

STRUCTURAL TREATMENT OF *BETA UPSILON* BY MORRIS LOUIS, 1960

Supervisors: Amber Kerr, Gwen Manthey, Keara Teeter



Beta Upsilon, Morris Louis, 1960, acrylic (Magna) on raw canvas, 102 ½ x 243 ½ in.

Project Summary:

During my graduate summer internship in paintings conservation at the Smithsonian American Art Museum (SAAM), my primary project was the structural treatment of *Beta Upsilon* by American artist Morris Louis. After being vandalized 35 years ago, the painting was removed from display and placed into storage, where it remained until undergoing treatment. Amber Kerr and Bartosz Dajnowski of G.C. Laser Systems developed a laser-cleaning technique for removing the graffiti from unprimed, unsized cotton duck canvas. They completed research and laser-cleaning of the artwork prior to my internship. I and my co-intern Brianna Weakley were brought on for the final phase of this multi-year project. We constructed a temporary working surface, performed imaging, edge-lined the painting, assembled its new custom stretcher, and assisted with the loose-lining and re-stretching of the painting.

Preparing for Treatment: Constructing a Working Surface

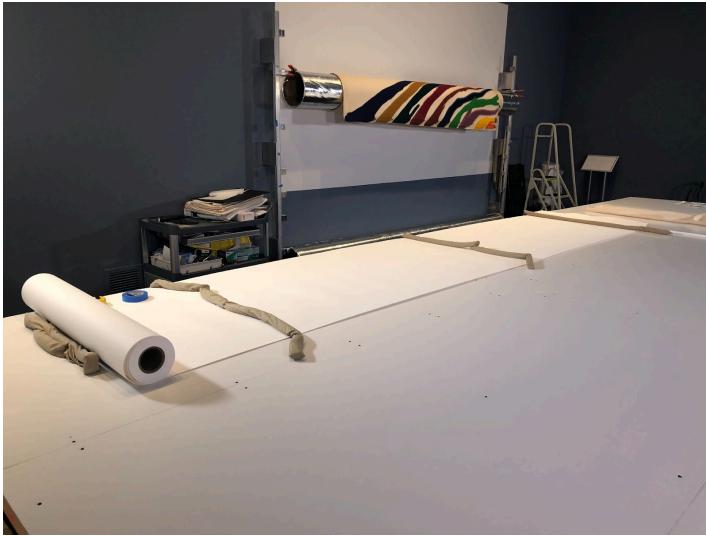


A custom working surface/table was constructed to facilitate the treatment. Essentially a massive strainer, the table framework (designed by Amber Kerr and supplied by Upper Canada Stretchers) was assembled and then placed onto several folding tables.



Half-inch thick foam core boards were strategically pieced together and drilled into the wooden frame to create a table top.

Preparing for Treatment: Constructing a Working Surface (continued)



Panels of blotter were cut and strategically taped together to create one uniform layer with a flush surface. This blotter layer was then taped down over the board table top.



The completed working table with the painting laid out for the first time in over 30 years. Amber Kerr is pictured in the top center conducting stain removal tests on the painting.

Edge-Lining Process

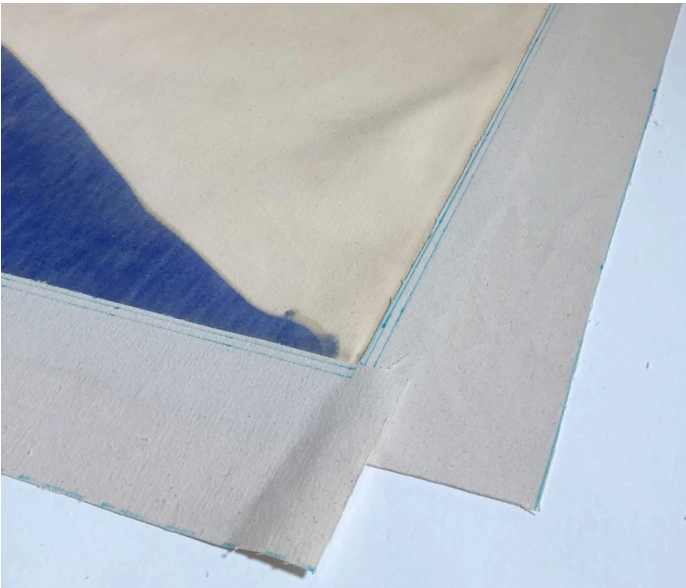


Rolls of 5" width cotton duck canvas strips were measured and cut (left). Basting tape (Seamstick brand) was applied along all edges on the back of the painting below the foldover edge and closer toward the painting's outer edge (right).

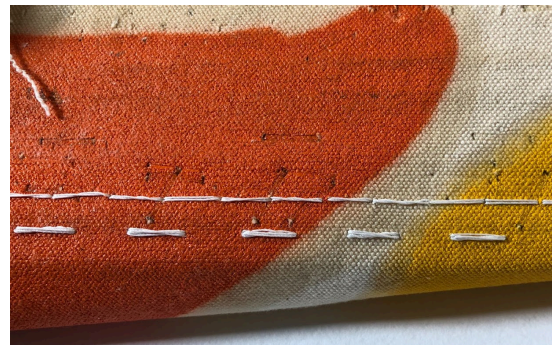


The basting tape adhesive was activated with gentle heat (left) and then the canvas strips were rolled out and adhered along the basting-taped edges (right).

Edge-Lining Process (continued)



Stitching guidelines were marked along the join of the artwork edges and the lining strips using fabric pens (Dritz Mark-B-Gone brand). Two parallel lines were drawn a quarter inch apart along the joined edges (left). The edge-lining was then stitched onto the painting using a technique developed by Amber Kerr (right).



Stitching in progress (left). Weights were applied along the painting edges while stitching. Detail images on the right show the zig-zag stitch on the painting's reverse (top) and the back stitch plus running stitch on the front (bottom).

Edge-Lining Process (continued)



Front lower corner with the completed stitching.



The painting's reverse with its completed edge-lining.

Humidification



Non-painted areas were humidified to reduce deformations in the canvas. We prepared foam core panels with stacks of blotter sheets taped to one side to expedite switching out wet and dry blotter during humidification. Blotter was dampened with deionized water using a Dahlia sprayer and applied for about 5 minutes. The damp blotter was removed and foam core with dry blotter stacks were applied with weights on top, then left overnight. Due to the large size and limited number of weights, heavy objects such as folding tables were used as weights.

Loose-lining and Re-stretching



A new aluminum and wood stretcher supplied by Upper Canada Stretchers was assembled (left). Led by Gwen Manthey (right), a cotton duck loose-lining canvas was stretched and stapled onto the stretcher.



The loose-lined stretcher was then placed face-up onto folding tables. Here, the painting is ready to be rolled out face-up onto the loose-lined stretcher.

Loose-lining and Re-stretching (continued)

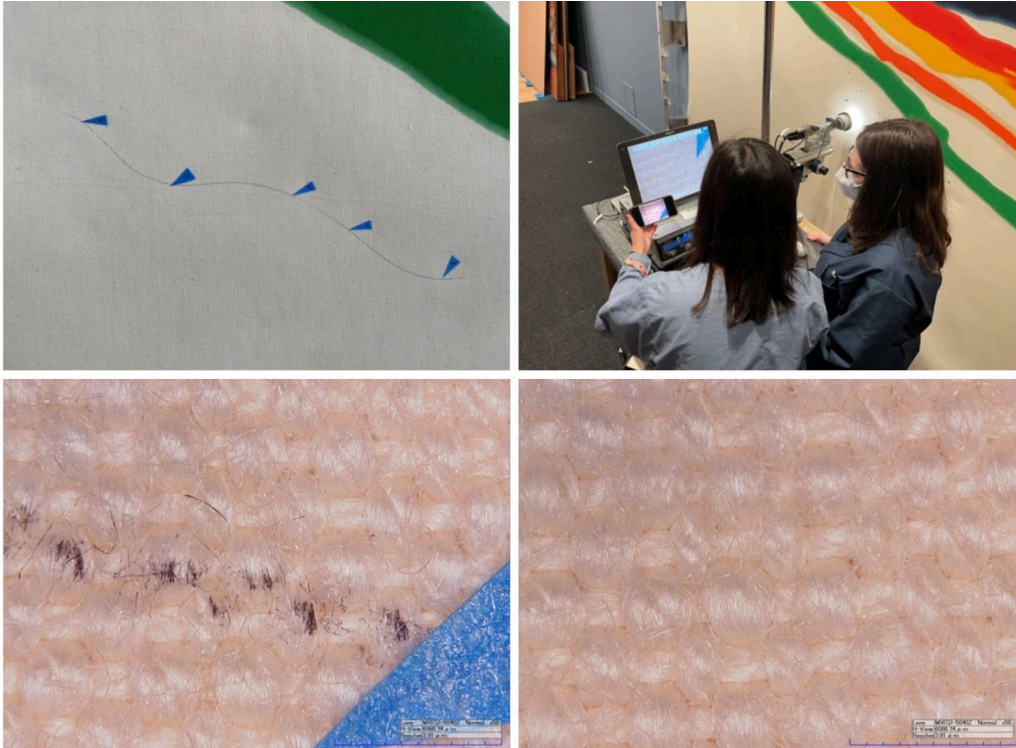


The painting was laid out and positioned onto the stretcher (left). The painting was re-tensioned onto its stretcher and pinned down through the edge-lining with Amber Kerr and Keara Teeter (right). I assisted with the first two rounds of re-tensioning.



Brianna, Amber, and Josephine with the painting re-tensioned onto its stretcher.

Documentation and Imaging



Hirox micrographs of the vandalism were taken before and after laser-cleaning. Top left: overall image taken by Amber and Keara before cleaning, with tape triangles marking out locations for Hirox imaging. Top right: Brianna and I taking Hirox micrographs of the locations after cleaning. Bottom row: Hirox micrographs of the graffiti before cleaning (left) and after cleaning (right).



Overall imaging was performed in normal light, raking light, and UVA-induced visible fluorescence.



Brianna and Josephine with their mock-ups of *Beta Upsilon* in front of the painting.