

Naveen Chaparwal Guest Faculty, DLISc, UCSSH, MLSU Udaipur

GENERAL APPROACH TO PRESERVATION

When we talk of the preservation of a document in a library, be it a manuscript or a printed book, or in the form non-book item, we look at the three components which constitute it:

- i) The artefact (the physical entity)
- ii) The image (the impression on the artefact)
- iii) The information (the thought content)
- Preservation of the Artefact and Image

For the sake of convenience in this discussion let us use the generic term 'book' to include other reading materials A book is almost unusable if its pages are brittle and the brittle pages crack and crumble when turned, or its pages to each other and cannot be turned. It is also difficult to use if its binding is in a delicate, fragile state, incapable holding the pages together. There are the cases where the *artefact* is in an unhealthy state. Similarly, a book material and not clearly legible. If the photographs and illustrations are blurred, discoloured or stained, their usefulnes greatly diminished, and in extreme cases these become almost useless. Scratches on films and vinyl recordings retheir usefulness to a great extent.

- All these cases are the ones where the *image* is in a poor state. Deterioration of the artefact and the image is cause the interplay of three basic factors:
- i) The inherent characteristics of the materials of which the artefact is composed;
- ii) The storage condition of the artefact, and
- iii) The type, intensity and amount of handling of the artefact by the clientele, and the Library staff.

Inherent Characteristics of the Library Materials

- a) Palm-leaf and Birch-bark Manuscripts Birch tree is of Himalayan Origin. Birch-bark sheets usually consist of a number of layers, collected from the inner side of the bark. These are thin and delicate sheets, containing some natural preservative chemicals (salt of salicylic acid), which are insect-repellent until this natural preservative dries up.
- Palm-leaf, on the other hand, is of two varieties: *tala* (Palmyra) and *Sritala* (talipot). Leaves of *tala* are thick and coarse and are difficult to handle. These do not absorb ink, and, as such, characters have to be inscribed on them with a stylus on the surface and the grooves filled with ink. The leaves of sritala, on the other hand, are thin, flexible and can be handled' or written on like paper.

Birch-bark and palm-leaf are natural organic materials. These possess inherent strength to withstand normal environmental effects for many years, even many centuries, if stored properly. But a normal and congenial environmental condition is difficult to maintain for these materials. Over a long period of time, the layers of birch-bark tend to separate and the edges of birch-bark and palm-leaf show a tendency of curling up, if exposed to prolonged dryness. Prolonged dampness also causes their gradual deterioration.

The hand-written texts on palm-leaf and birch-bark generally used black carbon ink or pigment, which have the quality of retaining legibility for centuries, if kept away from acidic contaminations.

EVOLUTION OF WRITING MATERIALS

• The history of writing and the history of human civilization are inseparable entities. Writing, and for that matter printing, notwithstanding our modem technologies, is still by far the most potent and effective tool used in communication, and communication is the foundation of all human progress.

• Stone and Metal

Writings on stone are the oldest examples of writing which have survived the vagaries of nature through centuries. Other more fragile materials, which might have been used for writing at various times, being destructible, have not survived, and our knowledge about them is mainly through literary references, and is not always quite conclusive. Writing on stone had to be done painstakingly with the help of chisels or some sharp tools. Once written, the message acquired a very long life. Inscriptions on stone slabs, on the sides ofrocky mountains or on stone pillars, still exit in many parts of the world. The *Rosetta Stone* of Egypt which is more than 5000 years old, is one such typical and valuable example. Use of metal plates for writing purposes appears to have been introduced at a later date, but that too, quite early in history. Inscriptions on stone mostly bear texts of special value, royal annals, religious codes of conduct and some such things, and the metal plates were generally used as documents of a more mundane nature like land grants, legal codes, interstate agreements and the like. These are available in a large number in, various museums of the World. But the fact remains that neither stone slabs, nor metal plates could ever achieve the status of "books" for disseminating knowledge and information, as books do.

Clay Tablets

o Something which is akin to the present day 'book' was created by our ancestors the Sumerians, the Babylonians, the Assyrians and the Hittites. They used tablets made of water cleaned clay. While the clay was still soft, the writer used to inscribe writing on it with the help of a stylus. After the writing was done, the clay tablet was either dried in the sun or for better, durability, burnt in kilns. The tablets, which looked like bricks, were of different shapes and dimensions about five inches long. These burnt tablets were quite hard and almost indestructible.

Papyrus

o If the clay-tablet was to some extent, akin to our modern book, the papyrus roll, is more nearly its direct ancestor. The Papyrus roll is of equal antiquity as clay tablet. About the time the Babylonians were producing clay-tablets with cuneiform writing, the Egyptians learned to make beautiful writing material from papyrus plant. Papyrus, from which our paper derived its name, is a reed-like plant (Fig. 2). In ancient Egypt it grew abundantly in the shallows of the Nile delta. The stem of the plant is 3 feet to 10 feet in length, triangular and tapering in form. The Egyptians used the stem of the plant for various purposes, such as, basket-making, weaving mats and sails of boats etc. But the most significant use for which papyrus has found its enviable place in history was its use as a writing material. Because of its various uses the growing of the plant was not entirely left to nature. The Egyptians in fact cultivated it in a big way to meet the growing demand for it, specially as writing material.

• Animal Skin

• Skin of certain animals has been used as writing material centuries ago. The animals whose skins were found appropriate were chiefly sheep, goats, and calves.

• Parchment

o Parchment is the generic term representing animal skins used for writing purposes. It is made by removing the hair or wool from the skin of the animal, and placing the skin in lime to get rid of its fat. The skin is then stretched on a frame and shaved with knives and scrapers. Powdered chalk is 'rubbed on with pumice stone to smoothen and soften the skin. These of parchment as writing material have this history: The successors of Alexandar the, Great developed the city of Pergamum near Constantinople in Asia Minor, as a centre of learning. When the library at Pergamum threatened to become more important than the one at Alexandria, the Pharaoh cut off the supply of papyrus to Pergamum. This was in about 190 B.C. when the supply of papyrus from Egypt dried up, that at the command of Eumenes II, the ruler of Pergamum, experiments with animal skin started, to replace papyrus. The new material was known as *pergamemtum*, which is the origin of the word parchment.

Reference

1. htt://egyankosh.ac.in

Thanks