

ENDANGERED ARCHIVES PROGRAMME**Methodology Report****Overview of the Umberto I Library and Archive:**

The Umberto I Library and Archive was established by the Italian Charity Association in Umberto I Hospital, Cairo, Egypt, in 1903. The non-governmental and not-for-profit **Italian Charity Society (S.I.B. - Società Italiana di Beneficenza)** <http://www.societaitalianabeneficenza.org/ospedale-umberto-primo.html>, is now over one hundred years old. The mission of the charity is to offer medical and hospital assistance to all, with or without compensation, without influence of ethnic origin or religion. It provides humanitarian services.

The collections of Umberto I's library and archive contain 30,000 objects of historical, unique, rich, and rare personal collections, such as books, records, photographs, paintings, documents, stamps, newspapers, and magazines of various sizes, which are written in English, Italian, French, and Arabic in various sciences, which were donated to the Italian Charity Society by the foreign and European communities that lived in Egypt in the eighteenth and nineteenth centuries. These collections were stored in a closed store without environmental condition control and were not suitable or ideal for many years, which led to severe deterioration.

There collections are in a state of severe deterioration. Aspects of deterioration include ossification, hardness and loss of elasticity, erosion of the leather tanning material, loss of various parts, presence of dust, yellowing, weakness, brittleness, tearing, surface deformation, leaf yellowing, brittleness, and spots that come from various sources, such as contamination or fungal contamination. Furthermore, shrinkage, change in dimensions and sizes, and color change (some areas are dark, others are less dark). In addition to some stains that may be caused by infection with microbes. A visual assessment of the collections shows that there are approximately 2500 objects suffering from various aspects of deterioration and endangerment.

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Description of the old storage location and aspects collections of deterioration and endangered

A visual assessment of the collections shows that there are approximately 2500 objects suffering from various aspects of deterioration and endangered. **Therefore, we applied for the Endangered Archives Programme grant to develop a major project to preserve, digitize and rescue these damaged and endangered objects.**

The Panel indicated in its following opinion "The Panel feel that this project would work best as a Pilot survey of £15,000 for a maximum of six months. We are unable to approve funding for a Major project without full confidence that all the material to be digitised is unique and cannot be found elsewhere in other institutions. **Following a successful completion of a Pilot project, the applicant would be encouraged to apply again for a Major project to digitise the rest of the relevant material.** Please note that EAP does not fund conservation, but supports preservation, surveying and digitisation. The EAP Lead Curator recommends purchasing a microlens for digitising stamps".

Therefore, the project aims and tasks were modified in accordance with the Panel's instructions as follows:

1. Survey and documentation for about 2500 historical and endangered collections.
2. Assessment of conditions for about 1000 endangered objects.
3. Stabilization and temporary preservation of about 1000 endangered objects.
4. Samples of the digitization for about 100 objects.

The methodology used to rescue and preserve deteriorated and endangered collections:

1. Evaluation of conservation environment conditions

We measured the temperature, humidity, and light intensity to determine the potential risk of these conditions on the collection. Averages of 12 readings were taken at different times of the days. Temperature was measured at 23 °C and humidity at 36% RH. Light levels were recorded at 80 lux.



Measure environmental conditions: Temperature, humidity, and light

2. Observed of deteriorated aspects

Aspects of deterioration include blocked, hardness, rigidity, brittleness, water damage, dust, weakness, surface deformation, paper yellowing, decreased pliability, paper fragility, and detached papers and materials. Moreover, cover and bookbinding damage, erosion of the tanning material, wear, missing parts, tears, and deterioration of the spine and sewing. Also, spots that come from many sources such as: reddish brown foxing or fungal contamination.

Furthermore, chemical damage and color change (some areas are dark, others are less dark). In addition to stains that may be caused by, e.g., pollution or infection with microbes.

3. Objects stability

We made the minimum level of treatment needed to slow the deterioration of all individual components for the collection to improve the storage of individual objects by preserving the object in a paper box or making a custom storage facility.

Also, made some structural repairs to ensure preservation of individual objects.

4. Cleaned

We cleaned all the objects to clarify surface details by conservators who had cleaned dust from objects with soft brushes, cloths, vacuum cleaners, or vinyl erasers as a first step before the sterilization process.

5. Sterilization

Sterilization and disinfection of objects were carried out to inhibit microbial deterioration and maintain the health and safety of library staff.

The sterilization process was carried out in a number of stages:

- The fumigation room was prepared using metal shelves covered with polyethylene inside the existing archive storage.
- Nano guns were used to disinfect objects and reduce levels of contamination and microbial infection.
- Strips of treated paper were placed inside the books after conducting a sensitivity test.
- The ultrasonic humidifier was used in the evaporation process.
- Books and objects were placed inside the evaporation chamber in a fan shape to ensure good penetration of the treatment materials.
- Pure tea tree oil dissolved in ethyl alcohol is used for sterilization and disinfection of materials.

6. Transferred collections to the new workplace

The cultural heritage collections, after cleaning and sterilization, were transferred to the new workplace for classification, cataloging, and preservation.

7. Survey, documented and catalogued

A survey of materials that could be cataloged, registered, and indexed was conducted using the open-source library management system Koha. Materials were selected based on visual assessment, significance, history, value, rare, diversity, and physical condition.

8. Assessment of the condition of endangered

An assessment of the condition of endangered materials was conducted to characterize and diagnose the manifestations of material damage, determine the degree of material damage, the feasibility of digitization, and the preservation method. An innovative module was created on the Koha system to record condition assessments, facilitate data extraction, and link the condition assessment to material data on the system for ease of search, accessibility, and user service. A number of books were selected in this project to be assessment according to their degree of damage and diversity as models for case assessment of the condition.

9. Temporary Preserved of objects.

Temporary Preserved boxes have been prepared to store damaged materials that have separate papers or packaging and are difficult to handle safely and in a stable condition, and to prevent these materials from being exposed to increased degrees of damage. The assessment of the condition objects has been temporarily preserved to prevent further damage and stabilize its condition.

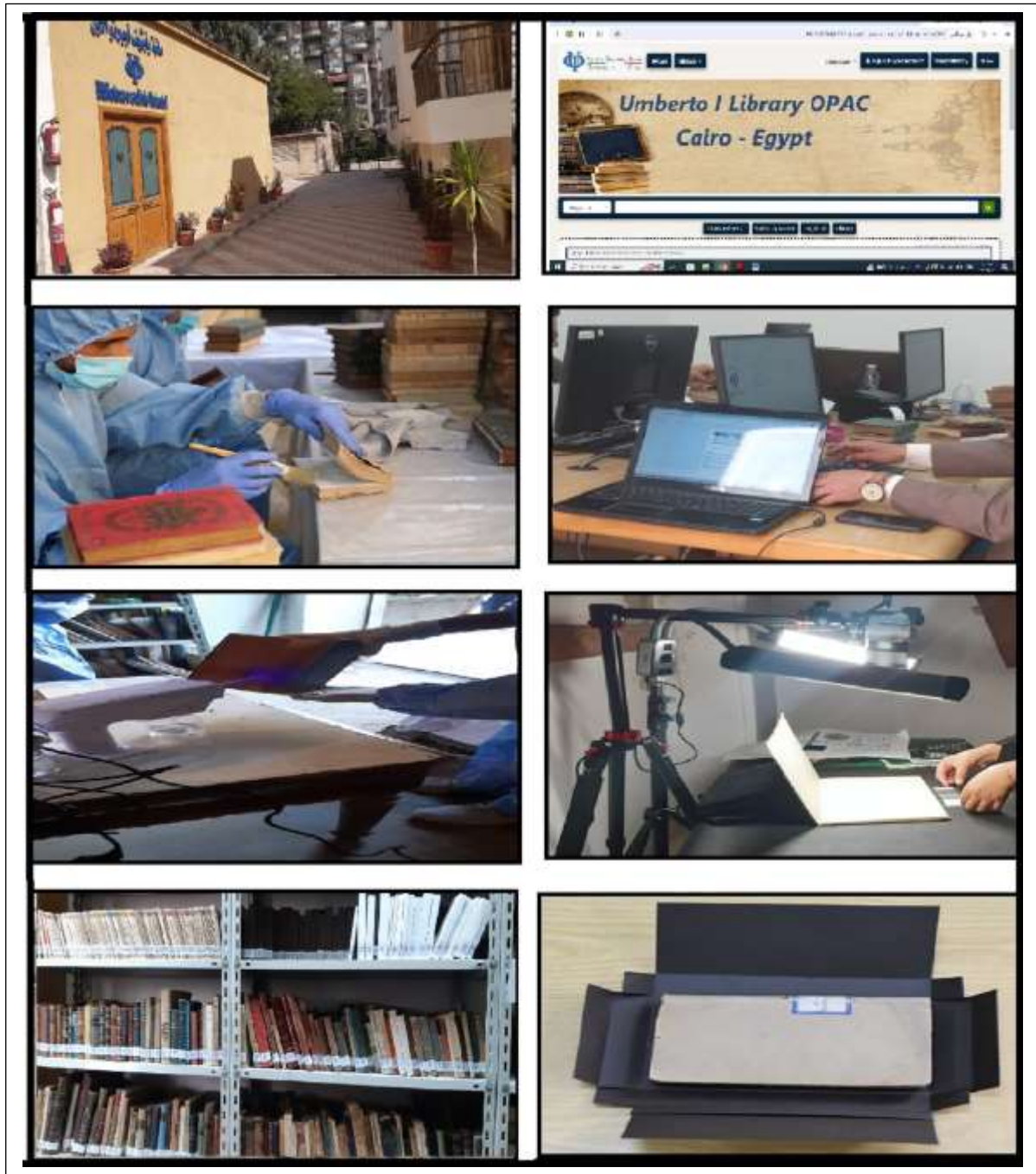
10. Digitization of objects

In accordance with the project's objectives and mission to prepare samples for digitizing objects, some of Dr. Rocchi's personal collection of books, albums, documents, postcards, and paintings were selected based on their importance, value, rarity, history, and thematic diversity as samples from the personal, individual, and family collections donated to the Umberto I Library and Archive. Digitization and metadata were professionally completed, following instructions, guidelines, and standard criteria, in collaboration with colleagues Jody and Carmen from the Endangered Archives Programme.

11. Dissemination, Accessibility, and Sustainability

Digital materials were published on the Umberto I Library and Archives System and on the Endangered Archives Program website as outputs of this project. These digital materials were fully accessible to local and international beneficiaries and researchers for research and study purposes.

The digital storage of library, archival, and heritage materials on hard drives was also carried out in multiple copies, ensuring their sustainable storage and protection against damage and loss.



Graphical Summary of methodology used to rescue and preserve deteriorated and endangered collections

Outputs of this pilot project EAP1572:

In the Preserved and digitized of the endangered objects of Umberto I Library and Archive in Cairo, Egypt project supported by the British Library's Endangered Archival Collection Programme (EAP), we have achieved the following aims:

1- Survey, Documented, and Indexed of the (2295) objects of historical, rich, rare and endangered collections (books, photographs, paintings, documents, stamps, newspapers and magazines) from date back (1719- 1994).

2- Assessment of the condition of endangered (1069) objects from date back (1818-1950).

3- Temporary Preserved the endangered (1069) objects from date back (1818-1950).

4- Digitized of the (3538) Digital Files created with format tiff, as 'samples' of objects of historical, rich, rare and endangered collections (books, photographs, paintings, documents, stamps, newspapers and magazines) from date back (1890-1994).

- **Related Countries of the collection:** Egypt; Italy; United Kingdom; France; Germany; Palestine.
- **Related Subjects of the collection:** Art; History; Sports and recreation; Folklore; Agriculture; Poetry; Health and Medicine; Travel; Architecture; Anthropology; Biography; Correspondence; letters; Micellaneous documents; Society; Environment; Water; Irrigation; Registers; Psychotherapy; Social sciences; Antiquities; Nile River; Medical jurisprudence.
- **Languages of the collection:** French; Italian; Arabic; English; German; Turkish; Hebrew.

Future issues:

The preservation of this rare and unique cultural heritage is important and requires the cooperation and support of cultural heritage preservation communities together to complete the work of preservation, accessibility, sustainability, and the fact that these materials are not exposed to damage, loss, or destruction. This is due to limited financial resources available to the Italian charity association in Egypt; it is unable to complete the preservation, digitization, and accessibility works of the collections alone.

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