



## Processing and Preservation Centre Preservation Coordination

# AN OVERVIEW OF THE PRESERVATION AND CONSERVATION OF ARTWORKS ON PAPER FROM THE NATIONAL LIBRARY

The National Library of Brazil is among the largest national libraries in the world. It is responsible for implementing the government's policy of collecting and preserving the Brazilian bibliographic heritage, also guaranteeing current and future generation to have access to Brazilian intellectual production, which constitutes the National Memory Collection.

The accelerated growth as well as the accumulation of information publicized in the most diverse supports, has propelled the progress of studies and scientific researches that propitiate the improvement and the execution of the principles of the conservation and the restoration of artworks that compose the great collections of the institution.

In recent decades, conservators working in these areas, around the world, have agreed on a set of fundamental preservation concepts to better utilize the resources made available in well-developed conservation and technical programs.

The Coordination of Preservation consists of the Conservation and Binding Center - CCE and the Restoration Laboratory - LR, which perform specific procedures related to certain degrees of deterioration. Those considered high in that the use of techniques related to conservation is not enough to restore the structural condition of a work, goes to the restoration. All the works that compose the great collection of the National Library, from the collections of Periodicals, General Works, Reference and those belonging to the special collections such as Iconography, Rare Books, Manuscripts, Cartography, Music and Sound File, are contemplated by the conservation or Restoration.

CONSERVATION treatments carried out and developed at the Conservation and Binding Center (CCE) consist of a set of procedures that aim to improve the physical state of the support, increasing its permanence and extending its useful life, allowing its access to future generations.

In this context, PREVENTIVE CONSERVATION covers all measures and actions that aim to avoid or minimize future deterioration or losses. This department faces the challenge of working in the Library's entire collection. They comprise the necessary and ideal actions of handling and storage, dry cleaning,

environmental control (such as light, temperature, RH, air pollution and pest control), safety policies, risk management plan, personnel training, packaging and transport of artworks for exhibitions.

Environmental monitoring is one of the main priorities of Preventive Conservation, because it is directly linked to agents of deterioration, which constitute potential chemical, physical and biological risks to the Collection.

The study done by the Coordination of Preservation, together with a specialist in climatology, collects current levels of temperature and RH through the data logger and identifies the level of incidence of artificial light in each section. The system of data collection is SITRAD, operating since January 2010, which can be accessed via the National Library webpage.





The conservation and restoration treatments of the artworks follow preestablished ethical, aesthetic and historical criteria's.

The conservators and restorers participate as instructors in courses of conservation, restoration, binding and wrapping of artworks. They provide technical advisory services to cultural institutions, public and state libraries.

Our team also does project consultancies that involve assemblies of conservation and restoration laboratories. They also give personnel conservation training.

They are also responsible for developing researches for the presentation of papers in congresses, seminars, round tables and lectures.

Additionally they act as a courier for the assembly of exhibitions where artworks belonging to the collection of the National Library are exhibited.

The repairs carried out during the conservation treatments are considered as a set of technical actions of direct intervention with low impact in the structure of the original supports of the artworks.

In order to protect them from physical damages caused roughly by handling, packaging and inadequate storage.

It is desirable that repairs are carried out in a relatively short time so that the collection is returned to its place of custody and is made available to users.

These are some of the following examples of repairs on documents and books: recovering of damaged books, tissue-repair of turned sheets, infilling missing parts of the sheets, covers and documents.

We highlighted some important procedures of conservation of books and documents, which should be considered:

- A specific form should be filled in with the diagnosis, a photographic record, and a detailed observation of all the characteristics of the artwork under treatment.
- Applying the principle of reversibility over all the materials used.
- Making sure all the new materials added are compatible with the artworks.

#### **Dry Cleaning**

In preventive conservation, this treatment is one of the most important. Its main goal is to reduce or eliminate harmful agents that can cause damage to the books and documents. This treatment is carried out in a specific equipment with the use of appropriate protection.



Dry cleaning is also performed with the use the of grated rubber's powder in flat artworks. During this treatment, the removal of surface dirt adhered to the primary support of the documents is carried out with the use of a pair of tweezers and a magnifying glass.







### **Encapsulation of vacuum - journals**

In 2014, a vacuum encapsulation machine was acquired with the purpose of encapsulating the microfilmed or digitized journals. This treatment is integrated in the preventive conservation program.

This technique of removing the oxygen from the plastic packaging periodically allows the newspaper to remain in a safe and controlled environment, transforming it into a rigid object.

This prevents the continuity of damage such as abrasion, loss of support and attack of aerobic biological agents, which these journals would be subjected to without this protection.





#### Disc cleaning

For the records of the Division of Music and Sound Files – DIMAS, the first stage of work is to assess the collection, which is filled in a specific form.

These are the following steps carried out: dry cleaning by air blasting with low pressure, washing with neutral soap, rinsing by soaking it in running water, air-drying and storage in a Tyvek envelope sealing.











### • Repairing

The following treatment procedures are carried out to recover the bindings, restructure the spines, repairs of sheets in books and flat documents, infills (using light tables), and flattening of large format documents such as maps.







## • PROFOTO - Preservation program of the National Library Photographic documents

The "Dona Thereza Christina Maria" Collection contains a large number of books, photographic documents and objects belonging to The Emperor D. Pedro II, who donated the collection to the National Library in 1891, before he was exiled during the proclamation of the Republic in Brazil.

As an integral part of the methodology of the preservation treatment of photographic documents, the identification of the photographic process should be the first step to be done and registered on the documentation sheet.

We use this documentation sheet in order to collect accurate data, assess the condition of the photograph and make a treatment proposal with the most appropriate conservation treatments, packaging and storage.





## **Packaging**

Several models are adopted for the packaging of books and flat documents, according to their physical characteristics and condition of the primary support. Below are the national library models:

**Preservation wrap** 



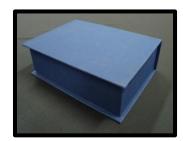
**Cross-box with shoelace** 





**Rigid boxes or Portfolio** 





Folders for flat documents





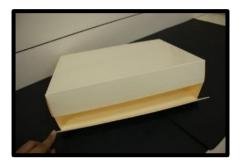
## Packaging for large format- maps







**Telescopic boxes for photographic documents** 



## **Binding**

The Binding studio rebinds hardcovers of fragile books, specifically the most recent publications.







#### Gilding

The Binding Studio also does the gilding of books according to the standards of the Institution and the Brazilian Association of Technical Rules.





#### Exhibitions

The Conservation Centre team accompanies the assembly of exhibitions at the National Library and in other cultural institutions. The stages of evaluation of the conservation conditions of the artworks selected by the curator of the exhibition are carried out and the necessary conservation treatments are undertaken.

The collection is prepared to be exhibited taking into account the principles of preservation and security. Polyester strips are used to protect books in cradles, passe-partouts for photographs, engravings, illustrations, and other supports are built to better accommodate artworks in showcases.

When the artwork is requested for loan from others institutions, technical reports of the condition of each artwork is done and a courrier of the Preservation team is assigned to accompany the assembly and dismantling the exhibition.

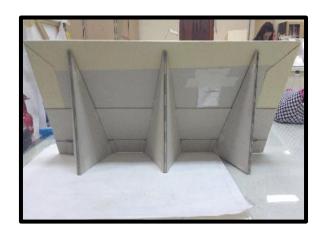
## • Procedures for exhibiting National Library artworks











## • Exhibitions outside the National Library

The Conservation team also accompanies the mounting of the artworks in frames and their packaging in special boxes for adequate transport.







## **Acknowledgements**

- National Library www.bn.br
- Processing and Preservation Centre CPP (Initials in Portuguese)
   Liana Gomes Amadeo Coordinator in charge cpp@bn.gov.br
- Preservation Coordinator COP (Initials in Portuguese) Jayme Spinelli Junior preserve@bn.gov.br - jayme.spinelli@bn.gov.br
   Assistant - Dinorah Soares Correa Neta - dinorahscneta@gmail.com
- Centre of Conservation and Binding CCE (Initials in Portuguese)
   Gilvânia Faria de Lima gilvania.lima@bn.gov.br

#### • CCE staff members:

Anderson Ferreira da Silva dos Santos, Cláudio Márcio Souza de Carvalho, Cirlei Gorne, Eduardo Pimenta Motta, Elisabeth Moraes da Costa, Isabella Oliveira São Martinho, Jandira Helena Fernandes Flaeschen, Juliana Bride de Souza, Katya Duarte de Vasconcelos Sandes, Leandro Veiga Perni, Liége Sá Nascimento, Luiz Marcelo da Silva Costa, Marco Eduardo Araújo Lima da Silva, Munik de Araújo Miranda Dumas, Reinaldo Matos Aragão, Renata Coelho Silveira Soares Rocha Ferreira, Rosimeri Rocha da Silva, Sirle Rebeca Simas Rodrigues.