
Annual Meeting Abstracts

The 2023 WAAC Annual Meeting

was held in Houston, Texas

November 6-8

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

The Sensate Gaze

Karen L. Schiff

I began making Laid Line Drawings in the summer of 2006, partly in response to the gorgeous papers I had seen less than a year before in the Metropolitan Museum of Art's exhibition "Vincent van Gogh: The Drawings" (October 18 – December 31, 2005). But the project emerged just as much in response to a cheap pad of paper I came across in a Wyoming Wal-Mart. This brief talk will focus on the ways that I use drawing to articulate the material qualities of manufactured laid papers, first by Aquabee and later by Fabriano, with the goal of discovering more about them, while along the way creating visual and conceptual intrigue. Looking sensitively at these papers is the first step toward perceiving and drawing out (so to speak) the quiddity of a thing, the tidbits of wonder lurking in even in mass-produced, everyday materials.

Endnotes

1. Cyclododecane, a white, waxy cyclic alkane, available at Kremer Pigmente GmbH & Co. KG
2. 1.1% (0.5M) MES sodium hydroxide pH 5.5/.5% Ecosurf EH-6™/deionized water
3. HXTAL NYL-1 Epoxy Adhesive Part A-B, epoxy, available at Talas
4. Paraloid B-72, an ethyl methacrylate copolymer resin, DOW Chemical Company)
5. 3M glass bubbles K25, 3M Company
6. Orasol dyes, Ciba-Geigy
7. Pigmented wax resin, Gamblin
8. Milliput, two-part epoxy putty, Mil-

Complexity of Vision, Consistency of Intent: The Art of Jay DeFeo

Karen Zukor

As a contemporary artist (1929-1989), Jay DeFeo was a singular figure in the San Francisco Bay Area. Her use of materials was wildly inventive and is evident in her drawing, painting, sculpture, collage, & jewelry. But 60 to 90 years later, her work presents a conundrum as to what was her intent and what is the result of neglect and poor storage. Conserving her work is a challenge – what did DeFeo intend and how does her work (literally) hold up?

Treatment of Mink Stole's Iconic Glasses from Pink Flamingos

Sophie Hunter and Dr. Rebecca Ploeger

In John Waters' 1972 black comedy film *Pink Flamingos*, the actor Mink Stole plays the antagonist Connie Marble, who battles Divine for the title of "filthiest person alive!" Her character is perhaps most recognizable by her glasses, a pair of 1970s cat-eye frames, decorated in sparkling silver rhinestones. The glasses were also one of the few remaining objects still in existence from this iconic cult film, and thus deemed critical to include in the current exhibition, "John Waters: Pope of Trash" by the curatorial team.

Unfortunately, the glasses, with their mainly cellulose acetate frames, were in very poor condition, having reached advanced stages of plastic degradation. The eyeglass frames were broken into several pieces and brittle and cracked throughout; their entire surface covered in a thick layer of leached plasticizer, which was hardened and blanched; their shape deformed from shrinkage; and the lenses had fallen out. The glasses could not be handled, as even the slightest amount of pressure would cause them to break anew. Mink Stole, who agreed to loan them to the Museum, described them to the curators as "dust."

This presentation will discuss the analysis and treatment of the glasses, including the use of cyclododecane to make them stable enough to handle, the cleaning and consolidation methods used, and the restoration of the lost areas. With the help of a supportive mount, the glasses are cur-

rently on display at the Academy where visitors can now recognize them as the movie prop that helped to create the Mink Stole character we know and love. Mink Stole has since generously donated the glasses to the Academy Museum due to the extensive conservation work that was carried out. (see page 24 for complete article.)

Conservation Considerations for Cast Ductile Iron Sculpture - Beverly Pepper's Moline Markers

Abigail Rodriguez

In the early 1980s, American sculptor Beverly Pepper became the first known artist to work with ductile cast iron. This groundbreaking work was completed in collaboration with the John Deere Foundry in East Moline, Illinois, and the Davenport Art Gallery of Davenport, Iowa. The sculptures created during this period are collectively referred to as the "Moline Markers" and include thirteen distinct vertical forms ranging in height from 9 1/2 to 24 feet.

Three of these sculptures are in The Fine Arts Museums of San Francisco (FASMF) collections, on display in the Barbro Osher Sculpture Garden at the de Young Museum. Two of the three sculptures exhibit structural condition issues and all three have heavy wear and alteration to their patinas. The structural issues include slight deformation of the vertical elements and subsequent failure of a spot weld.

This research is multi-pronged, aiming to develop treatment protocols for both the structural condition issues and restoration of the patina on the FASMF sculptures. As Pepper was known for pushing the limitations of sculptural materials, the development of a structural treatment plan for these works will include consultation with foundries, metallurgists, and structural engineers. Foundational work on this project will also include the assessment of several other "Moline Markers" across the United States, compiling past treatment methodologies to inform conservation considerations for monumental cast ductile iron sculpture. Colorimetry and spectrophotometry will be used to capture information about Pepper's intended patina.

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Substituting Esters for Aromatics in Varnish Solutions

Robert Proctor

Aromatics are both revered and detested by conservators. Revered for their unique ability to dissolve a range of resins and detested because of the environmental and health hazards they pose. The desire to find safer and effective replacements for aromatics may soon become a necessity as regulations get tougher. There are already some countries where it is almost impossible for conservators to obtain solvents like xylene, toluene and Shellsol A 100 ®. This paper will propose several potential replacements for aromatics focusing on two esters that the author has been using successfully in varnish formulations. How these solvents were chosen, tested and how they both compare and differ from aromatics will be discussed.

Climate Readiness for Libraries and Archives: Exploring Modular Storage at the University of Texas

Sarah Norris

At the University of Texas School of Information, preservation students address climate readiness as part of disaster planning. Within their disaster planning coursework, students undertake climate risk mapping projects to highlight how Texas collecting institutions are likely to be impacted by changes in storm patterns and flooding, especially in the Gulf Coast and Central Texas regions. These mapping projects often start discussions about the necessity of preventive action, as the extreme nature of water events continues to increase.

From these discussions, a collaborative project has grown to explore the idea of modular storage. With contributions from preservation students in the School of Information and design students in the School of Architecture, this project explores whether collections storage might be compartmentalized for quick removal as dangerous storms approach. This strategy would minimize resource-intensive flood response for damaged materials. It would also enable collections to remain permanently located in their home communities, even when those communities face increasing flood risk. Where climate-endangered communities are also

historically under-resourced, this project can also support equity, by preserving the connection between communities and their culture.

Another Take on the Spray Booth (Portable and Not)

Cristiana Acerbi Ginatta

The challenge in the newly built conservation studio was to find a way to partition the open floor plan and extract solvent fumes when spray varnishing and using solvents.

The partition needed to be easy to install and easy to reverse, should not block the light coming from the windows on one side of the space, and the fume extractor had to be adequately dimensioned, solvent-proof and for outdoor installation. The presentation will show 2 solutions that were explored and the final implementation and will include the budget for both solutions.

Paper Hinges for Heavy Lifting: a float frame solution

Courtney Books and Brian Koelz

In 2019 The Saint Louis Art Museum (SLAM) acquired an oil painting on Masonite by Esphyr Slobodkina titled *Levitating Abstraction*, c 1950. Unframing the painting revealed that any depth of frame rebate interrupted the artist's design and inspired the curator to purchase a new float frame.

In lieu of conventional solutions like clips or heavily applied adhesives, SLAM's paintings conservation and framing labs devised an alternate framing system that would satisfy the following goals: 1) be visually unobtrusive 2) avoid blind adhesion 3) be readily re-treatable 4) be strong enough to suspend the support's weight 5) be secure enough to withstand seismic shock. The adapted treatment was designed to suspend a hardboard panel within a float frame from a network of paper hinges and a rigid lattice support. Small mock-ups were tested for adhesive performances and a full-scale (1:1) mock-up was tested for extensive sheer/peel strength performances.

The resulting treatment successfully resolved common challenges found in float-framing a rigid support by maintaining accessibility to the reverse and

re-treatability. The painting was installed in the galleries of the Saint Louis Art Museum in November of 2020. Three years later, the support's hinges show no sign of strain, lending confidence to the weight-lifting performance of the hybridized design.

Message in a bottle: questions and realizations at the beginning, middle, and end? of a career in conservation

Olivia Primanis

This presentation is envisioned as an interactive discussion by WAAC meeting attendees. Throughout our careers in the conservation and preservation of art and library materials, we encounter many challenges, choices, opportunities, and goals. What are they? How did you manage them? Are you searching for some specific information now? Looking back, is there information that, had you known it then, would have influenced the course of your career? To add to the mix of choices and detours for all of us, please think of sharing your career questions and/or thoughts on how events in your work either resolved themselves or how you achieved your goal.

Using Felts for Localized Drying Treatments

Abby Schleicher

Drying paper is a critical conservation treatment, employed to manage dimensional changes in paper following exposure to aqueous treatment including humidification, mending with adhesive, or bathing. While standard methods for localized treatment often involve small mending stacks comprising a 10 pt blotter weight, hollytex, a glass plate, and a weight, it is important to reflect on how often we should adapt our methods based on the unique characteristics of the paper, media, and materials being treated. The ease and familiarity of established techniques should be balanced with the need for customized solutions and sustainability

There are a multitude of variables and methods for drying to consider, and choosing the right approach can have a profound impact on the outcome. Different restraint drying methods have been suggested for specific purposes and types of paper. To gain a comprehensive under-

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standing of the mechanical and chemical changes that occur when paper becomes wet and subsequently dries, “Paper and Water” by Irene Bruckle serves as an invaluable resource. It explains various methods to control and optimize the drying process for a wide range of applications specifically the overall flattening of paper in large pressing stacks.

Blotter stack drying versus felt-based techniques, or a combination of materials like matboard and felt, can be tailored to create distinct effects, each optimized for specific conservation needs. In the case of fine photogravures on delicate substrates like thin Asian tissue (e.g., gampi) or water-sensitive transparent architecture paper, adopting a local hard-soft mending stack may be the key to effectively managing dimensional changes. This tip will explore the role of localized drying treatments in paper conservation and the importance of adapting methods to suit the unique characteristics of the materials being treated.

Two Strategies for Botanical Albums at New York Public Library

Emma Guerard

The decision to change the presentation of a library item has major impacts on the general impression of that object, but may be a necessary one to preserve its overall content. In the case of two nineteenth century botanical albums in the New York Public Library’s Photography Collection, Ferns and Mosses (1865) and Tiroler Alpen Flora (est. mid 19th century), comprising brittle dried botanical samples and paper supports, the items were deemed too fragile to handle for digitization or access. To ensure the continued availability of these items, a strategy of changing their presentation for safe handling was elected.

Two different approaches were taken to reflect differences in the items’ primary formats. Ferns and Mosses consisted of botanical samples adhered to the recto of bound paper leaves in decorative and pictorial motifs. Ferns and Mosses was disbound; detached botanical elements were adhered to the paper supports, and the individual pages mounted in window mats. The samples in Tiroler Alpen Flora were originally stored loosely in

unbound paper folders with manuscript identification cards; the samples, cards, and their paper folders were encapsulated in polyethylene sleeves separately to reflect this unbound, non-adhesive portfolio structure.

The final outcome of these treatments are items that reflect their original content in a manner that can be safely accessed by library staff and patrons, but that are also vastly different from the primary form of the scrapbooks. This talk discusses decisions made throughout these two treatments and the implications of reformatting unstable albums as a strategy for their preservation.

Treatment of an Ethiopic Manuscript: How the Inaccessible Becomes Accessible

Kaeley Ferguson

The Harry Ransom Center is known for its rich collections full of unique items that are available to researchers across the globe. A small subset of Ethiopic Manuscripts in the Ransom Center’s Collection that are of increasing interest for research and classroom instruction have remained inaccessible due to challenges in condition and cataloging. The Miracles of Mary is a manuscript within this collection that includes beautiful illuminations and text dating from the 16th to the 18th centuries. In order to support the Ransom Center’s desire to promote access to more diverse non-European and American collections, this manuscript underwent an interventive treatment. This talk will discuss the treatment process, which includes media consolidation, parchment repairs, and resewing, as well as the decision making behind each of these steps. This treatment involved collaboration with conservators, curators, bookbinders, and scientists in order to make the most informed treatment decisions and learn about Ethiopic Manuscripts.

Paid Conservation Internships Programs, from High School to Graduate School

Jodie Utter, Ellen Kruppa-Cunningham and Sarah Melching

Largely, as a result of poor outreach, racism, and classism, art conservation is a relatively homogeneous profession

that historically has not reflected the diversity of the general population. In our field, there has been an expectation that applicants’ self-fund unpaid internships and extensive academic requirements before being considered for admission into one of a handful of conservation graduate programs.

The featured speakers have acted as host sites, providing opportunities for a variety of people from differing backgrounds and interests to gain practical hands-on experience in art conservation. These programs aim to educate both future conservators and individuals who will become educated advocates for the field of art conservation. The panel will discuss their internship programs and partnerships with a focus on the evolution of the programs and emphasis on successes and lessons learned, as well as attracting applicants from non-traditional backgrounds.

Breaking the Toxic Addiction-Sustainable Research at the MFAH

Soraya Alcala, Silvia Russo, and Per Knutås

Don’t you know that you’re toxic?
And I love what you do.
Don’t you know that you’re toxic?
(From Britney Spears, Toxic, 2003)

Like Britney Spears, we acknowledge that some of our habits are grounded in routine and can be harmful to our health and the environment. Acknowledging the need to improve conservation practices for our health and the environment, the Sarah Campbell Blaffer Center for Conservation at the MFAH is dedicated to rethinking the preservation strategies of our extensive collection of 5000 years of human creativity.

One of our initiatives highlighted in this presentation is our inclusion as a committed partner in the European-founded GREENART project (GREen ENdeavor in Art ResToration).

GREENART unites 28 global partners in an ambitious initiative to explore and develop innovative solutions for conservation treatment and preventive conservation using low-impact materials derived from renewable natural sources or recycled waste.

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As a participating partner, the MFAH is actively testing and implementing novel cleaning methodologies, coatings, and consolidants on various case studies. These case studies involve diverse materials and challenges, such as cleaning an oxidized and stained Morris Louis painting and removal of wax and applying a coating on a Giacometti sculpture.

The overall research focuses on two primary aspects: firstly, exploring new cleaning solutions, such as gels and nano-structured fluids, by replacing existing polymers, solvents, and surfactants with fully sustainable biological, natural, or low-impact materials, and secondly, re-evaluating traditional consolidants, coatings, and packaging materials using plant proteins and polysaccharides sourced from renewable resources.

This presentation will highlight the current state of the multidisciplinary research at the MFAH, addressing the challenges encountered and the significant advancements made in the pursuit of sustainable conservation practices.

Mapping the Crossroads: The Conservation of Varnished County Wall Maps from Indiana

Seth Irwin

In 2023, the Indiana State Library embarked on a six month grant funded project to treat the most condition critical varnished county wall maps in the collection. This project was funded by a grant from the Indiana based Nicholas Noyes Foundation and carried out by project paper conservator Valinda Carroll in the conservation lab of the Indiana State Library. In all, twenty varnished wall maps were treated, digitized, and rehoused. For most of these maps the condition was in such a state that even the act of handling them would cause pieces to fall off and they could not be digitized or exhibited or used in any manner.

Most of the maps selected for this project were the last existing copy. As these were county maps, they contained information not found anywhere else, such as property owners, business, and regional population information. 19th century wall maps present a difficult problem for paper collections as they are often very large and a very complex mix of

materials. This talk will focus on the conservation issues of varnished maps and the project conducted at the Indiana State Library.

Making a Pair of Microclimate Cases for a Vittore Carpaccio Painting on wood in two pieces

Jane Berman

Designing and executing micro-climate cases for paintings is always challenging, each one requiring a slightly different approach but with the same goal of maintaining a consistent relative humidity as well as protecting the object from “wear and tear” from travelling beyond its home environment.

The Getty Museum owns the top half of a Vittore Carpaccio double-sided painting on wood dated @ 1492-4 titled “Fishing and Fowling on the Lagoon” and the bottom half, titled “Two Women on a Balcony” is owned by the Museo Correr in Venice, Italy. These two paintings had been reunited in a single micro-climate case in 1999 but was deemed too cumbersome to use again.

This presentation will give a brief overview of the journey it took to make cases so these two paintings could come together for a second time in order to travel to the NGA in D.C. and Palazzo Ducale in Venice, Italy this past year.

Managing the logistics of removing a large-scale contemporary canvas painting from a blind strainer

Linnaea Saunders and Leslie Vilicich

A large-scale contemporary canvas painting (2022) sustained a small sharp dent that required treatment to address the deformation and accretions present. The canvas had been meticulously stretched over a blind strainer comprised of a wood strainer fitted with a thick hardboard. This prevented access to the reverse of the canvas; therefore, the canvas needed to be removed from the strainer for treatment.

As this was a brand-new painting, we felt it needed to be lifted from the strainer (not rolled) and sought a method for looming the painting that would not alter surface gloss of the gessoed foldover edges.

Aware of the system described by conservators at the Yale University Art Gallery

in a treatment presented at the Conserving Canvas conference in 2019, we modified their approach to accommodate the needs of this project. We also used this project as an opportunity to purchase and experiment with the Precision Mat. This paper will outline the nuances of how we worked through the testing, planning, and logistics to successfully handle this large format canvas.

Apollo Mission Control Center Restoration NASA, Lyndon B. Johnson Space Center, Houston, Texas

David Bucek, Jordan Shelton and Delaney Harris-Finch

September 1961, NASA announced Houston would be the site for the new Manned Spaceflight Center. A demanding four-year design and construction schedule necessitated a modular design developed by master plan architects, Charles Luckman Associates. Kaiser Engineers of California were selected to design Building 30, Mission Control Center (MCC).

Houston MCC took over all manned flight control operations in June 1965. Gemini, Apollo, and Shuttle missions were monitored from the third floor Mission Operations Control Room, (MOCR2). The MCC was modified to accommodate each program, including renovations in 1976-1982 when MOCR2 was stripped and reconfigured for Shuttle. The final mission occurred in 1992. The room was decommissioned and opened for tours with minimal alterations.

The Apollo MCC was designated a National Historic Landmark in 1985 for association with the U.S. manned spacecraft program, with emphasis on the Apollo 11 mission. The extant Apollo MCC includes MOCR2, Visitors Viewing Area, Summary Display Projection Room, and Simulation Control Room. The Apollo MCC fell into disrepair due to heavy, unrestricted visitor traffic; lack of adequate resources for maintenance; and competing stakeholder priorities. In 2013, restoration efforts were initiated. A grant from the National Park Service facilitated a Historic Furnishings Report and Visitor Experience Plan. This 2015 document provided Apollo-era specific restoration recommendations.

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The Apollo MCC was designated as “Threatened” by the NPS in 2015. The National Trust for Historic Preservation highlighted Apollo MCC preservation efforts during its 2016 national conference. This prompted the Houston Chronicle article, Money, access complicate effort to restore Mission Control. Following, Gene Kranz issued a letter to the NPS, ACHP, Senators, and NASA Administration firmly stating the importance of the site and urgency to complete restoration by the 2019 Apollo 11 50th anniversary.

Restoration consultation began in 2017, led by JSC with the NPS, ACHP, NTHP, Texas Historical Commission (SHPO), Space Center Houston, retired Apollo flight controllers, and restoration project management and design team. An expert team was tasked to restore the interiors of Apollo MCC, to Apollo 11 conditions. Apollo flight controllers were interviewed; 1960s plans, photographs and film were scrutinized; and on-site architectural forensics performed. Hundreds of narratives and drawings were issued to the SHPO for review.

The final record drawing package includes over 150 drawing sheets documenting historic, pre-work, and restoration conditions.

The consoles were restored to Apollo-era configurations; retrofitted with LED displays and energy-conserving projection technology was utilized in the SDPR. Electrical systems were upgraded and a new programmable lighting system was installed and historic fixtures LED retrofitted.

All interior elements and finishes (carpet, tile, wallpaper, paint, ceiling tiles, light fixtures, a/c grilles, and handrails) were restored. New wallpaper was rolled from original pattern drums found in storage. When re-manufacture was unfeasible, creative reproduction techniques were implemented; new ceiling tiles were hand-stamped to match the original pattern, and fabric was hand-woven to re-upholster vintage office chairs.

An audio-video visitor experience was produced. Projected displays of maps, data, and video on the projection screens, console monitors, and televisions were meticulously reproduced and synched with historic audio recordings.

Mechanisms of Decay: Rapid Weathering of Outdoor Basalt Sculptures

Jane Gillies, Bavan Rajan, Kirston Siebach, and Gelu Costin

Three basalt sculptures by the South Korean Artist Byong Hoon Choi called “Scholar’s Way” were installed in a pool of water, outside the new Kinder building for Modern and Contemporary art, at the Museum of Fine Arts, Houston in 2020. The sculptures are carved from naturally occurring columns of basalt sourced from Indonesia, with most of the surface being highly polished to a black mirror-like finish. Parts of the sculptures around the bases and at projecting elbows of the abstract forms retain a weathering crust.

Before the installation, conservation had concerns about what effect the surrounding environment and the addition of chemicals, to control the water quality, would have on the sculptures. In a short time, the polished surface had dulled and granules of the crust were falling off. Although the artist has worked with this material for 40 years, only a few of his sculptures are installed outside in water.

Despite his assurance about the material durability we obviously had a problem whose mechanisms needed to be more fully understood. Conservation collaborated with students and faculty at Rice University to determine the geochemistry of the basalt and weathering crust, as well as to analyze the water quality and its chemical composition.

Surface measurements of the columns with near infra-red, energy dispersive spectroscopy (EDS) and electron probe microanalysis (EPMA) showed that the base rock that was used was already in a highly altered condition before installation. The degree of alteration on the surface was accelerated by weathering in humid conditions.

The weathering crust is largely made up of clay and some remnant basaltic igneous minerals. The EPMA showed that the basalt contains orthopyroxene, Ti-augite, plagioclase, and Ti-magnetite and is thus an iron-titanium basalt. Secondary minerals are widespread and make up more than 90% of the crust. These minerals

are mainly clays such as ferripyrophyllite, ferrisepiolite, and kaolinite. The presence of these minerals proves that the rock was altered by hydrothermal processes prior to human intervention.

The effect of weathering in humid conditions affects the surface of the rock. The porous clay aggregate readily absorbs water and the other remnant minerals are somewhat soluble in the chemically treated water. The civil ordinance governing water features which had been used to justify the use of harsh chloride containing bleach and acid in the water was deemed inapplicable to this non-interactive feature. The clay minerals occur over the entire surface of the sculpture including previously polished portions, consistent with recent weathering in addition to the original weathering crust.

This study is ongoing. A protective wax has been applied to the polished areas. We have not decided on whether a consolidation treatment can be applied to the weathering crust as this may cause greater damage. We are removing the additive acid/alkali mix from the water and are investigating replacement with a copper salt to prevent algae growth.

Color Management of Digital Imaging for Conservation

James Craven

Imaging is an essential part of conservation documentation, and the imaging systems available are numerous and varied. This presentation will outline some essential capture parameters and color management practices that can satisfy requirements for accuracy and longevity of image data. Those topics include lighting quality and geometry, camera settings, color profiling, and archival file generation. The Menil Collection’s imaging studio will be presented as an example, but applications for these practices apply to any chosen hardware and at any scale.

*“The best way to send information,”
(Oppenheimer) explained,
“is to wrap it up in a person.”*

from *American Prometheus*