

THE *Art* OF CONSERVATION

Modern restoration techniques allow art conservationists greater ease and economy of time in removal of years of grime from some of the great masterpieces.

By Jennifer Yang



PHOTO COURTESY OF THE CHICAGO CONSERVATION CENTER.

Amber Smith, Associate Paintings Conservator at the Chicago Conservation Center, a private restoration lab located in River North.

The conservation of celebrated works of art has long been a major concern for artists, collectors, and art historians alike. Preventing great works of art

from deteriorating over time is a constant battle that relies upon emerging technologies, scientific methods and a keen understanding of art history. In recent times, conservation has benefitted

from technological advances within the digital age, as well as the accessibility of online information networks, thereby creating new opportunities for conservation by saving time and resources. As conservation continues into the 21st Century, researchers and artists continue to face even more challenges with the advent of new types of synthetic pigments, new media, and changes in artist methodologies.

Digital photography has literally transformed the world of conservation. In the past, researchers relied upon film-based X-Radiography and Infrared Reflectography (IRR) for the examination of paintings and their underlying structures. Today, both procedures have gone digital at some facilities. At the Art Institute, X-Radiography is still done on film, but the individual X-ray images are then scanned into the computer to form a seamless composite image. Inge Fiedler, a microscopist at the Art Institute of Chicago, who has researched and worked on pieces such as Seurat's *A Sunday Afternoon on La Grande Jatte (1884)*, has a digital camera mounted to her polarizing microscope for the examination of pigments. "In the past, we had to wait for a film lab to develop the pictures. Now I can see the images right away on my computer and manipulate

materials. In the past century, artists have turned increasingly

to new media and materials for the creation of their work. More modern and non-traditional mediums such as acrylic paints are gaining popularity, while training in the usage of traditional oils and painting materials is becoming more obscure. Smith explains, "Acrylic paint is not as permanent as oil paint. It is more sensitive to damage when mishandled, and it is more 'light-fugitive.'" According to Smith, some acrylic manufacturers are working to improve the permanency and "light-fastness" of their paints. However, this is an ongoing endeavor, and acrylic paintings created in the past few decades may face greater risk of deterioration than those painted with traditional oil paints.

While some artistic forays into newer materials may have resulted in fragile works of art, other artists have experienced great success both in terms of durability and workability. Picasso was known to have used French, oil-based industrial house paint in some of his paintings, such as *The Red Armchair (1931)*, a part of the Art Institute's permanent collection. Picasso's usage of the Ripolin brand household enamel paint may have influenced other early 20th century artists, and research is currently underway at the Art Institute to identify the differences between oil-based artist paints from oil-based house paints in artworks from that period. Conducted under the directions of Francesca Casadio, Senior Conservation Scientist at the Art Institute, the Ripolin Project should shed further light on the significance of the non-traditional paint material in other major works of art from the early 20th century.

Graydon Parrish, a figurative artist based in Austin, TX and New York, thinks that advancements in digital technology may be the saving grace for art created with experimental materials and techniques. As an expert in traditional media, Graydon feels that artists should be aware of the importance of good craftsmanship and knowledge of art materials. For artists who choose to work in oil, Graydon recommends painting on rigid support and allowing the works to dry thoroughly before varnishing.

As far as finishes, new technology wins out over the old, with synthetic varnishes superior for conservational purposes. Smith recommends using new synthetic varnishes for paintings due to their ability to be lifted for cleaning without disturbing the underlying paint layer. This dichotomy of advantages versus disadvantages created by new technology continues to affect both artists and conservators alike. Perhaps Graydon puts it best when he says, "Luckily, art can be digitized, and that is perhaps the most durable of all media. If the physical piece does not last, we will at least have a record of it." ♦



Photos: (top to bottom) Landscape painting before, during, and after restoration performed by The Chicago Conservation Center.



(bottom of page): Seurat's *A Sunday Afternoon on La Grande Jatte* (1884) following restoration by the Art Institute of Chicago.



the images as well," she explains. Fiedler, whose research involves identifying materials in works of art from the museum's collection, identified the zinc yellow pigment responsible for the darkening of the famous *La Grande Jatte* painting by Seurat.

Amber Smith, an Associate Paintings Conservator at the Chicago Conservation Center (CCC), a private restoration lab located in Chicago's River North district, cites advancements in digital photography as one of her favorite technological changes. At the CCC, both X-Radiography and IRR are digital-based, thereby freeing up time for other restoration procedures. "Today, conservation can now proceed without the presence of large scientific labs," she explained. Communication has also improved with the digital age, spawning a virtual information network amongst conservationists throughout the world. "Conservation used to be done alone, but now we have access to other people and what they know," said Smith. The conservation community is small and highly specialized. With the advent of electronic mail, conservators like Smith can trade knowledge via e-mail about obscure artists and the best available restoration and conservation techniques.

Although advancements in technology have helped facilitate conservation work, it has also, in some ways, created new challenges with the invention of new art

