

Art Hazards: Yellowing Varnish

Varnishes protect paintings from dust and scratches, as well as having an aesthetic function. The natural resin varnishes mastic and dammar gradually oxidise and turn from colourless to yellow on exposure to light. The change is visible to the human eye within about thirty years. In the nineteenth century slightly tinted varnishes, to give a 'golden glow' were sometimes used. However, most artists before and since have preferred a colourless coating. Newly developed synthetic varnishes do not discolour and can be applied almost imperceptibly.



If a varnish becomes so discoloured that it impedes appreciation of the painting, or significantly alters its appearance from that intended by the artist, it may be removed by a conservator (see pictures above). A solvent must be used which will affect the varnish but leave the paint layers unaffected. The choice of solvent will depend on the formulations and ages of the paints and varnishes. Removal of varnishes should only be carried out by someone with a thorough knowledge of both historic painting practices and the properties of available solvents as well as good practical experience of the cleaning of paintings.

Pigment Profile: Indian Yellow



Indian yellow pigment was produced from the urine of cows fed exclusively on mango leaves. The liquid component of the urine was evaporated off and the resulting yellow precipitate formed into a ball and sold to colourmen to be washed and packaged. The paint made from this pigment was rich and transparent, with none of the fading problems associated with other yellow lakes. It was popular for watercolour painting and was sometimes used as a glaze in oil. An endeavour to dye textiles with the pigment, however, was short-lived, as clients were put off by the foul smell emanating from the fabrics. Early animal rights legislation in India put an end to the manufacture of the pigment in 1908. Despite the best efforts of pigment manufacturers, an equally light-fast substitute was not developed until the nineteen-nineties.