

INDIGENOUS MATERIAL OF PRESERVING MANUSCRIPTS IN LIBRARY

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ABSTRACT

The manuscripts collection are important to the human society, researcher, scholar can measure the value of valuable collection, which they are able to access them. The aim of this paper is to highlight the Indigenous Material of Preserving Manuscripts in Library. The paper discuss role of NMM for Preservation and conservation of Manuscripts. The present article is an attempt to highlight different types of indigenous material to preserving the manuscripts. In this paper an attempt has been made to summarize the effectiveness of the Indigenous Material of preservation.

Keywords: Preservation, Manuscripts, NMM (National Mission for Manuscript)

1. INTRODUCTION

Libraries are places for knowledge, in other words, they are centres for sharing Knowledge. In the recent years, libraries are known as a knowledge oriented organizations and they play an important role in order to preserve, and disseminate information and knowledge to their end-users. Along with these libraries, nowadays try to manage the knowledge transfer with modernizing the information systems, networks and other modern facilities.

Preservation of deteriorating information resources in libraries has become a global phenomenon to which libraries must aggressively respond if their mission of providing information needs of their patrons would be met (Akande, 2009). Libraries acquire material to meet the informational or recreation deteriorate unchecked or become damaged in anyway, it may be difficult and may be ultimately difficult or the information it embodies

available for use. It is the responsibility of the library staff to keep these materials in good physical condition so that they are available for users at all times. Materials in many libraries and archives throughout the country are still housed in conditions that leave much to be desired (Olatokun, 2008). A large portion of information recorded on audio or videotape about important events, people, etc., has been routinely wiped out in our electronic media houses (Popoola, 2003). This is a sad situation and one that is found in many libraries of African higher institutions. The deterioration of information-bearing material has a long history. Unless something is done to stop the process, library collections deteriorate and will continue to deteriorate. This is a battle that has to be waged against to prevent the deterioration of our intellectual heritage. Preservation is the action taken to anticipate, prevent, stop, or slow deterioration. It can also be described as the art of anticipating and preventing decay (Baker, 1981). Conservation is an act of preservation, protecting and shielding material from destructive influences that shorten their life span. The library plays a crucial role of protecting and preserving information-bearing materials from distortion, deterioration, and eventual loss because the materials are imperative. Academic libraries acquire information resources to meet the needs of their community. People use the collections as a result of increasing enrolments in higher education. There are shortages and decline in book budgets arising from the poor funding of the institutions as well as the high cost of books and other information resources. As a result, the libraries are left with damaged books, distorted tapes, scratched CDs, etc (Popoola, 2003). India has been a great seat of learning from the ancient period. The Takashila/Texila (now in Pakistan) and Nalanda in

Bihar were two important seats of learning during 7th and 5th century B.C. These seats of learning had a good oriental collection in classical languages. In the medieval period, particularly during the Mughal rule, a large number of madrasas were established which had a rich collection in Persian, Arabic and Urdu languages. In the modern period a large number of institutions, schools, colleges, and universities were set up which possess a collection of oriental literature in addition to resources in modern Indian languages. Besides, India is quite rich in terms of oriental resources in the form of manuscripts, rare books, coins, edicts, "Shahi farmans" and other materials. This valuable treasure is in both classical languages and Indian languages namely Sanskrit, Pali, Prakrit, Arabic, Persian, Hindi, Tamil, and Urdu etc. These resources represent the history of Indian culture presentable in subjects of Theology, Languages and Literature, Philosophy, Religion, Mysticism, Architecture, Archaeology, Epigraphy etc. (Mahawar 2013).

2. ROLE OF NATIONAL MISSION OF MANUSCRIPTS (NMM) FOR PRESERVATION AND CONSERVATION OF MANUSCRIPTS

The National Mission for Manuscripts was established in February 2003, by the Ministry of Tourism and Culture, Government of India. A unique project in its programme and mandate, the Mission seeks to unearth and preserve the vast manuscript wealth of India. India possesses an estimate of five million manuscripts, probably the largest collection in the world. These cover a variety of themes, textures and aesthetics, scripts, languages, calligraphies, illuminations and illustrations. Together, they constitute the 'memory' of India's history, heritage and thought. These manuscripts lie scattered across the country and beyond, in numerous institutions as well as private collections, often unattended and undocumented. The National Mission for Manuscripts aims to locate, document, preserve and render these accessible to connect India's past with its future, its memory with its aspirations.

3. OBJECTIVES OF NATIONAL MISSION OF MANUSCRIPTS

Some objectives of NMM

- ✓ Locate manuscripts through national level Survey and Post-Survey
- ✓ Document each and every manuscript and manuscript repository, for a National Electronic Database that currently contains information on one million manuscripts making this the largest database on Indian manuscripts in the world
- ✓ Conserve manuscripts incorporating both modern and indigenous methods of conservation and training a new generation of manuscript conservators
- ✓ To train the next generation of scholars in various aspects of Manuscript Studies like languages, scripts and critical editing and

cataloguing of texts and conservation of manuscripts

- ✓ To promote access to manuscripts by digitizing the rarest and most endangered manuscripts
- ✓ To promote access to manuscripts through publication of critical editions of unpublished manuscripts and catalogues
- ✓ To facilitate public's engagement with manuscripts through lectures, seminars, publications and other outreach programmes (Available on <http://www.namami.org/manuscript>)

4. WHAT IS MANUSCRIPT

A manuscript is a handwritten composition on paper, bark, cloth, metal, palm leaf, skin or any other materials dating back at least seventy-five years that has significant scientific, historical or aesthetic value. Lithographs and printed volumes are not manuscripts. Manuscripts are found in hundreds of different languages and scripts. Often, one language is written in a number of different scripts. For Example, Sanskrit is written in Oriya script, Devanagari script and many other scripts.

Manuscripts are distinct from historical records such as epigraph on rock, firmans, revenue record which provide direct information on events or processes in history. Manuscripts have knowledge content. Manuscripts are not only the reading material but also the heritage materials as well as historical evidences. In the era of computer, the use of manuscripts as reading material may not be required, but for research and to conserve our civilization, we must keep the manuscript as it is. Our country people have been following different type of traditional techniques to save or conserve the manuscripts from insects, micro-organisms, light, heat etc. because of which we still have lakhs of Sanchipat, Talpat, Bhojpatra, Tulapat 'Pothe', or paper manuscripts in various parts of our county (Mishra 2012).

5. TYPES OF MANUSCRIPTS

- ✓ Palm Leaf
- ✓ Brich Bark Sanchi Pat or Hansi Pat
- ✓ Bamboo Leaf
- ✓ Banana Leaf
- ✓ Bhoj Patra
- ✓ Cloth
- ✓ Parchment
- ✓ Ivory
- ✓ Metal (Bronze, Copper, Gold etc.)
- ✓ Paper

5.1 The factors affecting the manuscripts

Micro-Organism: Bacteria and fungus are very damaging to the manuscripts. Fungus damages the material, creates stains and discolours the letters. These grow in 65% humidity and 240-300C temperature. Bacteria also damage the leaves by creating colonies on the surface area.

Insects: The insects like silver fish, book-worm, book lice, cockroach, termite etc. take the manuscript as their food and shelter. These insects may damage the manuscripts totally.

Heat and light: High temperature (>360) and high humid condition is affective for the manuscripts.

Human handling: Human handling is also one of the important factors of damaging the manuscripts.

5.2 Basic requirement of manuscripts storage area

- ✓ Clean and tidy room
- ✓ Electric switchboard should be outside the room if possible
- ✓ Good lighting
- ✓ Good ventilation
- ✓ Manuscript kept in ordered manner in clean boxes or cupboards
- ✓ Manuscript should not be on the floor
- ✓ The storage area should be inspected regularly
- ✓ Manuscripts should be examined for insect or fungus attack and kept under observation before being documented and brought into the storage area
- ✓ Shelves should be able to take the load of the manuscripts etc.

6. WHAT IS PRESERVATION?

Preservation can be defined as 'all managerial, technical and financial considerations applied to retard deterioration and extend the useful life of (collection) materials to ensure their continued availability'. Preventive measures can considerably extend the useful life of collections, and are usually much more cost-effective than interceptive measures taken to remedy damage after deterioration has taken place.

The external causes of deterioration of collections include:

- ✓ poor handling or storage
- ✓ theft or vandalism
- ✓ fire and flood
- ✓ pests
- ✓ pollution
- ✓ light
- ✓ incorrect temperature and relative humidity(RH).

Deterioration due to natural ageing will continue but can be considerably diminished by minimising the effects of external causes of deterioration. Each can be tackled separately, but they do interact: for example, incorrect temperature and relative humidity can increase the risk of pest infestation, and poor storage may increase the risk of fire and flood damage. The nature of the collection must also be considered, since

for acidic paper or for vellum and parchment, incorrect temperature and RH can have more serious and rapid effects than for some other materials. You should assess and control all the preservation risks which may affect your collections (Walker 2013).

7. NEEDS OF PRESERVATION MEASURES

The delicate nature and the susceptibility to deterioration of manuscripts have been briefly described in the preceding paragraphs. That will serve as a guide to our preservation approach, both prospective. The preservation process will be discussed in detail is given:

7.1 Storage environment: For long term preservation of documents, the selection of proper storing space is essential. The library stock -area should have the following:

- ✓ Adequate ventilation- If necessary the area should be provided with air- circulation devices like, an adequate number of exhaust fans. Air circulation helps removal of stagnant air pockets, which, coupled with excessive humidity, helps growth of micro organisms and injurious pets.
- ✓ The orientation of windows should be such that these regulate sun light and reduce the injurious effects of the outside climatic condition.
- ✓ In no case should the stock area be on the basement floor of a building where the floor and the walls are likely to be damp or a subject to flooding, particularly in the rainy season, or due to choked drains.
- ✓ Entry of rats into the area should be prevented by sealing all joints in the partition walls and covering drain outlets. Hygienic condition should be maintained in and around the stock area.
- ✓ The area should have a properly done up floor and walls, so that these do not through dust all the time.
- ✓ Protection against Fire smoking, use of heaters and storage of inflammable liquid in the storage areas should be prohibited. All electric wiring should be through conduit pipes. Electric wiring should be regular checked to guard against weakening insulation. The use of temporary light, power connections and over loading of electric circuit should be avoided. Proper fuses, circuit breakers and earthing should be provided. As a precautionary measure all light and power circuit should be switched off after office hours. Fire detection alarm system as also suitable fire extinguishers should be provided in the storage area.

7.2 Atmospheric condition: Temperature between 220-250C and relative humidity between 45-55 percent constitute the most suitable ambient condition for storing of Library materials. This can be achieved only by air condition. But this facility is not available to most of our Libraries. Maintenance of cool, dry atmosphere are avoidance of too frequent changes in temperature and humidity in the stack

area should be achieved as far as possible by other methods.

7.3 Dehumidification: In the absence of air conditioning facility, to minimise the humid condition and dampness, especially during the rainy season, suitable dehydrating agents like anhydrous calcium chloride and silica gel can be used. Silica gel (in requisite quantity 2-3 Kg for a room of 20-25 Cu.mts capacity) may be put in small dishes and the dishes kept in different locations in the room. When the silica gel gets saturated with moisture, it has to be replaced. Commercial dehumidifiers are also available. These can be used where the stack area is large.

7.4 Deacidification: The wooden boards and cloth used in wrapping manuscripts in bundles, the leather, cord and end-papers used for binding should be acid free to avoid transmigration of acid contamination of the document. As has been stated earlier, the acid residue in paper at the manufacturing stage causes its deterioration at a rapid pace. To neutralise this acid content, various methods of deacidification have been and are being tried. Some of the more common processes are Morpholine Process (Barrow's) Vapour Phase Deacidification, Wei T'O Process, Diethyl Zinc Process. These chemicals are hazardous in nature and also require installation of costly equipment. Less hazardous and cheaper methods of deacidification involve the use of spray deacidification ammonia gas deacidification and aqueous deacidification (solution of Calcium hydroxide and calcium bicarbonate) depending upon the nature of the writing ink used and the strength of the paper. In each one of these processes there are advantages and disadvantages. Deacidification or treatment of individual items by any of these processes will slow or retard further damage to the material due to acidity. Treatment of only much selected precious items can be considered of the considerable cost involved in deacidification.

7.5 Preservation of special types of materials :

Palm leaf and Birch-bark Manuscripts :

The traditional practice of storing manuscripts is to collect several sheets together and tie them in between two thin wooden boards. The bundle is wrapped in pieces of cloth to protect against dust and other surface feeders. In this traditional method there is the possibility of uneven pressure on the sheets while tying each time. If the sheets have already turned brittle, there is risk of cracking. Therefore, proper care is necessary in tying and untying the bundles.

The best method of storing manuscripts is to keep the leaves loose in wooden or cardboard boxes the size of which is slightly bigger than that of the leaves, so that these can be taken out and replaced with ease. Too frequent and careless handling should be avoided. Science manuscripts are likely to be very sparingly used, it is necessary that once a year the bundles are opened, the sheets separated and cleaned and carefully stored again.

Films: Apart from storing the films in boxes, microfilms in case and microfiches in separate envelopes, and these materials in a cool dry and pollution free environment, it is necessary that the films, if not in use for long, are run at normal speed, at least once a year. This is necessary to eliminate the possibility of layers of film sticking together.

Binding: Unlike paper and other materials, in the creation of which the librarian has very little control, binding, with a few exceptions, is the creation of the librarian himself. He has to ensure that the binding has been done with standard materials and the binder has adopted standard processes. Indian Standard IS: 3050-1962 : 'Code of practice for reinforced binding of Library books an periodicals' will provide adequate guidance in this regard.

7.6 Pest control measures: A simple practice is to keep naphthalene bricks every six or eight feet on the shelves. This is an effective insect-repellent measure. A mixture of paradichlorobenzene and creosote, kept in dishes in the stack room also acts as a good insect-repellent. 10 percent solution of thymol in methylated spirit sprayed in the stack from time to time will check the growth of spores. But for a bigger collection it is always advisable to seek the service of a professional pest control organization for routine treatment under services contract agreement.

7.7 Vigilance and cleanliness: Two most important steps which every Library should meticulously follow are:

- ✓ To keep constant vigilance in the dark corners. This will help eliminate the possibility of the growth of micro-organism and other insect attacks.
- ✓ To maintain utmost cleanliness and tidy condition through a process of regular dusting. While dusting, care should be taken to ensure that the dust particles are not thrown about and do not settle down elsewhere in the shelves. The ideal method is to do the job with the help of a vacuum cleaner (IGNOU, MLIS-E12003).

8. INDIGENOUS MATERIAL OF PRESERVING MANUSCRIPTS

Some Indigenous Material of Preserving Manuscripts and its Application

Herbal and Natural Products

- ✓ Aswagandha: Dried and Powdered Leaf of Aswagandha in small packets are kept with the manuscripts covered in cloths to repel insect attack.
- ✓ Garlic: Garlic exhibits antibacterial, antifungal and insecticidal qualities.
- ✓ Lemon-Grass: Coatings of lemon-grass oil are given to strengthen the leaves of manuscripts and destroy the growth of micro-organism.
- ✓ Pyrethrum: The flower should be dried and then crushed and mixed with water. Through the pesticide is natural.
- ✓ Black pepper, Sandal and Clove: Oil extracts of some natural products like Black pepper, Sandal

- or Clove facilitate in the restoration of flexibility to the palm leaf of manuscripts.
- ✓ Custard-apple Seeds: Its powder is used to kill the insects that thrive on manuscripts.
- ✓ Ajwain: Powdered Ajwain also acts as an insect killer and fungicide. Fumes of Ajwain obtained by its burning has often used as a fungicide.
- ✓ Mint: Mint leaf also repel ant and cockroach
- ✓ Black- Cumin: Its gives a strong smell also used as an insect repellent.
- ✓ Turmeric: Turmeric has also been used as an insect repellent by rubbing its paste on the palm leaf and dying the binding cards and the cloth cover.
- ✓ Camphor: Karpura is commonly used in India to protect valuable documents. Filled in small cloth bags it is kept inside the storage of manuscripts.
- ✓ Neem: As the wooden planks attached to the bundle of manuscripts are prone to insect attack, in some libraries the planks are made of neem wood which can ward off termite. Dried leaf from a neem tree was some time placed between the cover of the booklice. Dried leaf is at its maximum potency at spring time.
- ✓ Tejpat: Tejpat leaf in small packets is kept with the manuscripts covered in clothes to repel insects.
- ✓ Eucalyptus: Eucalyptus leaf is kept with the manuscripts covered with cloth to repel insects.
- ✓ Tulsi: The Tulsi leaves have been mixed with stored grains to repel insects.
- ✓ Snake slough: Snake slough repellent property.
- ✓ Ritha; Ritha is slightly acidic and has been used for de- acidification (silk manuscripts only). Etc

9. CONCLUSION

Since library materials are composed primarily of organic materials, they are subject to natural deterioration, so libraries need to adopt the indigenous material of preservation to enable library materials stay longer time. Manuscripts are the primary sources of our culture and tradition, the collection of manuscripts are available all over the maximum part of the country. Today most of them face many problems due to many reasons, in the past we have also lost a big number of manuscripts due to lack of awareness. Manuscripts cannot survive without proper care, so it is our duty to conserve and preserve those manuscripts, save for the next generation.

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