

Two New Techniques for Loss Compensation in Art on Paper: Integration of Surface Losses Using Textile Fibers and the Use of Sprayed Cellulose Powder To Minimize Foxing and Other Discoloration

The integration of losses to the media in works of art on paper has traditionally been done using pastel, colored pencils, or paint-based media such as watercolor. This paper discusses the use of colored cotton and polyester fibers derived from machine-made threads to reintegrate losses in design. The technique was developed to treat a large-scale watercolor by William Trost Richards, *Tintagel on the Cornish Coast*, which had sustained gouges and abrasions to the primary support. The textile fibers, obtained from commercially available sources, were processed in various ways to prepare them for placement on the watercolor. To obtain finely divided fibers, the threads were immersed in liquid nitrogen and then cut while frozen. Admixtures of fibers can be made to approximate color tones, or fibers can be layered to build up color intensity. Methyl cellulose was used as the binder for both its adhesive properties and surfactant action. Finely divided fibers tend to remain separated in methyl cellulose, a factor that helps in application. The stability and removability of the fibers were also assessed. Preliminary work indicates that this method has great potential for use with a variety of media where losses are small or linear. It has less potential for success over large areas, although the technique is evolving.

Cellulose powder has long been part of the inpainter's toolbox and is indispensable for certain operations, such as the concealment of foxing. The technique presented here shows how cellulose powder can be made into a slurry with methyl cellulose and sprayed with an external-mix airbrush to create consistent films of certain thickness and opacity. The dried films can then be shaped to the stained areas of the paper and activated in situ with low moisture. The cellulose powder can be toned before or after application to refine the integration. A drawing by Nicholas-Touissant Charlet was successfully treated using this method.

ELISSA O'LOUGHLIN
Senior Conservator
Walters Art Museum.
Baltimore, Maryland
newpondstudio@gmail.com

STEPHANIE JEWELL
Assistant Paper Conservator
Balboa Art Conservation Center
San Diego, California
sjewell@bacc.org

Analysis of textile fibers and blends were performed using infrared (IR) and Raman spectroscopy and solid-state nuclear magnetic resonance (solid-state NMR) spectroscopy. IR and Raman spectroscopy were probed for their suitability to be used as automatic sorting techniques. Raman spectroscopy proved to be an insufficient technique in order to qualitatively characterize textile fibers at the probed excitation wavelengths, due to fluorescence emissions. IR spectroscopy revealed to be a useful technique for qualitative characterization of all types of fibers. Solid-state NMR spectroscopy was used to characterize ... Two New Techniques for Loss Compensation in Art on Paper: Integration of Surface Losses Using Textile Fibers and the Use of Sprayed Cellulose Powder To Minimize Foxing and Other Discoloration (abstract). Chail Norton. Digital Surrogates: A New Technique for Loss Compensation of Graphic Works on Paper (abstract). Adam Novak. Place in Wales: Reconstructing Drawings from a Sketchbook by Francis Place. Two New Techniques for Loss Compensation in Art on Paper: Integration of Surface Losses Using Textile Fibers and the Use of Sprayed. Cellulose Powder To Minimize Foxing and Other Discoloration. The integration of losses to the media in works of art on paper has traditionally been done using pastel, colored pen-cils, or paint-based media such as watercolor. This paper discusses the use of colored cotton and polyester fibers derived from machine-made threads to reintegrate losses in design. The technique was developed to treat a large-scale watercolor by William Trost Richards, Tintagel on the C