Don’t Scare the Horses: Small Museum Development Project

By Kelly Goulette and Jude Southward

The Denver Museum of Nature & Science is on the path toward building a new collections facility. This new facility and all its associated functions falls under our mission, vision, and values. Next we are to do all over again. What did we learn? Departments like Conservation, directly involved with preparing and installing works of art, were especially heavily impacted. This paper will present the logistics of planning gallery spaces, preparing large numbers of artworks, installing exhibitions simultaneously, and surviving the first year of operation. It will make recommendations as to what was never anticipated until the public came through the doors. Both successes and commentaries will be discussed for practical applications to upcoming expansion projects at other institutions.

Annual Meeting Abstracts

The 2007 WAAC Annual Meeting was held September 15-17 in Denver, Colorado.

The papers from the meeting are listed below along with summaries prepared by the speakers.

Don’t Scare the Horses: Small Museum Development Project

By Kelly Goulette and Jude Southward

The Denver Museum of Nature & Science is on the path toward building a new collections facility. This new facility and all its associated functions falls under our mission, vision, and values. Next we are to do all over again. What did we learn? Departments like Conservation, directly involved with preparing and installing works of art, were especially heavily impacted. This paper will present the logistics of planning gallery spaces, preparing large numbers of artworks, installing exhibitions simultaneously, and surviving the first year of operation. It will make recommendations as to what was never anticipated until the public came through the doors. Both successes and commentaries will be discussed for practical applications to upcoming expansion projects at other institutions.

How did we start? Our initiative began with a reaffirmation of the institution’s mission, vision, and values. Next we all took a trip! DMNS curators, conservators, educators, and senior leadership visited colleagues who have bravely gone before us and built new collections facilities. Additionally, staff attended workshops such as...
the “Build it and they will come: what accounts for participation in Wild West shows.” The individual stories involved in Wild West shows include figures Chief Sitting Bull and Iron Tail, who wear costumers that were worn by the historical figures. The paper discusses the evolution of library preservation programs,​​ with a focus on one person’s future is unique and cannot be predicted. The talk will discuss some of the planning, analysis, treatment, and conservation treatment began in September 2004 and concluded in June 2006. Treatment included design and manufacture of electromechanical in- s, gramophones, mechanical sound systems, records, reproductions, textiles, paper, gesso/fresco/plaster, and paint coatings, glass, metals, wood, and transparent/painted coatings applied to wood. The recruitment of advisors and practitioners in and outside the field of conservation proved to be a rather suc- cessful meld of ideas and activity.

The treatment, though complex and multi-disciplined, began as a challenge and concluded with the sense of accomplishment. The first issues addressed were of functionality: to put a “nickel” in the machine and yield an audible fortune “out.” Once achieved, the decorative and whimsical elements required cleaning, stabilization, and element replacement. Loss compensa- tion offered the most creative aspect of the project.

The treatment objective was to render the gypsy in working order with the overall intervention predicated on the most cur- rent philosophies guiding aged objects care found in both the museum and in the discriminating market place. This involves prizing stable original fabric and a standard of minimal intervention. In effect, returning the machine to a minimally compromised configuration with compassion for the aesthetic of age. At the McFarland Curatorial Center, in Virginia City, the gypsy was disas- sembled and packed for a trip to the conservator’s bench in Hall, MT.

Once on the bench and dismantled fur- ther, individual components received closer attention. To facilitate study and treatment, all of the electromechanical parts were removed from the case and in- stalled onto a proportionally sized exter- nal jig platform for ease of access. After studying the alternating current movement and interrelated linkages, speculation on stabilization to the electromechanical components, element options, and options for any necessary loss compensa- tion, as the search for identical mechanical movements found no positive results.

The missing component questions led to design and fabrication. The replacement in-fills functioned harmoniously with the existing functional movements once the given ample time for adjustment and fine tuning. Treatment proceeded to the rhythm of “performance and func- tion” time was given to historic fabric stabilization.

To understand how these components truly work together, one need only insert a nickel. The machine works and the conservation product supports the machine’s fortune ability, one person’s future is unique and seldom truly understood by its seeker.

Westward Bound
Karen Jones
Beginning with immigrant binders who fabricated the ledger bindings used to re- cord the proceedings of new state govern- ments, fine binding developed in fits and starts through out the Rocky Mountain West (Colorado, Arizona, Utah, Montana, Wyoming, and New Mexico). Highlights include the fine letterpress and bindery efforts in New Mexico and Arizona; the evolution of library preservation programs in Utah; and a successful effort to utilize library binding as occupational therapy for TB patients in Denver. Our concern with stabilizing the existing functional movements but Toward a conservation treatment performed on these artworks poses unique conserva- tion challenges, all of which will be the subject of this presentation.

How Emigrants Crossing the Plains Also Safely Crossed the High Seas
Joan Mast-Loughridge
We contracted with National Cowboy and Western Heritage Museum, in Oklahoma City, to stabilize the origi- nal carved wood painting of Albert Bier- stad’s painting On Emigrants Crossing the Plains. It was to be loaned to the Schirn Kunsthalle Museum in Frankfurt, Germany for an exhibition called “We Love Our Homes.” The request was that it be displayed in the original frame. The frame is a large, carved walnut cove, which was split, and part of the forward moulding was warping away from the outside moulding and base. Further, there was a question as to the stability of the frame corners. The mu- seum did not want to frame the painting without these conditions being addressed. We knew that the frame had been worked on previously, when the painting was conserved by WCCPA, but that it was primarily cosmetic.

Our concern with stabilizing the existing carving in the cove was not to constrain them to the degree that, with natural ex- pansion and contraction of the wood, es- pecially with the climate changes during travel, the cove would split elsewhere. We also wanted to make sure that the warped forward moulding did not degrade further, as it was the logical area to hold onto when maneuvering the very heavy framed painting. We used 1mm BEVA-film and B-72 in acetone to make repairs.

A Tale of Two Headaddresses
Julie Parker
This paper will discuss some of the plan- ning, analysis, treatment, and mount- ing efforts taken to install the newly acquired collection of 28 modern out- door sculptures. The sculptures arrived at the museum at the beginning of 2006, and the installation was completed in May 2007. In the interim, the sculp- tures were prepared for installation by cleaning their surfaces, removing old coatings, and reapplying new coatings. Structural engineering considerations for each piece were analyzed, and all of the work was carried out in a manner that addressed the structural stability. Our department was also in- volved with landscaping planning in or- der to minimize the impact of sprinkler overspray and chemical fertilizers on the surfaces of the pieces. The installation project was a group effort that included the work of many departments through- out the museum and trust. On-going cleaning and stabilization of a variety of materials as well as a unique opportunity to restore an object to a configuration from a specific time period based on the evidence of archival photographs.

Keeping the Life Sculptures of John DeAndrea Alive
Carl Patterson, Jessica Fletcher, Kristine Jeffcoat, and Sharon Blank
The Denver artist, John DeAndrea is best known for producing life sculptures with a startling degree of realism. Unfortunately, many of his polychromed sculptures and European and private collec- tions, have begun to deteriorate. This paper traces the evolution of the tech- niques, materials, and condition of John DeAndrea’s sculptures and attempts to predict the reasons for deterioration. The artist’s vision for the care and con- servation of his work will be presented, using two of the Denver Art Museum’s favorite pieces as case studies.
How Jean Charlot Set My Heart Aflutter

Victoria Montana Ryan

The ultimate path to the complicated conservation treatment of a fresco by Jean Charlot involved a will, a house, and negotiations between five entities and led to a long-term relationship with the Charlot that set my heart aflutter. Charlot, who may be the artistic godfather of the great Mexican muralists, was at the forefront of the 20th-century revival of mural painting. Throughout his long career, Charlot left not only a large body of work, but many mural treasures scattered though numerous countries. The challenging conservation steps, including the use of cyclododecane, to ensure stabilization and preservation of one such treasure are the focus of this presentation.

Bacterial Removal of Mercury from Museum Materials: A New Remediation Technology?

Lisa Snelling
Laboratory coordinator for the Biology Program at Denver University.

Timberley Roane
Associate Professor of microbiology in the Department of Biology at the University of Colorado at Denver and Health Sciences Center.

Bacteria – capable of detoxifying and, in some cases, sequestering metals – are being investigated in the remediation of contaminated environments such as soil and water and, in this project, the removal of mercury from museum type materials. Mercury on such materials poses a unique remediation challenge because it forms non-degradable, persistent chemicals.

Because mercury-resistant bacteria have the ability to convert mercury into a gaseous form, they may facilitate mercury removal. In the work presented here, a diverse bacterial community was isolated from mercury-treated items; two of the non-pathogenic bacterial isolates were capable of reducing 10 ppm mercury concentrations. One, Arthrobacter sp. 2604, reduced the mercury associated with a gelatin medium by 30% and a paper matrix by 20% within 10 days at 28°C. Another, Cupriavidus metalidurans CH34, reduced up to 50% and 60%, respectively. Current work is optimizing the conditions for bacterial mercury removal such as the method of bacterial application and the appropriate food sources for the bacteria during the remediation process.

The Modular Cleaning Program: An Update and Demonstration

Chris Stavroudis

Another take on the Modular Cleaning Program. This time, we will discuss solvents, solubility theory, and how the MCP can help the conservator in thinking about solvent mixtures. The MCP uses Hansen solubility parameters as the basis for calculations and displays the properties of the solvent mixture on a two part graph. The graph hopefully helps the conservator visualize changes in the solvent mixture’s properties as the proportions of solvents are changed.

The next version of the MCP should also be finished and ready for debut at the WAAC meeting. The upgrade is mostly to upgrade from FileMaker Pro 5.5 to FileMaker Pro 8.5. As always, there will be run time versions of the system for both Windows and Mac OS-X which will allow conservators to use the program without owning FileMaker Pro.

With any luck at all, the new version of the MCP will allow Mac users to view Hansen space using the 3D visualization program, Grapher, which is included with the Mac’s operating system.

Rehousing With No House

Rebecca Tinkham

What do you do when your old museum collection storage facility has been demolished and the new one is a hole in the ground? Literally. Meanwhile work must continue, and you have a 2,300 plus collection to survey, treat, and rehouse. A tale of extreme coordination, creative problem solving, and fancy footwear from the Palace of the Governors / New Mexico History Museum as told by a textile conservator.

The New Mexico History Museum is scheduled to open Memorial Day weekend 2009 providing expanded space for permanent and temporary exhibitions and state-of-the-art storage with environmental controls. Since the new building will be located on the site of the old collection storage facility, the collections had to be moved to an intermediate space during construction. During this transition time, surveys and exams, conservation treatments, training workshops, rehousing projects, and exhibitions continue to happen and constant access to the collections is required.

Limited space in the conservation laboratory and the retrofitted storage facility has led to creative solutions when trying to juggle people, space, and projects. Supply storage is wherever it will fit. Volunteers’ projects are often dictated by the day they work to best utilize available space. Rehousing projects may be only partly completed to prevent expansion in a packed storage space. The conservation lab, which has been treating predominately objects on a routine basis, has been occasionally thrown into disarray when a large textile is brought in for treatment or costumes for mounting. Limited lab space has necessitated a wet-clean to be performed in an outdoor, public area of the museum. What has worked, what hasn’t, and what is being learned in the thick of it all.

Investigations into the Preservation of Light-Based Artworks at the Denver Art Museum

David Turnbull

The Denver Art Museum collection includes important light-based artworks by such artists as Dan Flavin, Robert Irwin, and James Turrell, but has had no approach for their long term preservation. The light-based installation Trace Elements by James Turrell was removed from display during the summer of 2007, and research into documenting the installation led to assessing exhibition and preservation issues of light-based artworks by other artists in the museum’s permanent collection.