

Dianne Modestini Discusses the Treatment of Leonardo da Vinci's *Salvator Mundi* with Jean Dommermuth '96

In the spring of 2005, art historian and art dealer Robert Simon brought a painting in need of conservation treatment to Dianne Modestini's Manhattan apartment. "It started as the treatment of any normal picture," Dianne remembers. "I had set up an easel, thinking that it might be interesting for Mario to watch me working."

Mario Modestini, Dianne's late husband, had himself worked on many important paintings over his long and quite remarkable life. Born in Rome in 1907 he came to the United States to be the conservator for the Samuel H. Kress Collection in 1949 and, drawing on his own expert knowledge of paintings, helped build it into one of America's greatest collections of paintings. For several years, students at the Conservation Center had the enormous privilege of learning from Mario when he would visit the paintings treatment courses taught by Dianne.

Mario was a brilliant restorer with an exceptional eye and this picture of the *Salvator Mundi* did "make him look." It was damaged and much obscured by bad overpaint; the well-preserved proper right hand was one of the few details that might, to a keen observer, hint at the picture's quality. "He said it was by a very great artist from a generation later than Leonardo." Mario was particularly knowledgeable about Leonardo, having been instrumental in bringing the *Portrait of Ginevra de'Benci* to the National Gallery in Washington in 1967. "Mario went to Liechtenstein twice—the first time with a young J. Carter Brown to view the picture in a kind of cellar; Paul Mellon wanted someone he really trusted to say if it was right." The second time was to courier the painting to the United States. It traveled in a specially built, climate controlled case, in a seat assigned to "Mrs. Modestini." "Everyone in first class was curious, and thought the case held jewels. When the plane landed in New York, government agents immediately got on the plane and took Mario and the picture to Mellon's private plane to fly them to Washington." After the case had acclimatized, Mario opened it at the gallery the next day. And "everyone looked disappointed" by the small painting bought for a record \$5 million. "It took time to grow on everyone." The same has been true of this *Salvator Mundi*.

Dianne began the treatment by removing the varnish and overpaint from the painting. "The cleaning was totally straightforward; I did it in one sitting." The cleaning revealed the now-famous pentimento of the thumb—perhaps the single most decisive piece of evidence of the painting's authenticity. While there are many copies of this composition, only the original



Leonardo da Vinci (Italian, 1452-1519)
Salvator Mundi
Oil on panel, 25 13/16 x 17 7/8 inches (65.6 x 45.4 cm)
Private Collection
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Mid-treatment photo showing the pentimento of the thumb on the proper right hand

artist would have altered it during the painting process. But the thumb was quite fragmented and even after the cleaning, neither Dianne nor Mario was thinking Leonardo.

The cleaning also revealed that the panel itself, originally a single plank of walnut, had split into several pieces. A knot near the bottom center was a weak point as the wood was subjected to climatic stresses. From the knot, a split ran up the entire length of the painting just to the left of the head and there were smaller splits around the knot. The panel had been inexpertly repaired, perhaps centuries ago, causing still more damage. Monica Griesbach '04, a specialist in the treatment of panels, took the pieces apart and then very skillfully rejoined them, a task which called upon her training at the Conservation Center and with numerous conservators in the United States and Europe.

Sadly, Mario passed away early in 2006, never having seen the completed treatment of the Leonardo but leaving a legacy of many sensitively restored pictures in numerous collections.

Compared to the cleaning, the retouching phase of the treatment was far longer and more complicated. Using the retouching medium polyvinyl acetate-AYAB that Mario, along with conservation scientist Robert Feller, helped develop in the 1950's, Dianne began pulling the painting together. There were larger damages associated with the split as well as numerous smaller abrasions. Dianne is a practitioner and teacher of what is sometimes called "invisible" retouching, to distinguish it from the clearly visible toning of losses practiced in countries such as Italy. Perhaps a better term would be "inconspicuous" retouching, the goal of which is to allow the viewer to see the painting undistracted by damages or the restoration itself. The process required intense concen-

tration and endless hours, often in the evening and on weekends when the studio was quiet. "I talked to Mario in my head the whole time. He would say 'the nose is crooked!' He was always there."

The PVA retouching medium was ideal for this restoration. Not only has the medium's stability been proven over the past fifty years, but it is also very versatile. The restorer can choose between hundreds of different pigment choices, for example between different blacks with subtly different hues and opacities. And because pigment can be added to the PVA medium in any ratio, the density of the original paint can be matched. The mixture of the medium and pigment can be diluted with a choice of different solvents with dissimilar evaporation rates allowing various paint effects. All of these aspects were carefully manipulated in order to replicate the extremely complicated technique of the *Salvator Mundi* with its multiple, thin paint layers.

The art-historian Giovanni Morelli once said that the proof of a Leonardo was in his use of bone black, which has been identified in the *Salvator Mundi*. But identifying a pigment is not enough; Dianne also notes that the initial layer of black in the *Salvator Mundi* is very fine, compact and lean, similar to a figure in armor in Leonardo's *Adoration of the Magi*. It is this sort of detail that can not only aid in authentication but also in the restoration itself.

The black background is a key element of the picture, a deep darkness from which the shadowy figure emerges. Most of the original black background had been scraped off in the past and replaced by a muddy brown which Dianne, after long consideration, decided to remove. Analysis of the pigments later showed that the rich black of the original was composed of several layers containing both bone and carbon



Mario and Dianne Modestini in the paintings lab of the Conservation Center, 1994

black with some vermilion added—a fairly unusual mixture but one that is seen in other Leonardos. To reconstruct this, Dianne first tried black alone. "Mario had an old Schmincke black that's not made any more." But she found she needed to add some cadmium red—as a stable substitute for vermilion—to truly match the color and overall optical effect of the original. "It's strange how this painting forced you to work as Leonardo worked – if not, the restorations looked like dead zones."

It was also important to make the restored areas look properly old, so as not to stand out. Some of the first layers of the old retouching were retained as they were both a good base color for working on top of and already had the look of age to them. For the wholly new retouching, Dianne used many tools and techniques to achieve a similar effect. Retouching an old master painting is often an iterative process—putting down a layer of color, then distressing it to "age" it somewhat, then "repairing" that damage a bit.

It was while retouching a damage near the mouth, with its infinitely subtle transitions, that Dianne herself finally became convinced of the painting's authorship. "I had images of the *Mona Lisa* hanging everywhere, and the similarities were too strong for there to be any other conclusion." Subsequent technical

analysis, much of it conducted by Nica Gutman Rieppi, Associate Conservator of the Samuel H. Kress Program in Paintings Conservation at the Conservation Center, would add more hard evidence. But after the momentous discovery, the restoration still had to be finished.



Mouth detail



Proper right eye detail

The retouching of the proper right eye was “by far the most difficult,” says Dianne. Leonardo perhaps had the same issue. The eyeballs were left in reserve—totally unpainted—until the very end of the painting process. Then he used a single, very thin layer of brown paint, leaving specks of the preparation showing through to create the little glints in the eye. After numerous attempts, removed and replaced, the retouching of the eye finally worked—an accomplishment few restorers in the world would have been able to ever pull off.

It is now believed that Leonardo probably started work on the painting in about 1500—perhaps 25 years after the *Ginevra* had been painted—and continued working on it for several years. So it was, in a sense, painted by a very great artist a generation later, just as Mario had thought when he first saw the painting. The picture has come to be an accepted Leonardo and an important part of the current **exhibition** at the National Gallery, London: Leonardo da Vinci: Painter at the Court of Milan, November 9, 2011 – February 5, 2012. If he had seen the completed restoration “Mario would have come to that conclusion, too.” •

—Jean Dommermuth is a paintings conservator at Rustin Levenson Art Conservation Associates in New York City

In The News

Nora Kennedy, Sherman Fairchild Conservator of Photographs at the Metropolitan Museum of Art, and Conservation Center Adjunct Faculty member since 1993, is the 2011 recipient of the **HP Image Permanence Award**. This award, given by the Society for Imaging Science and Technology (IS&T) in partnership with the International Institute for Conservation (IIC) and sponsored by the Hewlett-Packard Company, recognizes advances in colorant and print media materials that significantly increase permanence; advances in predictive science that increase the validity of permanence predictions or provide insight into optimal storage and usage conditions; and/or educational efforts that raise awareness of the effect of storage and usage conditions on permanence.

Nora is specifically being recognized for her outstanding contributions that advance the longevity of photographic and fine art images created via modern digital methods in the form of her co-leadership with Debra Hess Norris in organizing the Mellon Sponsored Collaborative Workshops in Photograph Conservation, the creation and distribution of a digital sample book for two of the workshops and for leading the creation of the Photograph Information Record (PIR). Since any single digital print process can change in behavior from generation to generation in only a few years, the PIR is an important link between the object and the actual materials that produced it.

The Center proudly congratulates Nora on this prestigious recognition.

Coming soon to the website: Kress Paintings Research

A new link on the Conservation Center’s main page will feature select treatments, technical examinations and materials analyses of paintings treated in the Kress Program in Paintings Conservation. This research, carried out in collaboration with other conservators, conservation scientists and art historians, will serve as a resource for technical information on works in the Samuel H. Kress Collection.

photo credit: overall and details of mouth and eye: Tim Nighswander/Imaging4Art; mid-treatment (December 2007) of hand with thumb pentimento: Josh Nefsky; Marlis Müller