

# Significance of Preservation and Conservation in Libraries

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## Abstract

The physical deterioration of library materials, especially of paper-based materials, is now recognized as one of the major professional issues of librarianship. This deterioration occurs from various factors such as the quality of environment which library collections are stored, the handling of these collections, the increasing use of library resources, etc. This paper aims to identify the significance of preservation and conservation in libraries and to find out its major professional issues and how to overcome them. So, this paper presents an overview of preservation of library materials, the inherent characteristics which cause deterioration, the extent and nature of preservation problems in collections and methods of controlling the storage environment, handling library materials and education of librarians, library staff and users. Qualitative research method is used for this study. It will be useful for librarians, library staffs, researchers and the students of librarianship.

**Key words:** preservation, conservation, library materials, professional issues, deterioration

## Introduction

Libraries are repositories of wisdom of great thinkers of the past and present. They are social institutions with the responsibility of dissemination of knowledge to the people without discrimination. The holdings of these libraries are the heritage of mankind as they preserve facts, ideas, thoughts, accomplishments and evidence of human development in multifarious areas, ages and directions. The past records constitute a natural resource and are indispensable for the present generation as well as to future generations to come. Therefore preserving this intellectual, cultural heritage becomes not only the academic commitment but also the moral responsibility of the librarian who are in charge of these repositories.

Modern libraries maintain collections that include not only printed materials such as books, periodicals, newspapers, and magazines, but also non-printed materials, such as films, sound and video recordings, maps, photographs, microfiches, microfilms, CD-ROMs, computer software, online databases, and other media (Ogunsola & Ikegune, 2016). Library materials belong to everyone. Hence, one of the most important responsibilities is to care for these materials and to keep them in good physical condition so that they will be available in the future.

One of the chief concerns in library administration and operations is the preservation and conservation of library materials. Preservation of information resources in libraries is an integral library operation that can make the libraries useful.

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The deterioration of library materials, especially the printed materials have been in existence for some decades. The physical deterioration of library materials, especially of paper-based materials, is now recognized as one of the major professional issues of librarianship.

### **Objectives of the Study**

This study aims to:

- i. to identify the significance of preservation and conservation in libraries
- ii. to identify various types of deterioration occurred in libraries
- iii. to investigate the preservation and conservation techniques to be used in libraries
- iv. to find out its major professional issues in libraries and how to overcome them
- v. to enhance preservation performance in libraries

### **Method of the Study**

Qualitative research method is used for this study. In this study, the required data were collected through literature survey. So, the necessary information was collected from various documentary sources, such as books, periodicals, and various online e-resources.

### **Concepts of Preservation and Conservation**

Preservation means the combination of conservation and restoration for a collection, to provide full care and maintenance. It is achieved through appropriate selection, housing, care and handling, security, climate control, repair and conservation treatment. Preservation is a term that applies to the overall responsibilities of caring for collections. Regardless of the format: print, non-print, or digital - all library and archival materials require protection.

Clayton and Gorman (2003) opined that preservation is the generic term, and includes all activities associated with the maintenance of resources and the preservation of information content. This is in contrast with conservation, which refers to the physical items themselves in order to extend their usable life.

Jordan (2003) describes that preservation is the activities, principles, practices, and organizations that ensure the usability, longevity, and accessibility of recorded knowledge. Activities currently defining the realm of preservation of library materials include conservation (general collections repair and special collections), reformatting (microfilming, photocopying, and digitization), selection for preservation, environmental monitoring and control, care and handling of materials, disaster preparedness and recovery, standards relating to materials, practice, and techniques, commercial binding, and preservation education and training.

According to IFLA Principles for the Care and Handling of Library Materials (2010), preservation is seen in its entirety to include managerial and financial

considerations as well as storage and accommodation provisions, staffing levels, policies, techniques and methods involved in preserving library and archival materials and information contained in them.

Conservation and Preservation are the processes of keeping an object safe from harm or loss, damage, destruction and maintaining it in a reasonably sound condition for present and future use, preservation deals with the regular maintenance aspect whereas conservation deals with the curative treatment (Sawant, 2014).

Conservation was also defined in IFLA Principles for the Care and Handling of Library materials (2010) as specific practices taken to slow down deterioration and prolong the life span of an object by direct intervening in its physical or chemical make-up. The composition of some of the media of storing information makes deterioration inevitable. Deterioration may set in through the natural ageing process or as a result of other factors such as chemical composition of the media of information, biological agents, environmental factors, physical agents and improper handling. There is, therefore, the need to take certain conservation measures to slow down deterioration to avoid losing these library resources. Conservation involves taking protective measures to prevent decay and consequently, the loss of library resources.

Conservation is a field of knowledge concerned with the coordination and planning for the practical application of the techniques of binding, restoration, paper chemistry, and other material technology, as well as other knowledge pertinent to the preservation of archival resources. Conservation can be further characterized as both preventive and remedial. Preventive conservation consists of indirect action to retard deterioration and prevent damage by creating conditions optimal for the preservation of materials. On the other hand is remedial conservation, which consists mainly of direct action carried out on documents in order to retard further deterioration (Ngulube, 2003).

### **Preservation Activities**

All library materials slowly deteriorate. Hence, preservation activities are significant to be performed in libraries. The aim of preservation activities within the library is to prolong the usable life of useful research information in two ways: preventive preservation and prescriptive preservation. First, preventive preservation seeks to reduce risks of damage and to slow down the rate of deterioration. This is usually accomplished by selecting good quality materials, and by providing suitable storage environments and safe handling procedures. Secondly, prescriptive preservation identifies and treats or copies damaged materials to restore useful access to the information. Whether preservation is preventive or prescriptive, it is necessary to identify the variety of materials within the collections so that preservation recommendations can be made suitable for each.

Preservation activities include the maintenance of collections in line with in-house stack management policies and practices. Stack management is responsible for the optimal maintenance of the Library's collections. Collections include a variety of media such as newspapers, books, journals, maps, photographs and manuscripts. These tasks include the regular shelving of current and used collections, the

preparation of periodicals and newspapers for binding and the re-location of library collections. Much attention is given to the promotion and development of preservation efforts.

In the course of library work, library staff and researchers handle books, documents and records. The provision of better environmental conditions and the adoption of improved handling and storage methods can prolong the useful life of all historical materials.

### **Why Library Materials Deteriorate**

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. Deterioration is defined as a loss of quality in any library material which decreases its ability to carry out its intended function.

Library materials deteriorate due to the problems such as atmospheric pollution and its effects on paper; the effect of acids and other impurities; the yellowing of paper, insect and fungus damages; the effect of climate, humidity, temperature, and other environmental conditions; and the effect of fumigants on paper (Kathpalia 1973, 19).

Various scientific investigations of the causes of decay show that the deterioration occurs mainly one or more of the following physio-chemical situation (Kathpalia 1973, 21):

- (i) Heat and exposure to light
- (ii) Moisture, which besides constituting a hydrolytic danger also favours biological attack and deterioration due to fungi, insect, etc.
- (iii) Frequent and pronounced changes in temperature and humidity
- (iv) Acid impurities, such as those present in the atmosphere of industrial area , or in dust.
- (v) Oxidizing agent
- (vi) Pressure of heavy metals which, even in the traces, catalyze oxidatice degradation
- (vii) Presence and use of acidic sizes, such as alum, rosin, etc.
- (viii) Presence and use of acidic inks
- (ix) Use of fibres with low cellulose content and presence of non-cellulose materials. Such non- cellulosic materials are sensitive to deteriorative agents, such as light.

So, deterioration is caused by the various factorsm such as inherent problems, environmental factors, biological factors and chemical factors. They are light, moisture, heat, dust particles, insects and acids, differing from the deterioration associated with the normal ageing of paper. Deterioration due to all these causes can be counteracted by preventive measures and such measures constitute the

conservation of documents. If the cause or causes of deterioration are established, it is possible to prevent, check and repair.

### **Preservation Techniques**

One of the ways of preserving documentary information materials in libraries is referred to as de-acidification. De-acidification simply means removing acids from paper-based documents. The aim of mass de-acidification process is to neutralize the acid in paper, books and documents and add alkaline to the paper to leave it with a buffer to withstand future acid attack (Harvey 1993). De-acidification methods can be used to remove the acid content and increase the longevity of documents.

Digitization is one of the ways in which printed materials are being preserved for posterity in libraries and archives. Fumigation is also acknowledged as one of the best management techniques for preservation. Libraries and archives should put together a sustained programme of mass fumigation of documents to forestall fungi infestation.

Environmental preservation techniques have also been identified as one of the effective means of preserving library and archive documentary heritage. The use of air-conditioners, fans and windows in ensuring good air circulation is highly recommended. Light levels within the library should also be controlled using appropriate techniques including the use of binds and curtains to reduce ultra-violet rays of sun and the use of fluorescent UV-filters (Alegbeleye 2002).

Biological agents are major cause of deterioration of documentary information materials. With regards to insects, the most appropriate method of dealing with them is through integrated pest management measures. The needs for preventive measures in conservation and preservation of library materials are proper housing of documents, protection against heat, humidity, light, air pollution, dust, insects, fungi, fire, water, and mishandling.

Preventive conservation and preservation approach in libraries should focus on improving the environment, controlling light, temperature, humidity, and pollution. All libraries need to preserve and conserve their collections against deterioration from a variety of sources including chemical and biological threat, as well as physical damage through handling.

Thus, the recommended environmental conditions which should be provided to prolong the useful life of library materials are:

- (i) Low light levels
- (ii) Steady relative humidity (around 55 %)
- (iii) Steady temperature (around 21 degrees celsius)
- (iv) Good air circulation
- (v) Elimination of airborne pollution
- (vi) Control of biological enemies
- (vii) Improved handling techniques

(viii) Correct storage techniques.

### **Collection Maintenance**

Collection maintenance is really good housekeeping for preventive preservation. It is a very effective way to make an impact on a collection without spending huge amounts of money. The techniques involved are simple:

- cleaning the library and shelves
- cleaning and dusting covers and text block
- Proper shelving and careful removal of documents
- Careful use of books/document during reading
- Photocopying
- placing items in new enclosures (boxes and folders)
- performing minor repairs to covers and text block
- tipping in loose pages
- removing tapes, clips and elastic bands etc.
- sewing items into pamphlet binders
- attaching new labels
- replacing items in correct sequence on shelves

This work is ideally carried out in the stack area. Work stations equipped with all the necessary repair materials and tools are placed near by. The advantage of this system is of course that it saves a lot of time and handling. It is not necessary to record the movement of the items as they do not leave the stack area. Items are readily accessible if required by a client.

### **Issues of Preservation and Conservation of Library Materials**

Preservation is a pressing concern for librarians in all parts of the world. It is important to take adequate care of library resources. Limited funds, low-quality book production are some reasons why preservation of library collections is essential.

Libraries have always struggled against the physical destruction of their collections. Fires, floods, earthquakes, and wars have damaged the holdings of countless libraries, destroying forever much of the recorded history of human civilization. But library materials also fall victim to slow decay caused by acid content in paper, insect infestation, improper storage or handling, and excessive heat, mildew, humidity, and air pollution. Preservation does not simply happen on its own, so a well plan should be drawn and managed.

Issues of preservation and conservation of library materials include:

- Lack of knowledge about significance of preservation and conservation in libraries
- Lack of preservation and conservation policy
- More emphasis on library services than preservation management
- Inadequate finance
- Inadequacy of Equipment/Materials
- Tropical climate
- Manpower and other infrastructure

- Quality of paper and ink
- Maintenance culture
- Administrative problem
- Lack of qualified staff
- Inadequate manpower
- Inadequate training of staff and users

To overcome these issues encountered in libraries, librarians should care library collection to be maintained in proper storage and proper handling techniques. It is also important to have effective working preservation policy in place for the library and should be made available to the staff and library users. A preservation section should be established in libraries. All library staff should be trained on how to handle information resources and likewise the library users. Training, seminars and workshops on preservation should be conducted and library staff should be sent to attend local and international training.

### **Conclusion**

Preservation is indeed a central issue in modern librarianship. Since university libraries exist to support the teaching and learning activities through provision of current, up-to-date information, preservation must be given adequate attention. This study will enhance preservation performance in libraries by enlightening librarians and non-librarians on the importance of preserving their materials in the most suitable way for their libraries. It enables librarians make quick decisions on what to preserve immediately to reduce further deterioration and what can be postponed for future generations. The expected benefit of preservation is the awareness of the need to adequately reduce the rate of deterioration of valuable information resources of the library, thus making the materials available for future use. Basically, all archivists and librarians should learn preservation skills so that these skills can be integrated into all aspects of library routine works.

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