



14. Bone and Ivory Objects

Bone and ivory have the cellular structure. Ivory has a hard and dense tissue known as dentine, which results in striation, which may be seen radiating from the centre of the tusk. Bone and ivory are anisotropic having directional properties and for this reason they are easily warped upon exposure to heat and damp. They are decomposed by the prolonged action of water due to the hydrolysis of Ossian. Acids also disintegrate them. Being porous they easily go stained. They lose their natural color due to the long exposure to light.

14.1 Conservation of Bone and Ivory Objects

Accumulated dirt, oil and grease can be removed by brushing with 1% solution of labolene in rectified spirit. The washing are removed by blotting paper. The absorbed soluble salts may be removed by immersing the objects in distilled water for about 5 second and repeated a number of times with fresh distilled water. Then the objects are washed in 95% rectified spirit twice and dried in air. Weak objects may be strengthened by 2 % poly vinyl acetate in acetone. If the object is very fragile, it may be vaccum impregnated in 5% solution of poly vinyl acetate in acetone. In the case of restoration nitro cellulose adhesives may be used.



15. Lacquer Ware

Lacquering is a very good technique of finishing an art object. There are two types of laces. The resin after processing results in the lace of commerce i.e. shellac

15.1 Deterioration in Lacqueware

Moisture affects lacquer ware. The objects on contact with water become chalky or white or opaque. Very low humidity makes the lacqueware brittle and the lacquered portions may be chipped off. They are easily abraded.

15.2 Conservation Measure

Lacqueware should not be cleaned with water or an aqueous solution as they become opaque or white with water. As they are fragile, shocks and abrasion should be avoided. Soft brushes should be used for cleaning. They should be wrapped in soft tissue paper and kept in padded boxes or shelves.

16. Paintings

Type of paintings

There are many type of paintings preserved in museums and galleries. Whatever may be the type of painting their structure is more or less similar. They have multi layered structure. They are the support, the ground, the pigment and the protective layer like varnish. Wall painting, canvas paintings, panel painting, painting on glass, ivory, cardboard, mica etc. are some to name.

16.1 Wall Paintings

The paintings executed on wall are called wall paintings or mural paintings (Muir =wall). If the painting is executed on wet wall it is called true (fresco, buono) painting. If it is executed on a dry wall it is termed as (fresco secco) painting. Flaking of paint layer, lifting up of the paint layer in the form of cups, blistering, cohesion, scroll formation, fading of the paint layer, abrasion, physical damage by mishandling and vandalism are the deterioration to the wall paintings. Dust, soot, moisture, heat, vibration, pollutants, cracks in the structure, salt action, biological agents, seepage and leakage of water are the various causes for the deterioration of wall paintings.

16.1.1 Conservation of Wall Paintings

The accumulated dust may be gently brushed off. The cracks may be set right. Leakage and seepages may be provided in the monument or galleries to avoid people going near the painting and touching them.

16.2 Paintings on Canvas

Cotton canvas or lichen canvas had been used as the supported for the canvas painting. The primed canvas is used for painting the subject on it. The pigment is in oil medium. After drying, the pigments are covered with varnish. The deterioration of painting may occur either in the canvas, ground, pigments or varnish layer. Canvas may be affected by acidity and get brown color and become dry and brittle. There may be separation between the support and the ground or ground and pigments. There may be tear of canvas, cracking of painted surface, loss of pigments etc. If the canvas is bad the painting may be relined with fresh canvas of comparable thickness using reversible adhesives like paraloid B72, WAX AND RESIN MIXTURE. THE LOSS OF PIGMENTS MAY BE REPLACED BY INPAINTING with acrylic colors. Dust, moisture, light etc, affect the painting. Therefore it is better to air condition the gallery or storage.

16.3 Glass Paintings

In this type painting only support and the ground is only glass. The painting is done in the reverse manner. After painting is done the painted surface is covered with a paint to avoid the scratching. The painting is mounted with the unpainted side foremost so that the painting is seen through the glass.

16.3.1 Conservation Measure

When the glass is broken, two supports both in the front and back are to be provided. The broken pieces are aligned together and pasted with a 5% solution of polyvinyl acetate. The retouching of the flecked off portion may be with tempera colors. The loose paper may be pasted with paraloid B72.

16.4 Panel Paintings

Panel painting have wooden support. Panel paintings have jack tree planks pasted with cloth and primed with sukkan paste.

Since this type of paintings is composite in nature, the problems are also multiple. The wooden joints get loosened, cohesion between the layer the added material get lost. Stain formation due to leakage, fading of paints etc.

16.5 Drawing , Prints and Painting On Paper

The drawing on paper, paper prints and the paintings on paper pose a lot of problems. Here paper is supported. In the case of paintings ground is also applied. Since paper is organic in nature, moisture and biological agents easily affect these types of art works. Acidity affects the paper and become brittle. They are easily mishandled. Acidity affect art

work may be dry fumigated with ammonia. They may be fumigated regularly for the eradication of micro organism. The gallery to the storage may be environmentally controlled. Light density should be within 50 lux.





17. Photographs

Photographs are also image on pear. The image is nothing but chemicals like silver halides. The negative are found on glass or celluloid, or cellulose nitrate or cellulose acetate or even polyester film.

Photographs is a very complex material , having several components like support, binding medium and photosensitive image forming chemical which may react in different ways to various factors of deterioration. The common deterioration noticed in photo graphs are yellowing, stains separation of emulsion, fungal attack, insect attack, finger prints, and folds,etc.

In the negative due to age the emulsion becomes brittle, cracks and falls off at the slightest shock or touch. They should never be touched. Humidity should be within 45-60% and the temperature also should be within 20-22degree C.



Fig. 74: Example of tarnished area on daguerreotype due to previous broken cover glass



Fig. 75: Close-up of tarnished area at lower left corner on the left stereo plate



So in this way we can say that museum is the real mother of cultural properties, it care its objects not because to save but also for care. It is also our responsibility to conserve these artifacts of past and help museums to preserve it. At last I would like to say prevention is better than cure.

Reference

- [1] Agrawal, B.S., Museum Studies, 1970.
- [2] Allen, D.A., International Seminar On The Role Of Museum In Education, Paris, 1954.
- [3] Goyal Anil, Museum And Collection Of Delhi, Herman Publication, Delhi, 1995.
- [4] Johns Walter, Activate Place, Development And Implementation, Albana.
- [5] Markham S.M., The Museum Of India, London, 1936.
- [6] Bhamika S.K. Protection and Conservation Of Museum End Fine Arts, New Delhi, 1975.

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