

Conservation and restoration of documents from the National Historical Museum fund by appropriate methods

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Libraries and museums keep in their funds millions of written pages that contain the wealth of Bulgarian cultural and scientific heritage. The conservation and restoration of written materials is associated with preservation, rehabilitation and bringing objects to their original overall condition. To apply the restorative processes it is necessary to have a knowledge of the essential changes of the materials forming written cultural monuments under their long-term preservation, to suspend destructive factors causing accelerated aging of the paper and the inks, and to develop reliable restoration methods. Each object received for restoration and conservation has its own specific value: historical, technical and artistic. The primary task of restoration and conservation of written documents is not only mechanical adhesion of the detached places of separate pages and restoration of missing parts of the documents with new material but also stabilization of material basis of the paper, manuscript or document and termination of further destructive processes aiming their preservation for a maximum possible period of time. The purpose of this work is the study and application of appropriate methods of restoration and conservation of documents. Presented are various documents restored in the laboratory of conservation and restoration at the National Museum of History.

Key words: conservation, restoration, paper, documents

INTRODUCTION

Libraries and museums keep in their funds millions of written pages that contain the wealth of Bulgarian cultural and scientific heritage. The conservation and restoration of written materials is associated with preservation, rehabilitation and bringing objects to their original overall condition.[1] To apply the restorative processes it is necessary to have a knowledge of the essential changes of the materials forming written cultural monuments under their long-term preservation, to suspend destructive factors causing accelerated aging of the paper and the inks, and to develop reliable restoration methods. Each object received for restoration and conservation has its own specific value: historical, technical and artistic.[2,3] The primary task of restoration and conservation of written documents is not only mechanical adhesion of the detached places of separate pages and restoration of missing parts of the documents with new material but also stabilization of material basis of the paper, manuscript or document and termination of further destructive processes aiming their preservation for a maximum possible period of time.[4,5]

In enrichment exposure National Historical Museum, and in the preparation of exhibitions in the studio for restoration and conservation of paper do various monuments such as books, maps, engravings, documents, posters, newspapers,

photographs and more.

This work aims to study and application of appropriate methods of restoration and conservation of certain documents. Thus they are saved, restored, or close to its original state by removing or isolating harmful factors.

EXPERIMENTAL

The processes of conservation and restoration comprise of both traditional methods of restoration and some new ones, which were introduced in the laboratory practice, name [6,7].

1. Use of Gore-tex. Gore-Tex-producing Lascaux Restauro A.Diethelm AG CH-830 Bruttisellen was used for cleaning in the process of restoration and conservation. This is a porous material, which transmits solution in one direction.

2. Modification process of duplication. In the experimental work was changed technology of duplication of fragile, crumbling exhibits that need further strengthening was modified in the laboratory. Initially adhesive has been applied on the new basis, then the object has been placed and the restorer with hands or with a roll works on the front of the exhibit to the full application of the adhesive. It was found that in many cases during this operation a fragment of the exhibit might accidentally break away or to become a rupture, which could create additional difficulties to restorer and with extremely fragile objects - even losses. Therefore, when using the technique of doubling,

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an adhesive layer is applied evenly on the new basis and the object to be restored is placed on it. Then a sheet of melinex is placed and the adhesive layer is evenly spread using a special Japanese brush. Thus avoiding the possibility of direct contact with the exhibit and reducing the likelihood of the formation of blowholes

Three objects for restoration are presented. All exhibits were placed in a chamber with thymol steams for disinfection, mechanically cleaned with soft rubber, scalpel and brush.

RESULTS AND DISCUSSIONS

Presented are 3 site restoration fund of the National Historical Museum:

- Handwritten prayer book from the 19th century
- Book "Greater Hungary" 1941.
- Photography - Stefan Macedonia in the role of Samson from "Samson and Delilah".

The exhibits were initially placed in a chamber with thymol steams-for disinfection were then mechanically cleaned with soft rubber scalpel and brush. Before the beginning of the restoration procedures the exhibits are photographed.

A Handwritten Prayer book from 19th century before restoration procedures is illustrated on photo 1.



Photo 1. Handwritten prayer book before restoration

The Prayer-book was cleaned by gore-tex and various solvents - ethyl alcohol, toluene, ether and others. The Prayer-book was cleaned by gore-tex and various solvents - ethyl alcohol, toluene, ether

and others. Strengthening of the paper was done with low percentage solution of pure cellulose. All missing parts were filled and the torn areas were strengthened with appropriate Japanese paper and adhesive. Finally, the individual sheets were placed under press, face in sequence and stitch.

A Handwritten Prayer book from 19th century after restoration procedures is illustrated on photo2



Photo 2. Handwritten prayer book after restoration

Conservation and restoration procedures are performed on the book "The Great Hungary" from 1941. The book is torn pages and cover. For restoration and skills are used to attach each of its pages to the book block by a suitable adhesive and Japanese paper. Fenced areas are fragmented.

The condition of the book before restoration is illustrated on photo 3.

The following stages of work under the classical (manual) method of conservation and restoration are applied:

- photo shooting and visual inspection is done.
- Prepare a conservation-restoration work plan
- disinfection in chamber with thymol steams.
- mechanical cleaning.
- check for solubility of the inks.
- procedures for the cleaning of polluted areas, treatment with various solvents, washing with water and subsequent drying between filter papers.
- strengthening of paper and filling the missing parts with the appropriate Japanese paper with the necessary density and hue.

- if necessary - duplication on a thin micalet paper with appropriate adhesive.
- taking a picture of the restored object.
- placing under press for further smoothening of the folded sections.



Photo 3. Book "Greater Hungary" before restoration.

The results achieved are visible on the attached pictures of the objects after the restoration-photo 4.



Photo 4. Book "Greater Hungary" after restoration.

The fund of National Historical Museum is preserved Photography - Stephen Macedonia in the role of Samson from "Samson and Delilah" - Photo 5. The photography was in a relatively good condition, but it was necessary to be cleaned and reinforced. It was pretty dusty from the front side and the passepartout was faded. There were traces of glue on the back side on the passepartout. A careful treatment with bleaching reagents was required for the bleaching. That is why the photography was carefully cleaned from its front and back sides with a scalpel, rubber and brush. The front side was treated with cotton swabs dipped

in pure ethyl alcohol. After this treatment the image became much clearer. The passepartout was also cleaned – treated with bleaching reagents - photo 6.

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Photo 5. Photography - Stefan Macedonsky in the role of Samson from "Samson and Delilah" before restoration.



Photo 6. Photography - Stefan Macedonsky in the role of Samson from "Samson and Delilah" after restoration.

The results achieved are visible on the attached pictures of the objects after the restoration, namely:

Object 1 - filled and reinforced missing parts, bleached contaminated areas, straightened and sewn up sheets.

Object 2 – the pages are cleaned from stains of different origins, straightened, arranged and fixed.

Object 3 – the paspartout is cleaned and bleached, the photography is acquired greater contrast and clarity after the cleaning.

The templates, processed by this method meet the basic requirements for durability, safety and reversibility, but the method itself is very slow, low-productive and labor-intensive.

CONCLUSION

The paper as basis of valuable documents and exhibits is exposed to the effects of time, place of storage, moisture, bacteria, insects, molds and others. Its preservation and protection of all these adverse effects is a major task of its restoration and conservation in order to be preserved a maximum long period of time.

Covered by those major objectives are the numerous of restorations performed by restorers of National Historical Museum of dozens of exhibits and a variety of individuals and institutions. Each case is approached individually, according to the nature of the destruction of the paper, the cover - i.e. the object of restoration.

The common among them all is that the restoration process transparent materials are used Japanese or mica paper, silk veils, adhesives

and stabilizers of the paper, which in most cases ensure the durability of the document.

The basic requirements for the selection of methods for restoration of one or other written material, no matter how individual are for each, comply with the requirement their original form not to be changed, as well as the processes to be reversible. This means that, if necessary, they can get their original form.

Particularly important element of the restoration work is the chemicals and reagents that are used to be harmless for the paper and people.

Furthermore the specialists continuously explore and apply other more modern and more efficient working methods as well as new materials and techniques for restoration of the paper.

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КОНСЕРВАЦИЯ И РЕСТАВРАЦИЯ НА ДОКУМЕНТИ ЧРЕЗ ПОДХОДЯЩИ МЕТОДИ ОТ ФОНДА НА НАЦИОНАЛНИЯ ИСТОРИЧЕСКИ МУЗЕЙ

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(Резюме)

Библиотеки и музеи съхраняват във фондовете си милиони изписани страници, съдържащи богатството на българската културна и научна мисъл. Консервацията и реставрацията на писмените материали е свързана със запазване, възстановяване и доближаване на обектите до първоначалното им цялостно състояние. За да се приложат възстановителните процеси, е необходимо да се познават същностните изменения на материалите, изграждащи писмените паметници на културата при дълготрайното им съхранение, да се преустанови действието на разрушителните фактори, предизвикващи ускорено стареене на хартията и мастилата и да се разкрият надеждни методи за тяхното възстановяване. Всеки постъпващ обект за реставрация и консервация има своя специфична ценност и особеност - историческа, техническа и художествена. Първостепенна задача на реставрацията и консервацията на писмени документи в такъв случай не е само механичното залепване на разкъсаните места на отделни страници и възстановяване на липсващите части от документите с нов материал, а стабилизация на материалната основа на книгата, ръкописа или документа и прекратяване на по-нататъшните разрушителни процеси с цел запазването им за максимално дълъг срок от време. Целта на настоящата работа е изследване и прилагане на подходящи методи за реставрация и консервация на документи. Представени са различни документи реставрирани в Лабораторията по консервация и реставрация при Националния исторически музей.