

An Analytical Approach Of Preservation And Conservation Of Library Materials In Aspects Of Public Libraries

Mr. Akshay Kumar, Student of M.LIS., Faculty of Library and Information Science,
School of Social Sciences, Indira Gandhi National Open University
Maidan Garhi, New Delhi – 110 068, India
Gmail – ak540560@gmail.com

Abstract

Extreme temperature variations, such as those of 5 °C in the winter and 45 °C in the summer, have an impact on the physical state of library materials. Preserving & conserving library materials can be challenging due to various factors. Cunha & Cunha (1972) have assembled a list of references regarding the preservation of library resources. Limitations Preservation & conservation of library materials are important to ensure their long-term survival and accessibility. Suggestions An essential component of library and information management is the preservation and conservation of library items. To find out the control measures for preservation and conservation of library materials. The present study aims to examine the preservation and conservation techniques and the methodology to adopt for the conservation and preservation of library materials. 2.) 2) Exposure duration: Paper deterioration is directly correlated with the length of time it is exposed to light. The study includes to find out the causes a level of deterioration of library materials in academic libraries. Scope of the study The scope of the study is limited to find out the measures for preservation and conservation of library materials. This study also equally focuses the facilities and techniques involved in the preservation and conservation of library material in libraries. Balloffet and Hille (2009) have provided examples of several methods for conserving and preserving archive and library materials. ENVIRONMENTAL FACTORS: Light: - Paper deteriorates when it is exposed to light, whether it be artificial or natural light. Accordingly, the study suggested that libraries use cutting-edge tools for preservation and conservation, such as ICT devices with technology built in. Resources for the preservation and conservation of library collections are rarely sufficient to fulfill the enormous needs that exist (Harrison, 1982). Harrison has created a bibliography on the conservation of archive and library materials. A shared responsibility for preservation and conservation lies with the archaeologist and musicologist on the one hand, and the archivist and librarian on the other.

Keywords: *Preservation & Conservation, Library Materials, Public Libraries, Information & Communication Technology, Restoration Of Library Collections, Development & Maintenance Of Records*

Introduction

A library is a repository for the wisdom of notable thinkers from the past and present. It is the responsibility of this social institution to educate the general public in an inclusive way. Library holdings offer a precious legacy of humanity since they preserve facts, ideas, thoughts, accomplishments, and proof of human growth in a range of places, ages, and directions.. The historical records are a natural resource that will always be valuable to both the current and future generations. Since these materials are simply irreplaceable, librarians and information scientists have an ethical need to preserve this intellectual and cultural heritage in addition to their academic duty, whoever these repositories are overseen by.

In addition, appropriate distribution of library resources can occur if the records are in excellent and functional order. This necessitates the library resources' appropriate protection and preservation. Any librarian in charge of maintaining this documentary legacy should be knowledgeable about the several reasons why library items deteriorate and the potential preservation techniques. While conservation refers to corrective measures and the restoration of already-damaged material, preservation refers to routine upkeep of library holdings. Libraries have always been repositories of knowledge and information, but over time, they have evolved from being information stewards to becoming hubs for intellectual knowledge.

The term library, when simply defined, stands for a collection of library documents or records kept for reference or borrowing, but the concept behind the library has far reaching impact on the society. To an extent that even today in others disciplines, the term library is being used to denote a storehouse of usable information. The task of maintaining and conserving collections in public libraries is more difficult and distinct from that of other kinds of libraries because of ongoing challenges with insufficient budget, understaffed staff, and a lack of experience. The process involves clear documentation of the preservation needs the collection, analysis of the use of patterns for the materials in the library, though evolution of the collection development plan, and identification of the preservation resources readily available. In the digital scenario, all these processes need to be re - examined and redesigned.

In daily speech, the terms "preservation" and "conservation" are frequently used interchangeably to describe the processes involved in keeping an item safe from harm, loss, degradation, or loss while simultaneously maintaining its relative soundness for use in the future. However, these two terms technically have different meanings that are related to each other and overlap. While conservation deals with the repair and restoration of the already damaged specimen, preservation deals with its upkeep. A shared responsibility for preservation and conservation lies with the archaeologist and musicologist on the one hand, and the archivist and librarian on the other.

Wesley L.Boomgaarden provided these guidelines' definitions of preservation, conservation, and restoration, which are as follows: "Preservation is an action taken to anticipate prevent, stop, or retard deterioration." "Keeping every item in the collection in a usable condition is conservation." "Restoration" is the process of returning a deteriorating thing to its original or nearly original state.

The goal of preservation is to lessen or minimize the deterioration of documents' physical and chemical properties. The practice of fixing and repairing individual pieces to halt the deterioration process or restore them to a functional state is known as conservation. This keeps records in a useful form. Conservation includes investigation, diagnosis, treatment, screening, and documentation. Any technique that may be successful in preserving the property for as long and as close to its original form is also included. There are several reasons why conservation measures are taken, including as aesthetic preferences, the need for stabilization to maintain structural integrity, or the need for intangible continuity. The term "conservation" refers to the entirety of

procedures and activities used to stabilize, shield, and preserve records from degradation or damage, as well as handle papers that have already undergone such treatments.

Nowadays, preservation also includes, the conversion of data to a different format, such microfilm or electronic materials. Conservation, on the other hand, is the planning and administration of resources to ensure our access to them while preserving their quality. It covers the management, care, and preservation of cultural and natural resources as well as their defense against alterations. Although the terms conservation and preservation are frequently used synonymously, there is a little distinction between the two. While conservation typically denotes some resource management, preservation implies that natural resources will be left intact. In the traditional setup, the library material are books, magazines, journals, newspapers / newspaper clippings, encyclopaedia's, dictionaries etc and the method for conservation used to depend on the type material via papyrus, parchment, palm, leaf, paper, photographs, film, sound recordings etc.

Objectives of the study

1. To find out the preservation and conservation techniques.
2. To identify and to reduce the risk of damage.
3. To know the concept of preservation and conservation role of librarian doing so procedures.
4. To learn about the conservation and preservation control techniques for library materials.

Scope of the study

The study's focus is restricted to determining the best practices for conservation and preservation of library materials. The tools and methods used in libraries to conserve and preserve their collection are also the subject of this study. The investigation comprises finding determine the factors that contribute to the degree of material deterioration in academic libraries.

Statement of the problem

The primary worry in libraries is the loss of library contents, which has led to the requirement for conservation and restoration.

The importance of records in terms of their impact on society's economic, socio-political, and educational aspects must be properly taken into account. every activities must be maintained and conserved in order to safeguard the data contained in every communication media for effective usage by future generations.

Review of literature

To give a clear picture of the aspects of preservation and conservation, the review of related literature is separated into two main sections.

Preservation

The different reasons why library materials deteriorate have been covered by Harvey (1994); Langwell (1974); and Mahapatra and Chakrabarti (2003).

The reasons contributing to the deterioration of rare manuscripts in the Sikh Reference Library of Golden Temple, Amritsar, are examined by Narang and Singh (2014).The preservation of rare books and manuscripts has received a lot of attention from Huntington Library (Iiams, 1932).Case studies of seven preservation projects in seven different libraries are presented by Marrow (1983). The findings of the first national investigation into archive preservation procedures in the US are presented by Conway (1990). The results of the study and analysis indicate that while archivists have learned about basic prevention and treatment methods and recognize the importance

of their preservation work, they have only partially incorporated the range of cutting-edge methods to protect cultural heritage into their professional practice.

Conservation

Due to a lack of experience, qualified personnel, and enough conservation lab space, many libraries and archives around the world do not take the conservation component into account. Cunha & Cunha (1972) have compiled a list of references regarding the preservation of library resources. Resources for the preservation and conservation of library collections are rarely sufficient to fulfill the enormous needs that exist. Harrison (1982) has created a bibliography on the topic of conservation of archive and library materials. According to Blank and Stavisky (1997), the Jewish Theological Seminary of America's library in New York is home to rare printed books, manuscripts, fragments, incurables, archival materials, and illustrations from the 16th century onward. In 1996, the library started the process of conserving twenty-three manuscript fragments.

Several methods for conserving and preserving library and archival materials have been demonstrated by Balloffet and Hille (2009). The conservation and preservation methods used for the holding exhibition of library materials have been depicted with diagrams.

HYPOTHESIS

- 1.The reasons behind the deterioration seen in academic libraries do not significantly differ from one another.
- 2.The methods used to conserve and preserve library materials do not significantly differ from one another.

Research Methodology

The study aims to investigate the conservation and preservation methods used in libraries. The goal of the current project is to investigate methods for conserving and conserving library items, as well as preservation and conservation procedures. The entire study is founded on scientific research technique principles and several hypotheses that have been periodically validated. For this study, the researcher used the survey method of research. The study survey method proved to be quite beneficial in gathering dependable and valuable data. The use of survey research techniques can reduce costs and save time while maintaining research efficiency, accuracy, and sufficient information.

FACTORS OF DETERIORATION

Any material that has changed from its initial state due to an object's interaction with destructive causes is said to have undergone degradation. Wear and tear, bio infestation, warping, brittleness, shrinkage, cracks, abrasion, holes, and the buildup of dust and debris, among other things . Are some of the ways that paper-based materials deteriorate. In general, the following elements can cause library resources to deteriorate:

- 1.Climatic (environmental) variables, such as heat, light, humidity, moisture, dust, and water.
2. Rodents, insects, and microorganisms are examples of biological factors.
3. Chemical components.
- 4.Human elements and
- 5.Mishaps.

ENVIROMENTAL FACTORS :

Light : - Paper deteriorates when it is exposed to light, whether it be artificial or natural light. Light, particularly sunlight, can seriously harm have written or printed things on paper. When paper is exposed to sunlight in the presence of air (oxygen), photochemical degradation occurs quickly. This degradation is mostly caused by UV radiation from light. The lengthy cellulose chains are broken and the paper becomes fragile and feeble when a portion of the cellulose is converted to oxycellulose. The production of oxycellulose also causes white paper to yellow and coloured paper's ink and dye to fade. A significant portion of artificial light, such as fluorescent tube

light, emits UV rays that corrode paper by turning it yellow. However, the following variables determine how much mild damage there is.

- 1.) Light intensity: The rate at which the paper deteriorates increases in tandem with an increase in light intensity.
- 2.) Exposure duration: Paper deterioration is directly correlated with the length of time it is exposed to light.
- 3.) The distance from the light source: the greater the distance, the less harm. Warmth The high temperature of the atmosphere is typically the source of heat. Temperature is used to measure heat, either in Fahrenheit or Centigrade. The cellulose fibres are dehydrated by high heat and low humidity, which makes the paper brittle. It becomes so brittle upon contact that it begins to collapse. Conversely, a high temperature combined with high humidity fosters the formation of Mold. When electric bulbs are used for lighting, the temperature of the space rises because more powerful lights produce more heat. Extreme temperature variations, such as those of 5 °C in the winter and 45 °C in the summer, have an impact on the physical state of library materials.

Humidity and Moisture: The amount of moisture in the air we breathe is known as humidity. Relative humidity is used to quantify moisture. Water enters organic items through the surrounding air and is absorbed to varying degrees by all of them. When there is significant humidity, the paper absorbs more moisture due to this absorbent property. Paper must have a certain level of humidity to remain flexible, but over time, excessive humidity causes the paper to get soggy and damages the Fibers. The main factor causing many kinds of physical, chemical, and biological deterioration of library items is moisture. It causes the book binding to become loose and weakens the glue. Additionally, it degrades the paper's sizing components and spreads ink. Wet book pages that are frequently glued together. Additionally, it quickens the decomposition of numerous chemicals, which causes paper to become discoloured and yellow. Additionally, moisture encourages the growth of fungi, which harms materials used in book binding and paper.

Dust and Dirt - Dust is the fine, dry particles of any material in the air; it contains moisture, fungus spores, and metallic materials, among other things, and is extremely dangerous for libraries and historical collections. It settles on any surface of the item after being borne. Due to its hygroscopic nature, dust turns into dirt when it comes into contact with excessive humidity. If this dirt adheres to the books' surface, it might be challenging to remove. The library collection is deteriorating physically and chemically due to dust and filth. Dust serves as a nucleus for moisture to gather around, and this moisture provides the humidity needed for fungus to grow and for chemical reactions that result in the creation of acids. The solid particles of dirt and dust, which differ in size and hardness, cause abrasion on the books' surface.

Water - All three of the regular states of matter—solid, liquid, and gas—are found in water. It causes dimensional changes in hygroscopic materials, acting as a physical agent of degradation. Water that is damaging to the library collection can come from a variety of causes, including human error, leaking roofs, broken plumbing, and open windows during inclement weather. Over-wetting causes a biological attack on paper, typically shown as the development of mildew or fungus. Water can cause stains on paper, rotten leather, smeared ink, weakened adhesive, and long-lasting fungus, among other problems. Water damages steel furniture by causing it to rust.

Limitations

To guarantee the long-term viability and accessibility of library materials, preservation and conservation are crucial. Some common limitations include budget constraints, lack of specialized equipment or expertise, and the deterioration of materials over time. Libraries often prioritize items based on their historical or cultural significance, which can lead to some materials receiving more attention than others. Additionally, the use of certain preservation techniques may alter the original appearance or structure of the materials. Despite these

limitations, libraries continue to explore new methods and technologies to better preserve and conserve their collections.

Preserving and conserving library materials can be challenging due to various factors. Limited funding can restrict the resources available for proper preservation methods. Additionally, the natural aging and deterioration of materials over time pose ongoing challenges. Some materials, like fragile manuscripts or deteriorating photographs, require specialized expertise and equipment for conservation. It's also important to balance preservation efforts with the need for accessibility, as some conservation methods may alter the original appearance or restrict handling. Despite these challenges, libraries strive to find innovative solutions to ensure the longevity and accessibility of their collections.

Conclusion

The investigation came to the conclusion that resource deterioration and loss are caused by improper conservation and preservation techniques used in academic libraries. Accordingly, the study suggested that libraries use cutting-edge tools for preservation and conservation, such as ICT devices with technology built in. These will provide sufficient storage and improve the robustness and endurance of the information items kept in the libraries.

Information material's shelf life is influenced by handling, management, and storage circumstances. Not just the archivist or the conservator, but everyone should view preservation as an ongoing responsibility that spans the record's whole life.

Recommendation

An essential component of managing libraries and information is the preservation and conservation of library items. In nations with limited resources, libraries must strike a balance between meeting the requirements of an ever-growing student population and their own importance and necessity. Training courses on preservation and conservation management, as well as environment control, storage, housing, and handling of information resources, should be offered to information handlers and users such as librarians, archivists, and information technologists.

REFERENCES

1. Balloffet , N. , Hille , J. , and Reed , J.A (2009) . The conservation and preservation of Historical Records. The American Archivist, 40 (3) , p 321 324 .
2. Bokhara , Narendra , (1997) conservation of Manuscripts : Prevention in Better than cure conservation of cultural property in India , vol 30. New Delhi: P 52-53 ..
3. Dale cluff , E . (n.d) , The role and responsibility of the library in preservation and the conservation , p 181-196
4. Gupta , C.B. and Haider , S.H. (1995) . Conservation of Manuscripts; Preservation in Better than cure - conservation of cultural property in India , vol 30 , New Delhi , p 52-53 .
5. J eyraj , V. (1995) . Care of Archival Materials, Thanjavur Saraswati , Mahal series No : 395 .
6. Odogwu , N.J. (2008) . Preservation and conservation of school library materials. Owena Journal of and information science . Vol.3 (1) pp 54-61 .
7. Prasad ,Lalan Kumar . (1995) . Protection of Documents from Photo Chemical Effects of light - CCPI , vol 28 New Delhi : p 45-49
8. Ramaiah . L.S and G. Sujatha , " Preservation of library , Archival and Digital Documents " problems and perspective . P 150-160 .
9. Uniyal . C.P. (1995) . Preventive Conservation of Archival Materials: Some rather ignored but vital aspects - CCPI , vol 28 , New Delhi : p50-55 .