

Among both conservators and curators there seems to be a veritable tower of Babel as to what is understood by preservation and conservation. Many organisations and authors have dealt with preservation terminology. For our purposes it is not practical to continue this discussion. The most important point is that at least all conservators define their own terms clearly so that their colleagues know what they mean. At the very least it will lessen the confusion of tongues. MacKenzie gives very broad definitions, which more or less cover the whole field of conservation (MacKenzie, 1996):

- *preservation*, in its current meaning in the archive world, refers to everything which contributes to the physical well-being of the collections;
- *conservation*, or direct physical intervention with the material, is only one part of preservation;
- *indirect preservation* includes the building, archive storage methods, security against threats, and handling;
- *preservation by substitution or reformatting*. This means making copies of the records, normally on microfilm, and then using the copies in place of the originals, thereby reducing wear and tear on the latter and preserving their condition.

The Memory of the World programme refers to the different terms as follows (Memory of the World-website):

- *preservation* is the organisation and programming of all kinds of activities regarding conservation of the collections in general;
- *conservation* is a concept that includes *preventive conservation* which aims to reduce the risk of deterioration: environmental control, regular maintenance and protection of the collections by using appropriate treatment, anti-theft devices and creating surrogate documents for heavily-used original documents.

2.2.1 *Preservation Pyramid*

To clarify the jumble of conservation terminology the National Archives of the Netherlands developed the Preservation Pyramid. At the bottom of this model is the section of preservation from which the entire collection benefits and at the top is the section from which only one object benefits from the actions of the conservator.

The Preservation Pyramid contains four components:

- *preventive conservation* stands for all direct and indirect steps and provisions that will optimise the environmental conditions, and the preservation of and access to the object in order to prolong the life span. To start with it encompasses a clear line of policy that includes training, attitude building and professionalization of all staff;
- *passive conservation* stands for all direct and indirect steps directed towards the prolongation of the life span of objects. It includes good house keeping, air purification, air conditioning, repository hygiene and repository monitoring. An important feature of passive conservation is the survey of the physical condition of the collection;
- *active conservation* stands for all direct and indirect steps and actions on objects in order to prolong their life span. It includes re-boxing and re-wrapping objects, cleaning objects, mass-deacidification and disinfecting. This phase in conservation involves tasks that can be performed by people who are not trained conservators;
- *restoration* stands for all actions taken to prolong the life span of the object in its perceptible appearance in compliance with the rules of aesthetics and ethics, while maintaining its historical integrity. As it is the work of highly trained conservators who work on individual objects this is the most expensive and time-consuming phase in preservation.

2.2.2 *Preventive conservation*

One of a museum's primary purposes is to ensure that its collections are available for future generations. A popular image is of white-coated conservators working in laboratories to stabilise and repair items that have suffered from damage or neglect. This is 'remedial conservation'. It is, however, more efficient to prevent decay from occurring in the first place. This is preventive conservation. Deterioration is a continuous, natural process. It can, however, be slowed; indeed, science has suggested ways in which the natural lifespan of most museum objects can be extended. Many of these techniques are based on common sense and good housekeeping. However, these must inevitably be reinforced by the results of current research, and access to specialist information is vital if an informed approach is to be taken (Read, 1994).

Knowing and identifying problems of conservation in a tropical environment and considering developments is hard to understand and pinpoint. The emphasis ought to be laid on preventive conservation (Dartnall, 1988). After all prevention is better than cure. This holds especially true for developing countries that cannot allocate sufficient financial means to preservation. At the same time the more prosperous countries

consider preventive conservation as a major cost-saving measure. Indeed, because preventive conservation considers the welfare of whole collections instead of the treatment of individual objects, it allows the more efficient use of limited resources for the benefit of a larger part of our material heritage. Perhaps that is why preventive conservation, the management of the environmental conditions under which collections are housed and used, has made large strides in research and application (GCI-website).

Unfortunately, not all managers are convinced of the necessity of preventive conservation. During her stay in Malaysia Margaret Child noticed that librarians at the National Library were not interested in spending the funds necessary for developing an infrastructure that would allow a programme to gain momentum and mature. Rather, they wanted to achieve faster results. Basic preservation efforts such as simple repair or protective re-housing, used in a consistent and co-ordinated program, are more effective than ad hoc initiatives (Child, 1997).

Many precautions can be taken right at the start in the construction and design of the building (see section on *Building*). Storage conditions also offer many opportunities to prolong the life span of the objects (see section on *Storage*). See also *ARAFU, 1991; Beck, 1996; Brandt, 1994; Guillemard et al., 1990; Maidin Hussin, 1985; Raphael, 1993; Read, 1994; Souza, 1993 and 1994; Staniforth, 1997; Torres, 1996.*