



Condition Assessment and Treatment Report for the Conservation of Rare Book: A Case Study

Mohammad Nooruddin Ansari¹ | Prof. Abduraheem K.²

¹Research Scholar, Department of Museology, AMU, Aligarh, India and Ex. Coordinator & Senior Conservator, Conservation Laboratory, IGNC, New Delhi, India.

² Ex Chairman and Professor, Department of Museology, AMU, Aligarh, India.

To Cite this Article

Mohammad Nooruddin Ansari and Prof. Abduraheem K, "Condition Assessment and Treatment Report for the Conservation of Rare Book: A Case Study", *International Journal for Modern Trends in Science and Technology*, Vol. 07, Issue 02, February 2021, pp: 149-153.

Article Info

Received on 20-January-2021, Revised on 19-February-2021, Accepted on 21-February-2021, Published on 27-February-2021.

ABSTRACT

The aim of physical inspection is to collect information of the prescribed rare book. When it is received for treatment, the conservator should record information, how the book has appeared to his eyes. In this case the physical conditions of the book and their folios, missing portion if any, damages are recorded, history, provenance, owner of the books and background information such as condition of the storage or display area where the object was stored or displayed etc. In the reference of paper documents physical inspection is too important, because deteriorated paper is physically more sensitive as compare other material. This inspection begins with an analysis of both the material and cultural characteristics of the work and a real diagnosis is made in identifying the alterations and their causes. On the basis of this information the treatment most appropriate to the characteristics and the state of alteration of the document is prescribed. Analysis is carried out with the aid of the sciences applied to restoration work which will determine, on the basis of the physical, chemical and biological tests performed, the nature and state of conservation of the work. In this paper, I will describe all details regarding condition report, proposed treatment report and after treatment report.

KEYWORDS: Book, condition report, conservation.

INTRODUCTION

Documentation consists of written and photographic records of examination, sampling, scientific investigation, proposed treatment and treatment report of any book. In this step a conservator fill the documentation sheet properly. Conservator examine condition of book and do some test such as check the acidity with the help of pH paper or pH meter, check the ink either soluble or insoluble in water or alcohol, stability of paper, acidity of ink and other pigments, length and thickness of fibers, brittleness of paper, thickness of paper, shape and size, porosity of paper, etc.

Documentation sheet generally divide in three sections. In the first section, conservator fill general information regarding book, all physical and internal problems. Second section has all details of proposed treatment work. And Third section has all details of after treatment work. Documentation sheet also has some photographs regarding the condition of book, before and after conservation work.

DOCUMENTATION SHEET

General information of book

Laboratory number- 2016-03-91

Accession number- C-3845
 Title of the book- Central Provinces district Gazetters Betul District, Volume -A
 Type of the document- Rare book
 Name of the editor- R. V. Russell, I.C.S.
 Details of publication- Allahabad printed at the pioneer press
 Provenance- Nagpur, Maharashtra, India
 Owner/Custodian- Rashtrapati Bhavan, New Delhi, India
 Date of receiving the book- 18/03/2016
 Date of starting the work- 21/03/2016
 Date of complete the work- 10/05/2016
 Date of returning the book- 24/05/2016

spine, due to this rounding, large number of folios were broken from the folding marks.

Extraneous attachments/evidence of previous treatment

Lining- Not available
Mount- Not available
Hinges- Not available
Previous repairs/inserts- Some folios repaired with paper stripes
Tapes- Some tears treated with transparent tape

Condition

Discoloration
 Darkening/Yellowing- Yes
 Stains- Yes
Contact with poor quality material/mats- Available
Tape- Available
Adhesives- Available
 Fading- No
 Foxing- Yes
 Mold growth and/or stains- Not available
 Tide lines/water and liquid stains- Available
 Staining induced by media- Available
 Flyspecks- Available
 Accretions- Available
 Surface soiling- Available
 Fingerprints- Available
 Previous retouching- Not available

Structural condition

Brittleness- Yes
 Flexibility- Not flexible
 Tears/breaks- Available
 Losses- Yes
 Pin or tack holes- Available
 Abrasion/skinning- Available
 Stuck pages- Yes
 Thinning- Yes
 Overall planar distortions
Cockling/buckling- Yes
Bulges- Yes
 Creases- Available
 Folds- Available
 Wrinkles- Available
 Flattened plate mark- Available
 Scratches- Available
 Porosity- Yes
 Trimmed edges- Yes

Personal details of Conservator

Name- Mohammad Nooruddin Ansari
 Designation- Senior Research Fellow, Deptt. of Museology, AMU, Aligarh
 Email address- noorignca@gmail.com
 Mobile number- 8077277728
 Laboratory- Conservation laboratory, IGNCA, New Delhi

Description

Text block

Support

Paper type- Handmade
 Language/script- English
 Writing/design- Both side
 Dimensions- 20.8 X 14.0
 Shape- Rectangular
 Total no. of folios- 151
 Present color- Yellowish

Medium/Media

Illustration- Yes
 No of folios/plate- Five (Page no.- 01, 17, 36, 141, 145)
 Map- Two (Page no. - 12 - 13, 108)
 Graph- Not available

Housing

Mat/backing material- Not available
Box-type container- Not available

Binding

Nature- Hard cover
 Materials- Paper and rexin
 Condition of cover- Damaged
 Condition of spine- Braked
 Biological problem- Yes
 Binding technique- Hard binding sewn by hand and guarding is round at a

Media loss/abrasion-Softness due to loss of sizing- Fungus	Yes
Live- Powdery form- Stain-	Yes
Insect	<i>Not present</i>
Live- Eggs- Larva- Remains-	<i>Not present</i>
Type of ink-	<i>Present</i>
Type of pigments- Charring-	<i>Not present</i>
	<i>Present</i>
	Printed
	Printed
	No

Testing and analysis

Type of test

Acidity (pH value) of Paper documents

Before- 6.5

During- 6.5

After- 6.5

Ink

Before- 6.5

During- 6.5

After- 6.5

Pigments

Before- 6.0

During- 6.0

After- 6.0

Solubility of ink

In water- Not soluble

In alcohol- Not soluble

Solubility of pigments

In water- Not soluble

In alcohol- Not soluble

Proposed treatment

- Documentation (Manual and Digital)
- Removal of binding media and thread from the spine
- Removal of previous interventions
- Cleaning (Dry and Wet)
- Arrangement of section according to pagination
- Flattening
- lining with tissue paper (Kozu Fibre, 9 GSM) with partially glutton free starch paste
- Hole mending tear mending and edge mending with Japanese tissue paper
- Drying
- Trimming of excess tissue paper
- To arrange section according to pagination
- Binding (stitching and preparation cover)

- Preparation of archival box

Treatment report

Conservation of text block

Detailed documentation including photography was done on the already opened book. Pagination of book was done. Each and every page was cleaned. The stuck pages were separated using moisture, stuck pages were kept in ultrasonic humidifier for giving moisture. The broken pages were repaired with Japanese paper (kozo fibre). According to the pagination section were made of 4-10 folios. Each and every page was washed and the one which required lining was lined using japans paper and starch paste (reduced gluten). The lost portions of the pages were repaired using handmade paper (15gsm). During this process holes, tear and edges were repaired.

All the folios and sheets were dried and flattened under felt. Excess tissue paper were trimmed. No original paper during trimming was touched. Sections were arranged and the book was bound on the binding stand using needle and thread. During the binding of book two cotton strips were sown around the thread which holds each and every section.

Restoration of book case/cover

The rexin of the cover was mechanically separated. After removing the rexin from the damaged board, the rexin was mechanically cleaned; lining/support of de-starched muslin cloth using/applying adhesive of partially glutton free starch paste was given. The prepared cover was kept under felt for a day to provide slow drying. After drying of lined rexin, the rexin was pasted on an acid free mount board of 2000 GSM, using/applying reduced gluten free starch paste, and subsequently the prepared cover was kept under pressure machine to make it wrinkle free and flat.

The cover was subsequently attached to the bound book using starch paste (reduced gluten). The book was kept under pressure for one day.

The box for the book was made from handmade mount board, cotton cloth with the help of starch paste.

Photographic details

Condition of book before conservation

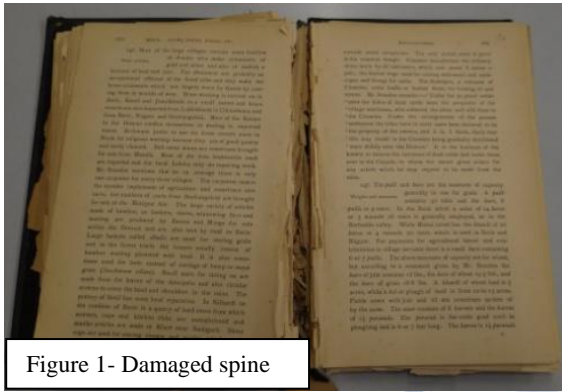


Figure 1- Damaged spine

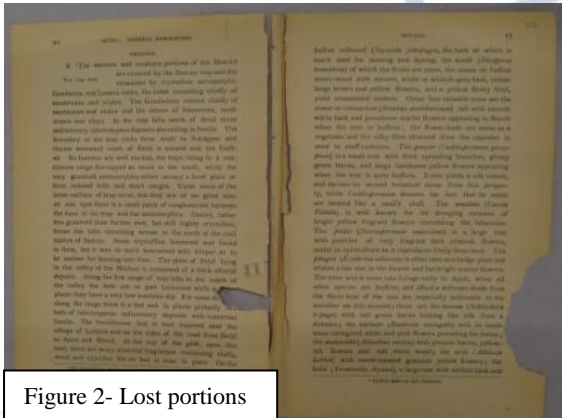


Figure 2- Lost portions

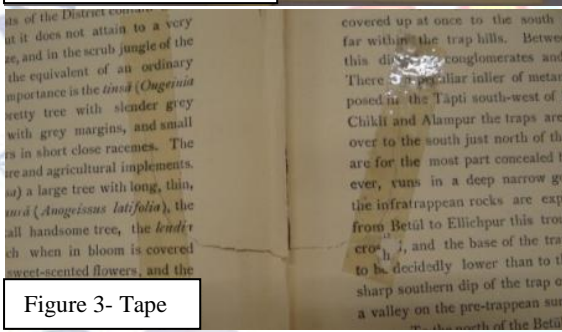


Figure 3- Tape

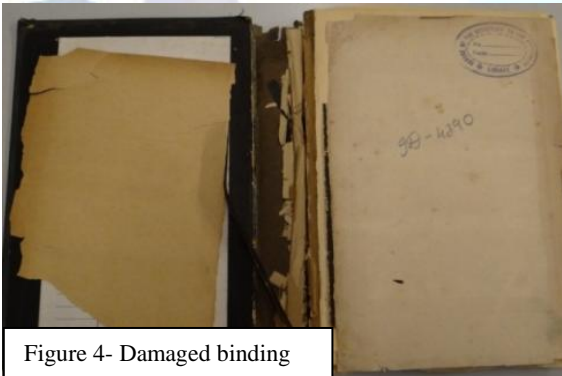


Figure 4- Damaged binding



Figure 5- Damaged edges

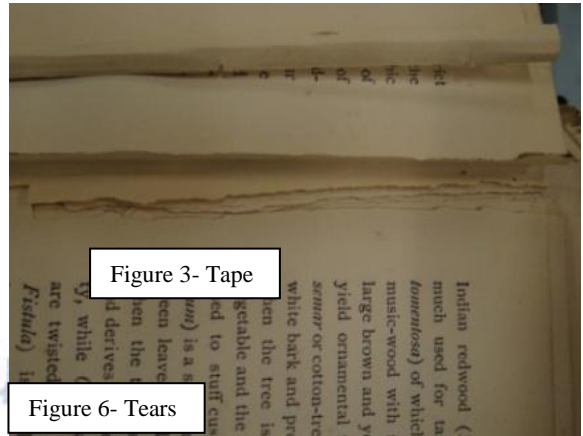


Figure 6- Tears

During conservation



Figure 7- Removal of tape

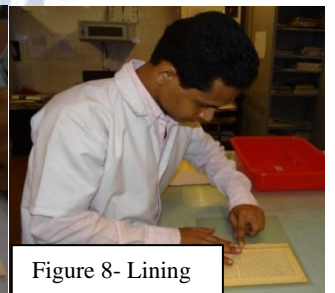


Figure 8- Lining

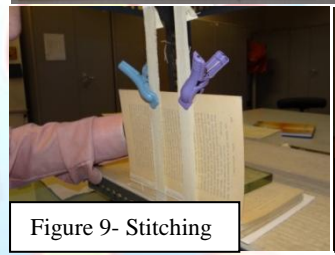


Figure 9- Stitching

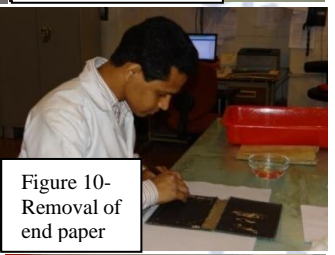


Figure 10- Removal of end paper



Figure 11- Removal of board

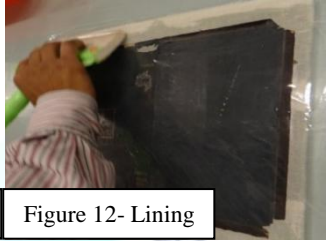


Figure 12- Lining

Before and After conservation



Figure 13a- Before



Figure 13b- After

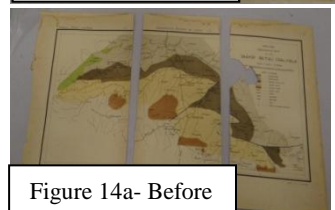


Figure 14a- Before

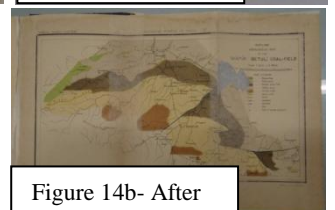


Figure 14b- After

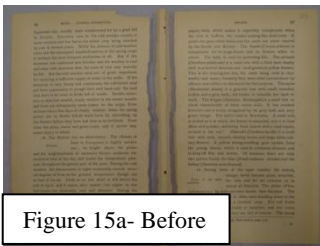


Figure 15a- Before

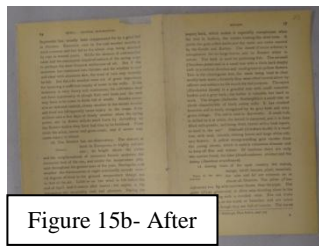


Figure 15b- After

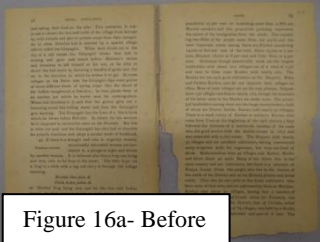


Figure 16a- Before

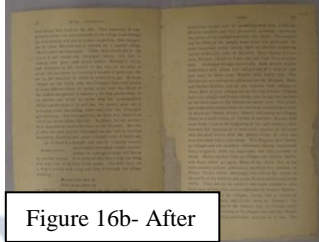


Figure 16b- After

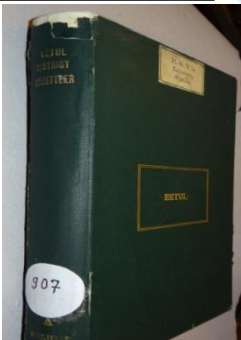


Figure 17- Complete book



Figure 18- Archival box

- [4] Canadian Conservation Institute. *Basic Care of Books*. CCI Notes 11/7. Ottawa, ON: Canadian Conservation Institute, 1995.
- [5] Canadian Council of Archives. *Basic Conservation of Archival Materials: A Guide*. Rev. ed. Ottawa, ON: Canadian Council of Archives, 2003.
- [6] Canadian Conservation Institute. *Making Protective Enclosures for Books and Paper Artifacts*. CCI Notes 11/1. Ottawa, ON: Canadian Conservation Institute, 1996.
- [7] Mesmer, Renate, Jennifer Evers. 2014. Cast Pulp Paper: An Alternative for Traditional Repair Materials for Book and Paper Conservation. Poster 33, 42nd Annual Meeting San Francisco, American Institute for Conservation [accessed 15. March 2018]. Available at: www.conservation-us.org/annual-meeting/past-meetings/42nd-annual-meeting-san-francisco/2014-posters#.WrrCrcguAdU [Google Scholar]

CONCLUSION

The project is aimed at building a flexible invoicing system which can precisely match content PDF files, easily match line items and tables and automate the entire invoicing process for any major organization. The system has the ability to obtain all relevant information from the document with 100% accuracy while ensuring speed and reliability. This project has a huge potential for further development. While the problem focuses on digitization of invoices, this could be extended to digitizing any document for processing, thereby removing any manual efforts, errors and management of document processing within companies.

REFERENCES

- [1] AIC (American Institute for Conservation of Historic and Artistic Works). 1994. *Code of Ethics and Guidelines for Practice*. Washington, DC: AIC [accessed 15 March 2018]. Available at: [http://www.conservation-us.org/our-organizations/asociation-\(aic\)/governance/code-of-ethics-and-guidelines-for-practice#.WWRly4pCOdU](http://www.conservation-us.org/our-organizations/asociation-(aic)/governance/code-of-ethics-and-guidelines-for-practice#.WWRly4pCOdU) [Google Scholar]
- [2] A.S. Bisht (2003), "Ethics in conservation", conservation science, pp 137-152
- [3] Balloffet, N., J. Hille, and J. A. Reed. (2005). *Preservation and conservation for libraries and archives*. Chicago: American Library Association. 84-5.