

4.2. **A roundtable meeting of (24 April)**

Participants: Michael Hanssler, Chair of the Executive Board, Gerda Henkel Stiftung, Dmitry Bondarev, Manuscriptkulturen in Asien, Afrika und Europa, University of Hamburg, Eva Brozowsky, Restaurierung, Berlin, To Tjoelker, ambassade de Pays-Bas au Mali, Felix Kroll, Pressereferent / Attaché de Presse, Deutsche Botschaft Bamako, Etienne Bouvier, Lux-Dev,
Elhadj Mahamane, Lux-Dev, Abdel Kader Haidara, SAVAMA-DCI, Banzoumana TRAORE, SAVAMA-DCI, David Stehl, l’UNESCO. At this meeting it was decided to coordinate efforts for safeguarding the manuscript collections from Timbuktu. As an initial step we suggested to write an outline of a general plan of actions with the view to establishing a preservation centre and a library in Bamako. The plan, as it suggested below in section 8, draws on most recent practices of preservation informed by studies in microbiology, chemistry and physical analysis of manuscripts. Experience gained through successful archiving of endangered libraries in Nigeria, Nepal, Mongolia as well as in damaged libraries in Germany (Cologne and Weimar) has been taken into account and adapted to the current conditions in Bamako.

4.3. A meeting at the University of Bamako, the department of Arabic studies (26 April)

During this meeting, the university academic staff and researchers were briefed on the plan to establish a library centre based on the manuscripts from Timbuktu. The participants (a list of everyone present is pending from A.K. Haidara) welcomed the move and expressed hopes to start working on the manuscripts once an initial part of them is ready for research. The scholars were assured that progress updates will be communicated to them by A.K. Haidara personally and through a dedicated website.
5. Estimated number, current location and condition of the manuscripts

It is currently quite difficult to make a precise evaluation of the situation because due to the crisis the manuscripts had to be packed, transported and stored in new locations rather quickly.

The bigger room of the storage in Faso Kanu houses approx. 600 metal chests. Following transportation, the manuscripts are stored in the metal chests, tightly packed.

5.1. Number and location of the manuscripts

At present approx. 2,400 metal chests are kept in several locations in Bamako with some chests being kept in narrow rooms. During the fact-finding mission at the end of April 2013, three of the larger storages were examined more closely.

In the Faso Kanu storage, 890 chests are kept in two rooms. The larger windowless room on level ground, which has security doors, houses approx. 600 chests.

There are further storages in Bako Djikorone where, in several rooms of private houses, altogether approx. 1,500 chests containing manuscripts are stored.

The chests contain between 20 and 950 separate manuscripts including single-leaf-manuscripts, manuscripts in acidic cardboard folders or large leather-bound loose-leaf volumes encased in traditional leather folders. The size of the manuscripts ranges from several centimetres (miniature manuscripts of approx. 13 x 10 cm) to larger formats (35 x 25 cm). Many manuscripts consist of thin loose-leaf collections in small format.

According to current estimation there are 270,000 to 285,000 individual manuscripts.
5.2. Condition of the manuscripts

The manuscripts are stored very tightly packed in metal chests. The chests are very heavy and the edges of some of the chests are severely deformed due to transport. The lower chests kept in the storage are under extreme pressure exerted by the weight of the chests placed on top of them. Moreover, the manuscripts contained in the chests exert extreme pressure on the manuscripts situated further down the chests. The metal chests are locked tight.

Abdel Kader Haidara divides the condition of the manuscripts into three different categories prorated as follows:

60% of the manuscripts show a stable condition;
20% present more severe damage;
20% are severely damaged and extremely fragile.

Insect damage, loss of paper on the edges damaged as a result of various influences, water damage and strong contamination are typical damages of these manuscripts.

The loose manuscript leafs are kept in acidic folders. In the metal chests, dirt and fragments which have been peeled off have particularly accumulated at the bottom of the chests.

5.2.1. Types of manuscripts

The manuscripts are mostly loose-leaf volumes apart from a few exceptions. The total collection primarily consists of manuscripts in acidic cardboard folders, single-leaf-manuscripts and manuscripts in leather or parchment folders. Loose-leaf-collections are particularly fragile. The first and last pages of the manuscripts in leather folders have been severely damaged by the leather and other factors and are very fragile.
The manuscript pages which came in contact with the acidic folders over a longer period have become structurally instable and are characterized by weak paper fibres.

Abdel Kader Haidara divides the total collection into three different categories prorated as follows:

55% manuscripts in acidic folders, also including single-leaf manuscripts
40% manuscripts in leather folders
5% bound manuscripts.

5.2.2. The leather folders

The traditional folders of the manuscripts are primarily made of leather-coated cardboards (particularly goatskin, but also camel skin, pigskin, sheepskin, and calf leather). The leather is often embossed. The back of the folders is made of leather and/or textile. The folder straps have not been preserved in most cases.

The leather has altogether become extremely cracked due to the dry storage climate. Many manuscripts are characterized by damage caused by insects which runs from the folder through the manuscript pages. The leather is extremely dirty. Furthermore, one may detect severe water damage as well as surface defects and abrasive wear of the folders which have been caused by mechanical pressure. Moreover, one cannot exclude discoloration of the leather as a result of microbial infestation.

The dry and dirty leather should be cleaned and protected. Collagen tenside is quite suitable for this purpose, as it may fulfil both tasks in one single step. Collagen is an essential element of leather which, unlike greases (leather care greases, lanolin, etc.), does not close the leather pores or cause damage. Leather greases are in general unsuitable for books as they cause considerable subsequent damage given the regional climate, so that they should be imperatively avoided.

The leather folders may have a protective function, however they are instable per se to such a degree that additional protection for the manuscripts is indispensable. Leather cleaning and care is strongly recommended.
The folder leather has become rough and dirty. There are many cracks and surface defects. In particular, the back of the folders has been severely damaged due to bending stress.

5.2.3. The manuscript paper

Most manuscript paper originates from Italy, more specifically from the Venice region. The current paper condition varies to a large degree; however the ageing of most papers is quite advanced due to the dry climate in Timbuktu. Particularly the first and last pages of the manuscripts have become extremely cracked, dirty, discoloured or even fragmentary as a result of combined detrimental influences. Apart from dryness, the main factors which have caused the fragility of the paper and the loss of substance include the slight acid content of the leather folders due to tanning, damage caused by insects, mechanical wear through use and transport as well as water damage. The paper of some manuscripts is very unstable, and in some marginal areas the slightest mechanical load causes cracks and surface defects. A more recent factor is the coloured folders made of acidic paper. They have been used during last several years and they present a substantial threat in a humid climate, as the dyes may bleed, causing irreversible discoloration of the paper.

The loose manuscript leaves feature folders made of acidic cardboard, which damages the paper substance and has lasting adverse effects. These folders should therefore be removed.

Most paper is unstable to such a degree that preservation measures are urgently needed for safeguarding the collection.
There are various examples of typical damage: discoloration, surface defects, cracks, desolate marginal areas, damage caused by insects, water damage, fragments that are glued to each other, bleeding inks, flaking of the surface, fragment formation and mould infestation.

6. Further damages of the manuscripts to be expected

6.1. Climate

Humidity will increase significantly due to the regional climate in Bamako, which will have adverse effects on the manuscripts in many respects. The individual humidity of the material is very low as the manuscripts have been stored in a desert environment for decades or even centuries. As a result of the immediate strong increase of the ambient humidity, the manuscripts will swell considerably and distort. Given the bad circulation of air and increasing humidity which may penetrate the metal chests, one may reckon with the formation of a microclimate in the chests. It is highly likely that, in such microclimate, the manuscripts will be affected by mould.

Considerable deformation and microbial infestation are imminent, which may cause strong discoloration and eventually a loss of substance.
6.2. Storage

The considerably compressed storage of the manuscripts in the metal chests may cause deformation and cracks in the manuscripts.

**Considerable deformation is imminent, which may finally cause a loss of substance.**

7. Immediate urgent measures

7.1. Air dehumidifiers in the transition storages

The use of mobile air dehumidifiers is highly recommended. Air dehumidifiers are electrically operated and must be checked and cleared on a daily basis. A thermometer/hygrometer is indispensable for checking relative air humidity. A relative air humidity of 50% in the storages would be ideal. An increase to more than 65% of relative air humidity will lead to mould infestation.

**In order to cope with the current power failures in Bamako, the provision of alternative energy, in particular a solar panel system should be considered.**

7.2. Silica gel sachets or other drying agents for the chests

Another alternative for protecting the manuscripts against humidity could be the use of silica gel (silicic acid, silicon dioxide) in anti-condensation sachets. The sachets will be put into the chests, and the drying agent contained in the sachets will absorb excess humidity.

**It is recommended to use both procedures in order to protect the manuscripts against humidity during the transition phase until they are placed on shelves.**

8. Further planning – “Master Plan”

8.1. Centralisation

The location found for storing the entire manuscripts should be developed into a functional storage.

The provision of rooms for further measures should be taken into consideration. It is particularly important to provide stores, a room for storing collections, a photographing room for digitalizing purposes, a workshop for conservation and preservation as well as space for research.
A large house was rented near the Complexe scolaire Massa Makan Diabaté, in the Bako Djikorone district in Bamako, where the new centre for the Timbuktu manuscripts shall be established. The house is very spacious and has three floors. Currently interior work is carried out in the house.

8.2. Provision of suitable rooms

The basic structure of the rooms should be intact in order to prevent water inrush or fire and ensure general safety of the manuscripts. The rooms should have no windows or exterior walls, so that the manuscripts are protected from daylight and against insects and heat and the interior climate can be monitored. In this case, too mobile air dehumidifiers are indispensable in view of humid climate periods. The use of alternative energy supply (solar collectors) is highly recommended.

8.3. Suitable storage shelves

It is recommended to use iron shelves with burnt-in varnishes or powder coating, as these are very stable, adaptable and fire-resistant. In any case, coating should be harmless for the items. It is recommended that the shelves be equipped with a sufficient number of boards so that the chests are easily accessible and the weight of the manuscripts contained in the chests is minimised. The items should be horizontally stored on the shelves, as the paper edges of the manuscripts are very fragile and the folder straps are usually inexistent.
8.4. Packaging

The unbound single-leaf manuscripts are very fragile and must be kept in protective envelopes. Alternatively, the use of unplasticized transparent envelopes should be considered for storing these manuscripts. Larger units could then be stored in folded cardboard folders and boxes. Harmful packaging with acidic cardboard shall be removed. The manuscripts will be wrapped in acid-free envelopes, and then larger units comprising approx. 10 items will be stored in archive boxes. The material recommended for the boxes is acid-free corrugated cardboard made of alpha-cellulose. The material is characterized by a particularly high ageing resistance and enormous stability and load-bearing capability while at the same time having a low net weight. The cardboard will be adjusted to the individual sizes and forms of the manuscripts beforehand, ordered from a specialized firm and then arrive as pre-cut flatware in Bamako where it will be assembled quickly and effectively. Glue will not be necessary. Special training will not be necessary either, given the simplicity of the design. It is recommended to use a protective layer made of acid-free paper in order to protect the paper which can be further damaged by the leather due to its slight acid content and coloured tanning.

8.5. Preservation/measuring of material

Further conservational processing of the manuscripts, particularly of the paper, is strongly recommended. These procedures will constitute part of an overall homogeneous strategy of preservation. To this end, a suitable basic workshop should be established in the library where the restoration expert offers seminars and training in specific techniques to the staff of the library centre. The basic equipment of the workshop should aim at preserving the manuscripts. The work steps performed in the workshop should be as simple and effective as possible (no unnecessary machines), so that the trained staff in situ will remain capable of acting in the period following after the restoration expert has gone.

Restoration will primarily aim at cleaning and preserving the manuscripts. Treatment measures involving water shall be dispensed with, as almost all inks, dyes and pigments contained in the manuscripts, based on their respective composition, are very sensitive to water.

While restoring the manuscripts, analyses of the material can be carried out (paper, ink, parchment, binder, leather, and pigments). The evaluation of the material is an important measure for the dating and classification of the manuscripts.
8.6. Inventory-taking/cataloguing

An initial inventory exists already, and the numbering of the manuscripts has begun. The current aim is to match the manuscripts with the inventory numbers and establish a virtual database so that the manuscripts are available for research. An archive software will be very useful in this respect in order to link the catalogue to the digitized representations of the manuscripts.

8.7. Digitalizing

Very good digital camera equipment is indispensable for digitalizing. In order to establish a digitalizing station, a digital SLR camera including a macro lens and RAW file function (or TIFF), at least two daylight panel lights and a height-adjustable table stand/tripod with a base frame are necessary. Furthermore, a suitable digital storage system should be used including backup copies and several hard disks. Sustainability of all data has to be considered at an early stage.

8.8. Research

In order to ensure academic research, the manuscripts will be made available for research and adequate workplaces will be provided in the new centre. Both cultural and scientific analyses of the manuscripts shall be established in the future. Abdel Kadel Heidara will inform the regional manuscript researchers on a regular basis of the progress of the manuscripts’ availability. An information website of the centre will be created to ensure transparency during the establishment of the new centre.

Overall target of the preservation measures and future prospects

A properly functioning centre for conservation, preservation and research should be established where the manuscripts are adequately stored until further decisions can be made regarding a more distant future of the manuscripts and their possible retransfer back to Timbuktu.