

Deconstructing a 17th c. Panel Painting by David Teniers and Jan Brueghel Using Confocal X-Ray Fluorescence Microscopy

Jennifer Mass

Museum Scientist
Winterthur Museum and Country Estate
Winterthur, DE

The North Carolina Museum of Art's Flemish panel painting, *The Armorer's Shop*, has long been attributed to David Teniers the Younger (1610-1690). The attribution is based on the presence of his signature at the bottom right as well as visual elements that are commonly associated with him and executed in his style.

The oak plank has a smaller wooden panel insert with the parade armor painted upon it. This unusual construction, combined with the identification of several paintings by Jan Brueghel the Younger (1601-1678) with the same parade armor, raised questions about the attribution and chronology of construction of the painting.

Conventional micro-analysis did not resolve the painting's construction chronology. Confocal x-ray fluorescence microscopy at the Cornell High Energy Synchrotron Source revealed the composition and location of buried paint layers at the panel interfaces. The relationship of the layers at these interfaces provides evidence that the inserted panel with armor was painted prior to the rest of the composition.



The Armorer's Shop
aligned to the confocal
XRF microscope

MCI
Topics in
Museum
Conservation

10:45am

December 14, 2006

MCI Theater
Museum Support
Center

4210 Silver Hill Road
Suitland, MD 20746
301-238-1240



Smithsonian
Museum Conservation Institute