

Thai Paintings of Wat Hong Rattanaram, Bangkok Yai

by Kulpanthada Janposri

Thai paintings in the Wat Hong Rattanaram generally depict the life of Buddha and the Ramakian. They number 57 paintings which are divided into 19 sets, a set comprising three paintings under one frame. Thai famous painters and art historians have concluded that the paintings date back to the beginning of the reign of Rama IV. This is evident in the architectural style used and the presence of modern objects in the art work such as optical lenses, book racks and western flags.

These are tempera paintings. The paints used are a combination of a binding medium, vegetable glue, and pigments. The pigments employed are lead white, red ochre, vermilion, red lead, yellow gambodge, yellow ochre, malachite, verdigris, prussian blue, carbon black, gold leaf and indigo blue. Most of them are mineral pigments with a few, like the yellow gambodge, organic dyes. The paints are applied in a typical Thai hand-

made paper, popularly known as *koy*.

By their very nature, these materials are all subject to deterioration. The paper being porous absorbs moisture which hastens its disintegration. The same moisture loosens the binding property of the glue which is water soluble for holding the pigments. Moreover, high level humidity causes the growth of microorganism on both the surface and the backing of the painting. The acidity of the paper and the other materials used for mounting like wood and pieces of leather has also a harmful effect on the painting.

The effects of these factors were apparent in the paintings in Wat Hong Rattanaram. The paintings were brittle and patches of mold and water stains were visible in some parts. A film of dust also covered them. The layers of paint were peeling; in some parts, they became powdery owing to the loss of adhesion force between the layers of paint and the paper and the lack of cohesion among the pigments.

To preserve these paintings, the conservators implemented the following steps: fumigation, cleaning, reinforcement of the paper support

and retouching. The fumigation was undertaken using the vapour of formalin. It proved effective in counteracting the effects of the molds. Each painting was cleaned with a soft brush and a rubber blower to clear away the dust. Hydrogen peroxide in ether was applied in each to remove the stains caused by molds and water. Since the paper had become brittle, fragile and torn, the backing was reinforced. A Thai handmade paper called *Sa* was used for this purpose. It was glued with the polyvinyl acetate emulsion, a glue found to be flexible, biologically resistant and non-toxic. It also had enough adhesion and cohesion forces to hold all the elements together. Retouching was done in parts where the layers of paint were damaged or missing with pigments and glue that were carefully chosen to approximate the original.

The restoration work revealed that the pigments used in the paintings were different from those used in the older paintings in other parts of Thailand. Hence, recommendations were made to do further investigations of paintings done at the same time the Wat Hong Rattanaram paintings were executed to determine whether the same finding would be uncovered.

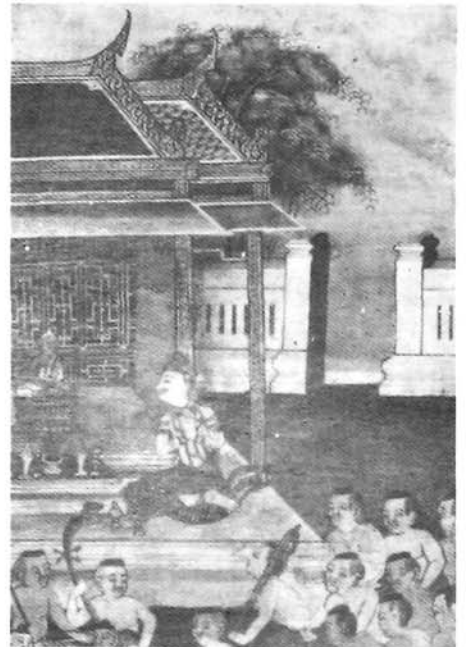
The author works as Head of Conservation Section, National Museum, Department of Fine Arts, Thailand.



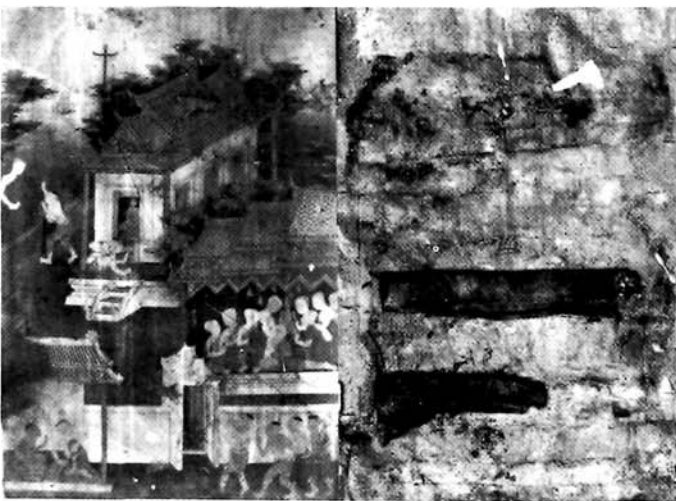
Before conservation, the painting was faded and moldy.



The back shows the disintegrating mounting paper.



After conservation, the details of the painting became more apparent.



The painting before removal of glass.



The back of the painting was also in a sorry state.



The painting after the removal of glass



After conservation

Problem of...

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