

CONSERVATION OF A PAPER PAINTING – A CASE STUDY

A MYSORE TRADITIONAL PAINTING ‘MAHISHASURA MARDHINI’

Introduction

‘Mahishasura Mardhini’ (Goddess Durga on a lion, killing the demon king Mahishasura) was a traditional painting of the Mysore school. It had apparently been subjected to repairs and treatment sometime after it was completed. It was found that the painting had been given a backing with a newspaper, which carried the date 1887. Thus the date of the painting was clearly shown to be just before or a few years prior to 1887. How one wishes such clear evidence of the age of a painting was available more often! (The traditional Indian paintings never carry the artists’ signatures and date, because in those days, artisans used to practice this as a ritual than a mere assignment).



Painting before Conservation Treatment

Examination and documentation

Painting was examined in detail using Stereo Microscope. The possible testing on pigment, pH range and adhesive used for making Vasli and previous repair was carried out and documented. Photography of several stages was also done in detail.



Same painting after conservation treatment

Condition:

Preservation status:

Painting was in unacceptable condition. The painting having no frame and glass was kept for a long time in a bad storage place, which, lead to many biological problems like insect attack, etc. The dampness in the storage place came in close contact with the painting is evident in colour smudge and smear, visible on the paint surface. The same moisture caused water stains on the painting.

Previous intervention:

Interestingly, some large missing portions had been badly repaired using skin grafting method i.e., the larger painting cut into smaller size and lacunae was filled with the cut pieces of the same painting. The adhesive used was gum Arabic and it created brownish stains on the surrounding areas of the repair.



Detailed photograph showing stains and colour flaking – before conservation



The same – after conservation



Detailed photograph showing previous bad repairs and tares – before conservation

Painted paper

The paper used for the painting was a thin drawing paper without having any acidic raw materials. Tears, holes and cuts noticed on the painted paper.

Primary Support (Vasli)

The painted paper was backed with old inferior quality newspapers, which remained in contact with painted paper for more than a century. During 19th and early 20th century artisans were not easily getting good quality papers to execute the paintings, the cost of the paper was far too high to afford. Therefore, they opted for the most commonly available thin drawing papers, which needed additional support for easy handling. The chosen thin paper used to be pasted with many layers of newspapers, prior to start the painting. The adhesive used was commonly gum Arabic. The thickness of the layer varied from painting to painting. This technique was known as “Vasli” This particular painting had Vasli, of about 5mm. As a result of this acidic paper support, the painted paper had become acidic, stiffened and brittle. It was found to have a pH around 4.

Pigment

It was a common practice to use natural vegetable and mineral colours for all these traditional paintings, executed during 19th to 20th Century. The painting to be treated was having the same pigments. These traditional paintings used to execute with “Gouache” technique or wash technique. Sometimes, There were paintings having both the techniques are also available. The particular painting had both techniques. Dry white pigment had been used thickly to give highlight and in some areas used on top most layer of the painting.

The paint surface showed a number of problems such as flaking of thick opaque paint and fading of colours. Flaking was mainly on the dry white pigment used as the topmost layer at the top of the painting and on the body of the demons. In some places, especially on the face of the goddess the colour had slightly spread due to moisture. Water stains, brownish gum stains were also noticed. Ingrained dust and dirt deposition was found on the paint surface.

Treatment:

Removal of old newspaper backing.

The challenge was removal of the newspaper backing. This was accomplished by removing the newspaper mechanically, a bit by bit using a surgical knife. Great care was taken as the original paint support being very thin and fragile. The previous repairs were also simultaneously removed. Tear was temporarily repaired with thin Japanese Lens tissue paper to avoid further damage during treatment.

Cleaning:

The next step was the removal of dust, dirt and water stains. The backside of the painted paper was cleaned with moistened cotton swabs, thoroughly. Care was taken, to ensure there was no moisture seepage into the painted surface. Dust and dirt were removed using a soft brush and possible ingrained dirt was reduced by careful application of IMS with cotton swabs.

Stain reducing:

Reducing water stains proved a little more difficult. Many techniques were employed to reduce the stain. The stiffened painted paper was relaxed by using humidification, Gortex and moistened cloth were used to humidify the painting. It was decided to carry out the treatment while moisture present on paper. Low pressure suction table was also used to reduce the hard stains. Some stains, which was on delicate area was treated locally using mixture of IMS and water on blotting paper, without giving any pressure. A piece of blotting paper was placed over the stained area and the solution sprayed on it. After sometime, it was found that the stains have been absorbed into the blotting paper, while the colours remained unaffected. Gum stain, which remained unchanged with above treatment was treated with hot spatula, water was applied on stained area with brush and left few seconds, when fiber completely absorbed the moisture the heated spatula was gently moved on stained area with the help of filter paper. When the paper dried, it was replaced with a fresh one. It was observed the stains were getting dissolved and transferring to filter paper. Since heated spatula was used much care was taken. With this technique many hard stains were successfully reduced. Some stains, which become part of the paint layer was left as it was to avoid further damage on paint layer. Hand magnifier and Stereo Microscope were also used to examine the paint layer in all the stages of stain removal.

De-acidification

Since the painted paper was in close contact with highly acidic news paper for long period it had become acidic and brittle. To improve the pH of the paper it was decided to apply saturated lime solution from verso. The process was repeated three times and dried in room temperature. Care was taken to avoid the seepage of the solution in to the painted surface. After this treatment, the pH was slightly in-between 6 to 7 range.

Reinforcement.

As stated earlier the painted paper was very thin, it was decided to reinforce it with Japanese tissue paper to improve the physical strength. Few techniques were discussed and finally Indian traditional reinforcement technique was adopted as the paint layer was delicate and fragile. The advantage with this technique was the lining process would be carried out keeping the painted surface facing upward. In that situation, close examination of the paint layer during the lining process was possible. Wheat starch was used as adhesive. Terelene cloth was moistened and spread on a table top and while it was still wet considerable thick paste was applied at the corners to avoid the cloth warping or cockling in the drying process. The chosen Japanese "Tosa Washi" tissue paper was placed on terelene cloth and specially prepared wheat starch paste was applied with soft brush. Then the pre-humidified painted paper was carefully placed over the Japanese tissue paper with the support of bondina and very gently, evenly pressed from the center towards the edges. The temporary repairs were removed from the painted paper before reinforcement. Painting was dried on the same surface in room temperature (about 15°C.) During the drying session paint layer was in constant observation. Lined painting was left on table top for ten days to avoid warping and cockling.

Infilling

The infilling work was carried out while painting was on table top. Very minute gap in-between cracks was carefully filled with tissue paper pulp and pressed over with bondina to make it even. Some areas were filled in three session to avoid overlapping. The large missing area was filled with similar thickness acied free Indian paper. Much more care was taken to

avoid overlapping. The missing area was traced with wax paper and transferred to infilling paper. pointed needle was used to groove the marked area and then moistened with mixture of IMS and water. When the fiber became soft, it was peeled along with some thin fibers. Both the infilling and painted paper was locally moistened with mixture of IMS and water (50:50). Slightly dry and thick wheat starch paste was used to avoid the cockling on the infilled area during drying process.

Re-integration

Keeping the ethics of conservation in mind, the re-integration was done carefully. The flaking and infilling area was toned down layer by layer with water based colour. Re-integrated area was kept little lighter than the original tone so that one could recognize re-integrated area in close observation.

Framing.

In these types of traditional paintings, the painting will not be in-laid before framing. The future risk possibility with this traditional method would be damage at the edges. Though it was not a very good method, the same method followed to keep the tradition continued. These paintings were framed normally with a rose wood frame and glass, however there used to be no gap between the glass and the painting. The painting's close contact with the glass resulted in many problems such as fungal growth if moisture present, due to dampness the fugitive colours would stuck to the glass etc. Therefore, here a little liberty was taken to avoid these serious problems by creating 1mm gap in-between the glass and the painting while framing.