



Treatment Report

Kress Number: K-345
Artist: Domenico Tintoretto
Title: Portrait of a Venetian Commander in Armor
School/Period: Venetian c. 1580's
Support/Medium: oil on canvas
Dimensions: 57.6 cm. W x 74.5 cm. H x 2.3 cm D
Owner: Allentown Museum of Art, Allentown, PA
Frame: unframed
Date of Treatment: 2017

Conservator:
Kimberly Frost, Master's Candidate,
Conservation Center, Institute of Fine Arts,
NYU

Supervisors:
Dianne Dwyer Modestini, Conservator of
the Kress Program in Painting Conservation
Shan Kuang, Kress Fellow in Painting
Conservation



Before Treatment Image

Photography:

Nikon D8100 camera with 60mm lens, ISO100, f8.0, shutter speed 1/5

Before treatment – digital photography in normal light and ultraviolet light; recto, verso.

During treatment – digital photography in normal light and ultraviolet light; recto.

After treatment – digital photography in normal light; recto.

Analytical techniques performed:

Examination under ultraviolet radiation with UV Systems TripleBright II LW370 Lamp, long wave, UV peak: 368 nm.

X-radiography, Phillips MG161 X-ray Radiography system and Carestream INDUSTREX HPX-1 Digital system with 8x10" Flex XL Blue Digital Imaging Plate, 35KeV, 5 mA, 90 sec

X-ray Fluorescence, Bruker Tracer III-V+ (Rhodium source and silicon detector) 0 kV, 15 mA

Analysis of Cross-Sections:

Microscopy, Leica DM4000 B light microscope with Spot Flex camera and SpotFlex Basic Software. Reflected and Ultraviolet light.

Scanning Electron Microscopy, Hitachi TM3000 Table scanning electron microscope

Electron Dispersive Spectroscopy, Bruker Nano Xflash MIN SVE Quantax 70 software

Signature, Marks, Labels or Notations:

On the top right on the back of the stretcher an inscription in reads: 8695F in blue pencil marked out with black crayon, on top of which is written K345. In the same corner, an inscription with red pencil reads: Box #317 P1.

On the bottom bar of the stretcher a blue and white label reads W.S. Budworth & Son Packers & Shippers 424 52D Street, New York, NY with 68 written in pencil on the label and again on the wooden stretcher bar.

On the reverse of the stretcher, on the central crossmember the number 68 in pencil, and above it #345 also in pencil. Between them at the center of the stretcher bar, a small square of different wood with fragments of a red wax seal, is inserted; presumably related to a previous stretcher or strainer.

Provenance:

Dr. Gustavo Frizzoni [1840-1919], Milan; (Count Alessandro Contini Bonacossi [1878-1955], Rome and Florence); sold to Samuel H. Kress [1863-1955] on 10 July 1935 as Jacopo Tintoretto; gift to the Allentown Art Museum in 1960, no. 1960.20.

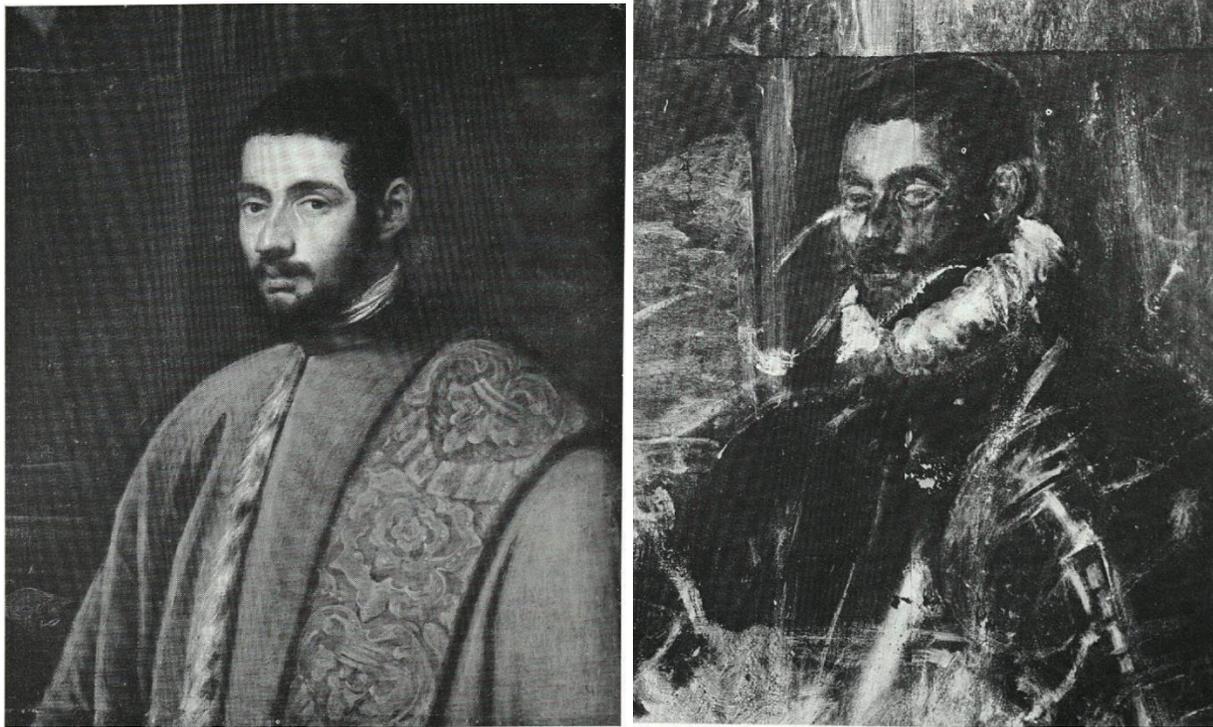
Art Historical Background:

Formerly attributed to Jacopo Tintoretto, this Venetian portrait is now attributed to his son, Domenico, during his working time in his father's studio. The armor and battle scene indicate his identity as a naval commander. The armor worn by the figure is similar in shape and decoration to the suit of armor worn by the Dodge Vernier in his portrait by Jacopo Tintoretto, painted to commemorate his victory in the Battle of Lepanto. Based on the current dating of the painting and the depiction of a smoky battle scene, this portrait might also allude to this major naval battle in the Gulf of Lepanto, where the Venetians defended themselves from the Ottoman Empire.



Jacopo Robusti, Tintoretto, *Doge Sebastiano Venier*, after 1571, Kunsthistorisches Museum Wien, Gemäldegalerie.

An article by Paolo Rossi mentions the close resemblance between this painting and another Portrait attributed to Domenico in the Collections of the Louvre, on view at the Musée de Beaux-Arts, Pau, seen below. An x-radiograph of the Pau painting, shows the highlights of a suit of armor that was later overpainted with a stiff red robe, which was removed during restoration.¹



Domenico Tintoretto, *Ritratto di Procuratore*, Pau Musée des Beaux-Arts.

A discussion with Conservator Dorothy Mahon and Curator Andrea Bayer at the Metropolitan Museum of Art, NY lead to the examination and comparison of the X-radiograph of *Portrait of a Venetian Commander* with those from two portraits in the museum's collection currently attributed to Jacopo Tintoretto.² Similarities were found in techniques used to delineate the composition, however the brushwork of the face was found to be distinctly different with carefully placed strokes providing a less sketchy and more solid buildup of paint layers in the portrait attributed to Domenico.

Treatment History:

After being acquired in 1935, *Portrait of a Venetian Commander* was re-lined and restored with pigments in damar resin in 1936.³ The picture was again cleaned in 1950 – 51 by Mario Modestini who cleaned the yellowed varnish and placed new restorations in tempera. According to the Kress catalogue abrasion and losses of pigment in the upper and lower parts of the face were noted at this time. The painting was then recoated with a damar varnish. An earlier

¹ See P. Rossi "Alcuni Ritratti di Domenico Tintoretto" in *Arte Veneta* vol. XIII, 1969, p. 60 - 71.

² See Appendix for X-radiograph image.

³ See Kress Foundation, K345, Condition Report.

assessment by Alan Burroughs records the heavy cracks and damage across the painting, as if from folding of the canvas.

Examination and Condition Report:

Support

Construction

The primary canvas is a twill weave of medium weight with some openness in the weave pattern. The linen canvas is oriented with the warp in the vertical direction. The canvas is lined with a modern, plain weave canvas. The canvas is planar and stretched taut on a modern stretcher made of 8 members with a central crossbar. The wooden members measure 1.5 cm deep and 7 cm. wide with 12 wooden keys securing the corners and side joints. The tacking edge is secured with small round nails at close intervals in the side of the stretcher bars, and is covered by a grey paper tape. The tacking edges continue about 2 cm on to the back of the stretcher bars under the paper tape and appear to be cut straight. The twill weave of the canvas and the current placement of the tacking edge prevent a clear determination of any cusping pattern.

Condition

The primary canvas has good contact and adhesion with the lining canvas and under tension it is taut and stiff, perhaps due to the adhesive used. The stretcher is in good condition with no damage or deformations in the stretcher bars.

Ground Layer and Underdrawing

Construction

A thin ground layer with a red tone is thinly applied to the canvas and pushed into the weave with some canvas nubs remaining visible.⁴ The ground layer remains visible in thinly painted areas of the canvas such as the sitter's suite of armor. Under examination with Infrared Reflectography, no drawing medium was detected. Instead, quick strokes of radio-opaque lead-white oil paint and dark carbon-rich paints were used to quickly sketch the figure's reserve and composition. This technique was commonly used by Jacopo and others working in his studio and can be seen in the unfinished portions of the painting, *Doge Alvise Mocenigo Presented to the Redeemer*, by Jacopo Tintoretto.

⁴ The red-tinted ground is also confirmed by the analysis of removed samples, see Appendix: Cross Sections.



Jacopo Tintoretto, *Doge Alvise Mocenigo Presented to the Redeemer*, c. 1577, Oil on canvas, 97.2 x 198.1 cm

This painted underdrawing technique was then exploited optically in the painting process to provide light-reflecting and layering components as they were adjusted or scumbled over with later paint layers. The heavy impasto of these sketching lines plays a role in the final texture of the surface and remains visible in many areas, most notably the man's suit of armor and the reserve drawn into the background at the right of the figure.

Condition

The ground layer is in good condition and is securely fixed to both the supporting canvas and the above paint layers. Large linear damages to the canvas have resulted in loss of both the ground layer and paint layer. Losses have been filled during a previous restoration with a water-soluble medium. However, these old fills stand proud of the surface and are excessively smooth. They disturb the prominent texture of the canvas weave across the surface.

Paint Layer

Construction

The artist has used a limited palette of earth colors, yellow, red, blue, black and white (pigments to be estimated after analysis). The painted is applied vigorously with varying textures, a technique indicative of an oil medium. After drafting the composition with broad strokes of white paint, the artist continued to refine the figure. The white outline of the head is covered with a green-gray layer of earth colors in the background, seen in sample 1.⁵ Thin scumbles of black and blue tones thinly cover the ground to create the body of the armor. This layer is also used to adjust the size and position of the sketched highlights. Highlights of viscous white, sometimes blended with yellow or blue, are applied over this dark layer to finish the modeling of the form. Next, decorations in red and yellow are loosely applied with a thin flowing paint along the curves of the armor. The face is thickly painted, perhaps due to adjustments when re-positioning

⁵ See Appendix: Cross Sections.

the right eye, which can be seen in the X-radiograph and in the two overlapping of flesh tone colors seen in the cross section of sample 2.

In the small naval scene, quick diagonal strokes in black outline the shape of boats in the foreground and in the background the pointed end of a brush has been used to sketch the distant masts into the wet paint of the sky. The atmospheric sky is created by alternating layers of blue and white, which can be seen in the cross-section of sample 3. First a thin white paint was applied, followed by blue paint, similar in color to the water. Next a white with a slight red tint was vigorously worked across the surface to create swirling clouds. A purple grey paint seems to have the same application, but was not included in the sampled area. This variety of texture and technique gives the painting a lively surface, in which texture plays a key role in the final image.

Condition

The paint layer is generally in fair condition. Fine age cracks have developed evenly across the surface. This cracking network is larger in the thickly painted passages, but remains secure on the canvas. Abrasion on raised points of the canvas weave is seen in most areas, especially in the susceptible dark pigments used for the hair and armor of the figure. The abraded condition is visually disrupting, often revealing a different color of the lower paint layer. The increasing transparency of dark areas has altered the modeling of the armor, where more of the ground layer is now visible. The thick white strokes of the preliminary sketch have become visible at the surface due to these conditions.

Large losses have occurred horizontally across the painting; their pattern seems to correspond to folding or rolling of the supporting canvas. Both ground and paint layers have been lost, creating a disruption in both the visual composition and the surface texture. Original paint surrounding these areas was painted over and smooth filling material covered the losses without mimicking the paint or canvas texture. Smaller isolated losses have also been sustained in the corners and along the edges of the picture. The regular interval of losses along the edges suggests that they might result from the flattening of a previous turning edge.

The most thickly painted highlights of the armor and face appear to have some softening of the original impasto texture. This flattening of the picture was probably caused by the lining treatment; however, the texture of the lining canvas does not show significantly in the original surface.

Varnish Layer

Construction

The painting is covered by a thick layer of varnish, which fluoresced yellow-green under UV confirming that it was a natural resin. Cleaning the painting revealed that the varnish was applied over both new and old retouches, some of which covered parts of the original paint layer.

Condition

The Natural resin has darkened and yellowed over time, obscuring the subtle details of the painting technique and colors.

Treatment Report

Surface Cleaning

Front and reverse of the painting was surface cleaned with a soft brush and vacuum. Next, cleaning tests to determine the proper type and strength of solvents for removing the yellowed natural varnish were performed on a small, inconspicuous area of the painting. Varying ratios, from weak to strong, of acetone in mineral spirits were applied with rolled cotton swabs. It was determined that a 1:1 ratio of the solvent was gentle on the original paint, but removed the varnish. Remains of old retouches were difficult to remove using this solvent mixture alone. Retouches were cleaned using Wolbers Acetone Gel cleared with mineral spirits and acetone mixture (3:1). A previous restoration with a waxy and brittle overpaint in the collar of the figure had misconstrued it as a pointed shape. This necessitated removal by mechanical cleaning under a stereomicroscope.



Stereomicroscope photograph during the mechanical cleaning of overpaints.

Fills and Isolating Varnish

Old fills were shaved down to allow for re-texturing of the surface. Losses in the ground of the face and upper right corner, were filled with a new putty made from bologna chalk, china clay and 10% rabbit skin glue. An isolating varnish of 18% mastic and tinuvin was brush applied.

Inpainting

Two mediums, Gamblin Wax Resin and Artcare B-72 retouching gels, were tested for their ability to mimic the texture of the painted surface. The wax resin medium provided a crisp texturing material for high impasto, but fluid strokes were not easily achieved, and its color palate was limited. Fast drying B-72 gels were tested in hard, heavy and light weight ratios. The heavy weight gel allowed for the easiest working properties, holding stiff shape or relaxed flow based on the portions of medium and working solvent. B-72 gels were chosen as the final texturing medium as they allowed complete control of color matching by mixing with dry pigments. Remaining inpainting was completed with dry pigments in AYAB synthetic resin (PVA) and watercolor.



Raking light photographs of texturing over old fills.

Appendix: Documentation



Before Treatment, Visible Light.



Before Treatment, Ultraviolet Light



During Treatment, X-radiograph.



During Treatment, Ultraviolet Light



During Treatment, Visible Light, Varnish removal.



During Treatment, Cleaned State.

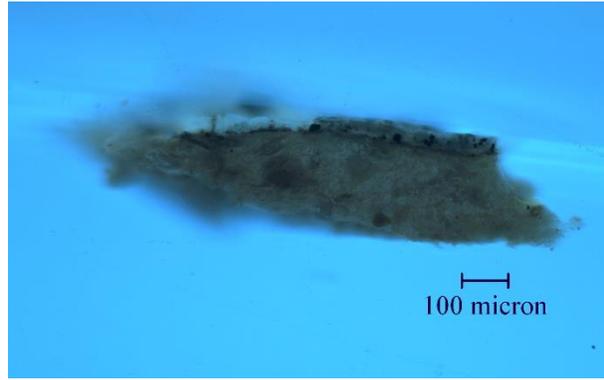


During Treatment, preliminary inpainting.

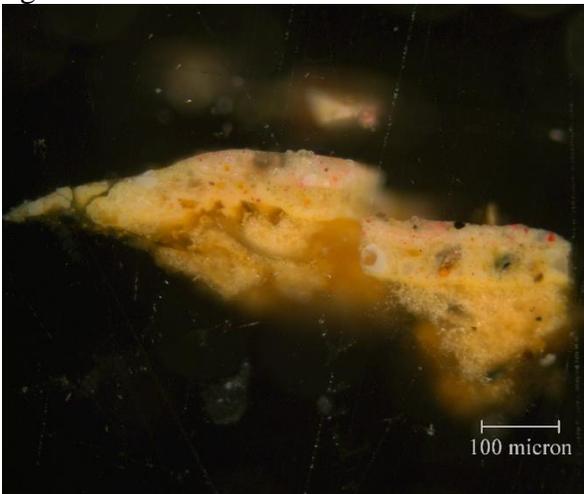
Appendix: Cross Sections



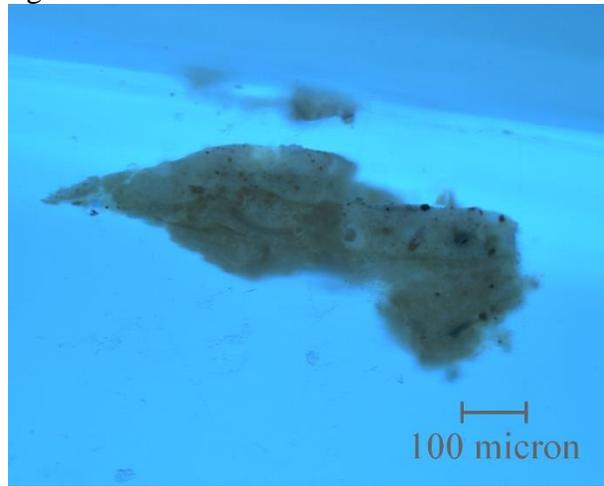
Sample 1 at 100X magnification, reflected light



Sample 1 at 100X magnification, ultraviolet light



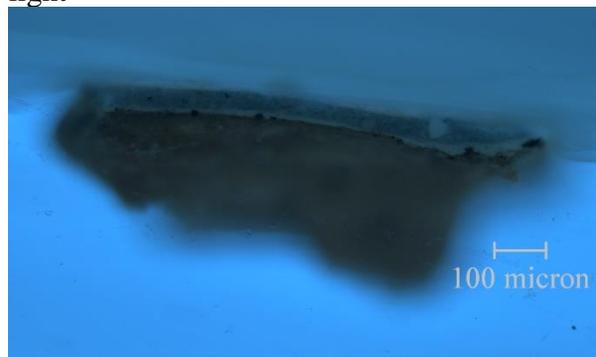
Sample 2 at 200X magnification, reflected light



Sample 2 at 100X magnification, ultra violet light



Sample 3 at 100X magnification, reflected light



Sample 3 at 100X magnification, ultra violet light