

## President's Letter

Mitchell Hearn Bishop

Walking back from the banquet over the Morrison Bridge in Portland I had plenty of time to think. It was a short walk but seemed long and for the most part, I thought about conferences.

Many years ago in art school I had seen a movie about Portland's bridges by Richard Serra and had conceived the romantic notion of walking over several of them while I was in town.

What I failed to notice, even though I had crossed over it earlier on the way to the banquet with Hiawatha and other WAAC walkers, was that Morrison wasn't a Portland bridge anybody in their right mind would walk on alone late at night. Even by daylight, it has all the charm of a stroll on a freeway. Pedestrian friendly, the Morrison is not. But it does provide a good place for some citizens to huddle beneath and drink a quart of beer out of a paper bag and ponder the wonders of cement and steel. A subsequent stroll over the Hawthorne Bridge more than satisfied my longings for the industrial ambiance of bygone days. On the whole, I was completely charmed by Portland. A great city, a great conference, terrific Chinese garden, and amazing food at a reasonable price. Lunch at the Heathman was a minor revelation, and I am now addicted to Oregon Pinot Noir. Claire Dean and Hiawatha Johnson did an amazing job, and you all did yours by giving talks and attending. In short, a hard act to follow. But, follow it I must while many members dream of moving to Portland.

First a few words about changes on the WAAC Board. As many of you know, Chris Stavroudis has resigned as Treasurer and will step down entirely at the WAAC meeting in Honolulu in 2003. We paid tribute to Chris' many years of service to WAAC at the banquet at Montage in Portland. How many of you have been feted at banquets that served alligator? Is this a great organization or what? (Vegetarian fare was also available). Molly Lambert was elected Vice President, and outgoing President J. Claire Dean will fill the unexpired portion of her term as Member-at-Large. Claire will also be helping with the transition as Chris steps down and a new Treasurer takes his place. Odile Madden has agreed to take the job as Secretary. We welcome Donna Williams and Nancy Odegaard as new Members-at-Large on the board. Walter Henry has agreed to serve in a new non-voting board position as Web Editor and will advise us on ways to make better use of the WAAC web site and grow the web site as a resource for members.

Finally, a big thank you to our outgoing board members, Beverly Perkins, Susanne Friend, and Hiawatha Johnson. Hopefully we will see them back on the board in future as Vice Presidents and Presidents!

This coming fall, October 9-11, 2003 we will be convening for our annual meeting at the Honolulu Academy of Arts in Honolulu, Hawaii. We're putting together a day of talks on subjects relating to conservation in Hawaii. Ideally, we will have an overview of conservation issues in the 50th state. Hawaii is a real microcosm for the issues confronting conservation all over the world. For the remaining two days of the meeting, I want to encourage you all to submit talks around a Pacific-Asian theme if you can. However, please feel you can submit talks on any subject.

For those of you who haven't been there, a few basic facts. Hawaii is roughly a four-hour plane ride from Los Angeles or San Francisco. Hawaii represents the far western edge of WAAC territory. So much so that it is half way to what used to be called the "far east." It is a sub-tropical climate, which is to say that it is not tropical in the sense of the equatorial tropics but warm virtually all the time and dominated by the presence and occasional absence of trade winds since it is in the middle of the Pacific Ocean. Coconut palms do well there but not as well as they do closer to the equator. Hawaii is the extinction capitol of the world. Many species evolved in the isolation of the Hawaiian Islands, and since the first human landed on Hawaiian shores, things have gone from bad to worse for Hawaii's endemic species. The relatively light presence of the Polynesian navigators who settled Hawaii gave way to the sugar industry, agribusiness, and mass tourism.

In spite of the environmental devastation, Hawaii is a place of great beauty and considerable charm, not just a giant destination resort. It is a place where a wide variety of people work and live, and it is, of course, a place where a surprisingly wide variety of people come to rest and play. Sadly, you will see little of the Islands as they were known to the Hawaiians but with some effort, you can get a sense of what life was like during the Hawaiian Kingdom and before Captain Cook's arrival. The importation of laborers from Japan, Okinawa, Korea, the Canary Islands, China, the Philippines, and believe it or not Norway, has given the islands a rich cultural mix that shapes its unique culture today. What this means, among other things, is incredible food. A trip to Chinatown in Honolulu will reveal a wealth of ingredients

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**President's letter, continued**

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found in a very few places on the planet. As a result, food and restaurants in Honolulu are now some of the best in the world.

Other than Waikiki, Honolulu has a variety of cultural resources. The Bishop Museum, the Contemporary Museum at Makiki Heights, the Honolulu Academy of Arts of course, the Mission Houses Museum, and the Iolani Palace just to name the most obvious. I would also urge anyone attending the conference to visit one of the other islands either before or after the conference. Oahu is a splendid island but the Big Island (Hawai'i) has Volcanoes National Park, Hilo, and Kailua.

Maui is in the unique position of being a place where you can drive your rental car from sea level to over ten thousand feet on the top of Haleakala and enjoy a complete change of climate and enjoy one of the great views of the world. Maui also has the former capitol of the Hawaiian Islands, Lahaina. The Lahaina Restoration Foundation has a number of historic properties worth a visit. Down in Hana there is the Kahanu Garden of the National Tropical Botanical Garden which is the site of one of the Pi'ilanihale Heiau, believed to be the largest ancient place of worship in Polynesia.

Kaua'i has the distinction of having two properties belonging to the National Tropical Botanical Garden, the Allerton Garden that may be familiar to some visitors as the site where parts of Jurassic Park were filmed and I'm told, a German version of Fantasy Island. On the North Shore of Kaua'i is the Limahuli Garden which has seven hundred year old agricultural terraces used in Kalo (Taro) cultivation. The town of Waimea on Kaua'i is the site of Captain Cook's first landing in the Hawaiian Islands. At times, I sometimes think it is a sleepier place than it was when he landed.

Moloka'i has the remains of the ancient fishponds used by the Hawaiians for aquaculture along the southern side of the island. It also is the site of the Kalaupapa Peninsula, now the Kalaupapa National Historic Park, a site of incredible beauty, which was formerly used for the forcible isolation of sufferers of Hansen's disease. Moloka'i is a great place to rest after giving a paper at the WAAC conference.

In Portland a number of you volunteered to help with the arrangements. We certainly welcome any help or suggestions. In a few months, the WAAC web site will include detailed information on the islands as well as information on accommodations, papers, and travel.

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**Deadline**  
Contributions for the May Newsletter should be

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## Western Association for Art Conservation

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The Western Association for Art Conservation (formerly, the Western Association of Art Conservators), also known as WAAC, was founded in 1974 to bring together conservators practicing in the western United States to exchange ideas, information, and regional news, and to discuss national and international matters of common interest.

### PRESIDENT

Mitchell Hearn Bishop

### VICE PRESIDENT

Molly Lambert

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General information  
New Memberships  
Publication Orders

Odile Madden

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Change of Address  
Payments

Chris Stavroudis

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Donna Williams

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Walter Henry

Individual Membership in WAAC costs \$30 per year (\$35 overseas) and entitles that member to receive the WAAC Newsletter and the annual Membership Directory, attend the Annual Meeting, vote in elections, and stand for office. Institutional Membership costs \$35 per year (\$40 overseas) and entitles that institution to receive the WAAC Newsletter and annual Membership Directory. For membership or subscription, contact the Secretary.

### Internet

Articles and most columns from past issues of WAAC Newsletter are available on-line at the WAAC Website, a part of CoOL (Conservation OnLine) hosted by Stanford University Libraries. WAAC's URL is:

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## FIRST ANNUAL WAAC SILENT AUCTION

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Thank you to all of the WAAC members who made the first annual WAAC Silent Auction such a success and so much fun. The auction raised a total of \$1,373 for Arts Alive!

Arts Alive! is a "by students, for students" money raising and grant awarding group founded in 1998 by Portland high school student Jennifer Fletcher, who was upset that arts funding in schools was being cut. Since 1998, Arts Alive! has awarded 33 grants for a total of more than \$112,000 to support arts education in Portland Public Schools.

The auction had lively, occasionally fierce (silently fierce, of course), bidding on all kinds of interesting items. The donations included very fine art, hand-made woolen mittens, wonderful books, tools, and even a set of Gamblin Colors.

The second annual WAAC Silent Auction will be held during the meeting in October 2003. This auction will support art education in Hawaii. Please take the time to create or find an item that you think would be fun to include in the auction.

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### Of Note

John M. Brealey, Head of the Paintings Conservation Department of the Metropolitan Museum of Art from 1975 to 1989; Adjunct Professor at the Institute of Fine Arts, New York University; a member of the Advisory Council, Hamilton Kerr Institute, University of Cambridge; Consultant to the Yale Center for British Art; Consultant and Restorer to the Frick Collection; and Fellow of the International Institute of Conservation of Historic and Artistic Works, died on December 19, 2002.

Brealey came to the United States in 1975 and, according to Calvin Tomkins in *The New Yorker* profile of March 16, 1987, was a "prime mover in a campaign to transform the theory and practice of the conservation of paintings in this country." He gave up an extensive independent practice because "the Metropolitan Museum of Art offered him a chance to set up his own teaching institute within the museum."

Students that he trained now have significant roles in conservation departments at the Museum of Modern Art, NYC; Museum of Fine Arts, Boston; the Virginia Museum of Fine Arts; the Kimbell Art Museum in Fort Worth; the Los Angeles County Museum of Art; the J. Paul Getty Museum; the National Gallery, London; the Prado Museum, Madrid; the Staatliche Museen, Berlin; and the Winterthur Museum and University of Delaware. A number of students are respected independent conservators in Europe and America.

He gave many public lectures and presented lectures on connoisseurship at various universities. His approach was first described by Sylvia Hochfield in *ARTnews* (Feb., 1976), and in *The Christian Science Monitor* on May 17, 1976. He described leaving a "microscopically thin layer of old varnish" on the white turban of Rembrandt's *Noble Slav*. Brealey felt it was necessary to "hold back" the turban during the cleaning to keep it from looking totally out of key. His conservative cleaning philosophy and his resistance to automatically lining paintings represented a "call to arms" in 1976 but has become fairly standard practice 26 years later. Brealey was co-author, together with Maryan Ainsworth, Egbert Haverkamp-Begemann and Pieter Meyers, of *Art and Autoradiography: Insights in to the Genesis of Paintings by Rembrandt, Van Dyck, and Vermeer*.

From 1982 to 1989, Brealey held annual five-day seminars at the Metropolitan Museum for directors and curators from other museums, on the connoisseurship of approaches to conservation and restoration of paintings, working in coordination with John Walsh.

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## Regional News

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### ARIZONA

The conservation lab at the Western Archeological and Conservation Center is steadily packing the fragile objects from the collection of 3.2 million artifacts to be relocated to their new building in Tucson in early 2003. Among the many people helping **Brynn Bender** are **Audrey Harrison**, Winterthur-Delaware program intern **Lara Kaplan**, and pre-program student **Samantha Rubinson**. Lara and Samantha also continue to work at the Arizona State Museum. **Gretchen Volks** and Brynn Bender are also still busy designing the new WACC conservation labs.

In addition to her private practice (Scroll and Folding Screen Restoration), **Carol Lavoie** is also the new preparator at the Center for Creative Photography.

**Martha Grimm** has just returned from studying traditional Mexican Weaving in San Miguel De Allende, Mexico.

**Marilen Pool** has been working on a number of projects for private clients. She recently submitted a proposal to conserve some historic artifacts from the Prescott City Centre Archaeological Site, including an oak beer keg.

**Nancy Odegaard** and IPAM partner (the AAM -International Partnership Among Museums program) **Orna Goren** are working on a month long exchange focused on cultural preservation. Nancy with **Melissa Huber** and **Cheryl Podsiki** (Kress Fellow) completed a CAP survey for the White Mountain Apache Tribe at historic Ft. Apache.

Also at the Arizona State Museum, **Teresa Moreno** has joined the museum faculty as Assistant Conservator and **David Smith** has been appointed Adjunct Conservation Scientist. The lab is actively engaged in several pesticide contamination studies with various units at the University of Arizona.

*Regional Reporter:*  
Brynn Bender (for Gretchen Volks)

### SAN FRANCISCO BAY AREA

**Julie Trosper** and **Molly Lambert** will serve as conservators on the 2003 Sikait archaeological expedition to Southern Egypt this winter (peace permitting). The site is a Roman emerald mining town located near the Red Sea. The excavations are co-sponsored by the University of Delaware and the University of Leiden (Netherlands).

The paper conservation lab at the Fine Arts Museums of San Francisco is pleased to have **Stephanie Lussier**, a third year student from Buffalo, and **Scott Homolka**, a recent graduate of the Buffalo program, working in the lab this year.

**Debra Evans** and **Jim Bernstein** conducted their "Mastering Inpainting" course (an AIC professional development workshop) at the Smithsonian Support Center in November.

In her project to document storage and exhibitions methods for large format works on paper, FAMSF Kress Fellow **Michelle Facini** has visited the San Francisco Museum of Modern Art, the Cantor Center at Stanford, the Doe Library and the Environmental Design Archives at UC Berkeley, the National Archives, the Library of Congress, the National Gallery of Art, the Baltimore Museum of Art, the Philadelphia Museum of Art, the Museum of Modern Art in New York, the Brooklyn Museum, private conservator Daria Keynan, GK Framing in New York, the Tate Britain, the British Museum, the British Library, the Victoria and Albert Museum, the Canadian Centre for Architecture, and the National Gallery of Canada.

She has also been contacting manufacturers to document available oversize materials. Michelle and Debra have also spoken to numerous conservators who have kindly offered information about their problems and successes in housing and displaying big paper. Michelle will continue to visit other institutions and collect information in preparation for an AIC presentation in June.

**Janice Schopfer** has completed installation of two new light bleaching units

in the paper lab. The new systems utilize high efficiency metal halide lamps (customarily used in the agricultural business) mounted to the ceiling with extensible supports (typically used in photographic studios). One of the units, comprised of two lights, enables conservators to do indoor light bleaching of prints as large as 5' X 7'. In addition to providing bleaching quality and efficiency comparable to that of sunlight, the units are also more compact and attractive than usual light bleaching set-ups.

Janice is now experimenting with polyester felts and inert corrugated material inserted in a forced air-drying press to achieve drying of paper by "de-watering" (the industrial term for evaporation).

At the Objects Conservation laboratory at the FAMSF, **Lesley Bone** has returned from Mexico City where she helped to install an exhibition of 300 African art objects from the collection of the Fine Arts Museums at the National Institute of Anthropology and Archaeology. The exhibition will travel to other cities in Mexico. Lesley is now working on the conservation of Oceanic objects for the new deYoung Museum, to open in 2005.

**Elisabeth Cornu** and **Paloma Añoveros** taught a preventive conservation course in Peru. The course, sponsored by the US Embassy, was carried out in two sessions, and took place in the north of Peru (Chiclayo) and in the south (Arequipa). From Peru, Elisabeth traveled to Buenos Aires, Argentina, on a Fulbright scholarship to teach a preventive conservation course at Fundacion Antorchas.

Elisabeth also visited convent collections in Quito, Ecuador and was invited to attend the 3rd Meeting of Latin American Patrimonial Cemeteries in Cuenca and Quito, Ecuador, at the end of October.

**Natasa Morovic** is conserving 18th and 19th-century American period frames from a number of Bay Area collections as well as from the collection of the Fine Arts Museums.

At the Asian Art Museum Conservation Department, **Donna Strahan** continues to work with contractors who are putting

the final touches on the new conservation laboratory. In between grant writing and setting treatment priorities she squeezes in some time to treat objects before they are packed for the move.

**Mark Fenn** is working closely with contractors at the New Asian to get the climate stabilized and a recording system in place before sensitive art objects can be moved into the new storage spaces. **Jane Williams** is leaving her "move conservator" position to give birth to her second child. She has applied for grants to continue preparing the lacquer treatment and research project for publication.

**Deb Fox** and **Setsuko Kawazu** are concentrating on the treatment of screens and scrolls for the opening exhibition on March 20. Special screen covers have been fabricated to protect the objects in their new storage cabinets.

**Blanche Kim** is still preparing objects for exhibition. Her current projects include treating Tang ceramics and lacquer objects, and working with the mount makers on large stone sculptures. **Meg Geiss-Mooney** continues to work on textiles and looks forward to the brand new storage units designed specifically for the textiles, thangkas, and costumes. **Candis Griggs** continues to pack, pad, strap, and stabilize objects for the move.

*Regional Reporter:*  
Paloma Añoveros

## LOS ANGELES AREA

The Conservation Center at LACMA has received good response from applicants for the Senior Paper Conservation position. **Victoria Blyth-Hill** and **John Hix** went to Brazil for a week in December to interview candidates for the next Lampadia/Getty Fellowship. The 2003 fellow will be in Objects Conservation. The interviews took place at CECOR (the Conservation Program for Brazil) in Belo Horizonte.

LACMA is working with **Andrew Hare** at the Freer/Sackler to schedule an Asian Screen and Scroll handling session in the

spring of 2003. When dates are confirmed, an announcement will be sent to WAAC members.

**Lauren Chang** joined the Textiles Conservation Section at LACMA for a one-year Mellon Fellowship. Lauren trained at the Textile Conservation Center, U. of Southampton before coming to LACMA and was a Mellon Fellow at the National Museum of the American Indian.

**Terry Schaeffer** participated in the Old Master Drawings and Museum Lighting meeting at the Getty Conservation Institute in October. **Liz Werden** and **Grace Jan**, pre-program interns, will be joining Paper Conservation in the treatment of the Nepalese Thangka *Chakrasamvara and Vajravarahi in Union* going on display in the *Circle of Bliss* exhibition at LACMA in October 2003. In addition to her work on the Thangka, Liz is continuing her pre-program internship experience in the objects conservation section at LACMA, where she will be treating works from the Southeast Asian collection. **Soko Furuhata** will be continuing her Mellon Fellowship in Paper Conservation through 2003.

**Sandhya Jain** will be returning to LACMA in March to continue her work on this Thangka as well as working with Paper Conservation and Textile Conservation on the mounting and framing.

**Joe Fronck** is beginning the restoration of a new LACMA acquisition, Baglione's *St. Francis*, purchased by the Ahmanson Foundation. **Elma O'Donoghue** traveled to Berlin last November to install LACMA's Central European Avant-Garde exhibition at the Neue Nationalgalerie. Mellon Fellow **Elisabeth Schlegel** traveled to Mexico City in December to pursue research on modern Mexican painters. Elisabeth will be continuing her Mellon Fellowship position through December 2003.

On November 3, **Duane R. Chartier** delivered a public lecture in the Distinguished Scientists Lecture Series sponsored by Santa Monica College. The topic of the 90 minute lecture was titled "The Art of Chemistry; The Chemistry of Art" which dealt with interdisciplinary

studies and the role of chemistry in dealing with problems in art conservation. Duane Chartier and **Susanne Friend** of ConservArt Associates, Inc., would like to welcome a new employee, **Alyson Souza**.

Susanne Friend gave a lecture at the dedication ceremony for the conservation of the WPA mural that ConservArt has restored at Torrance High School. The lecture was delivered on Saturday, October 26 in the auditorium of the high school, and the title was "Conservation of Relocated Immoveable Works: Anna K. Skeele's Home Life in Old Taos." This talk was similar to that given by Susanne at the meeting in Portland: "Conservation of Relocated Immoveable Works: Preservation at What Cost?"

**Tania Collas** of the Natural History Museum and conservator in private practice **Sharon Blank** carried out an intensive stabilization treatment on the Natural History Museum's Douglas World Cruiser, the *New Orleans*. The *New Orleans* was one of the two first airplanes to successfully circumnavigate the globe in 1924. It was donated to the museum in 1927. The stabilization treatment was carried out in preparation for the airplane's transport to a new storage location after the closure of the Santa Monica Museum of Flying where it had been on loan.

Silverlake Conservation is thrilled to have been hired as the project conservator for the Griffith Observatory Renovation and Expansion. They will consult with the General Contractor on all aspects of the building's restoration, which will be completed in 2005. **Linnaea Dawson** will be the project manager.

**Joanna Rowntree**, **Amy Green**, and Linnaea completed a conditions survey of the City of Dallas' outdoor sculpture collection. While in Dallas, they also repainted Tony Smith's *Snake is Out* in the collection of the Nasher Sculpture Center in preparation for the Sculpture Center's grand opening in Spring 2003. Joanna recently completed several other projects for the Nasher Sculpture Center including treatments of Mark DiSuvero's *In the Bushes* and Henry Moore's *Working*

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## Regional News, continued

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*Model for Three Piece No. 3: Vertebrae*, which she treated with Moore's assistant Michel Muller.

In September and October, Linnaea and Amy worked with the Getty Conservation Institute, **Leslie Rainer**, and **Aneta Zabala** on the documentation and stabilization of David Siqueiros' mural *American Tropical* located in downtown Los Angeles.

Sadly for Silverlake Conservation, Joanna has accepted the position of Conservator of Sculpture at the Nasher Sculpture Center. She will relocate to Dallas in February to run the Sculpture Center's newly created sculpture conservation lab. Linnaea and Amy look forward to future collaborations with Joanna and hope that some day she can be lured back to sunny southern California.

**Robert Aitchison** and **Mark Watters** of Aitchison and Watters, Inc. in collaboration with **Lisa Forman**, wrote the technical notes for over 400 works of art on paper included in the new catalogue of Galka Scheyer's collection by Vivian Endicott Barnett, entitled *The Blue Four Collection at the Norton Simon Museum*. The Blue Four are Paul Klee, Alexei Jawlensky, Vasily Kandinsky, and Lyonel Feininger. An exhibition of the collection at the Norton Simon Museum, *My Four Kings: Galka Scheyer and the Blue Four*, opened on December 13.

Robert and Mark gave a talk at the museum in January, one in a series of events associated with the exhibition..

They are also working with **Kurt Helfrich**, the curator of the architectural collection at the University Art Museum at UC Santa Barbara preparing architectural drawings for an upcoming exhibition of the work of John Woolf.

*Regional Reporter:*  
Virginia Rasmussen

### NEW MEXICO

**Bettina Raphael** is enjoying working in her new conservation studio in Santa Fe. She continues to consult with the Heard Museum of Phoenix on conservation criteria for the re-design of their permanent exhibit of Native Peoples of the Southwest.

She is also working on artifact treatment projects involving CCC tinware fixtures from Bandelier National Monument, "kachinas" from the School of American Research in Santa Fe, and Casas Grandes pottery from the Museums of Peoples and Cultures in Provo, Utah.

Now that the grand opening events of the new Museum of Spanish Colonial Art are over, **David Rasch** has turned his attention to additional community service. He has accepted the positions of Vice-President of the New Mexico Association of Museums and Vice-President of the Historic Santa Fe Foundation.

**Laura Downey** and **Kathleen Stewart Howe** presented a workshop "Preservation of Photographs" at the Jicarilla Apache Cultural Center in Dulce, NM on October 18. The experience was so successful that three of the attendees later came to Albuquerque to learn more in Laura's lab at the University Art Museum.

In the Spring 2003 semester at the University of New Mexico, Laura will teach a "Museum Preservation" course and team teach "Art Materials" with **M. Susan Barger**.

**Randy Ash**, **Linda Wiener**, and Susan Barger presented a pre-conference workshop on Care of Museum Collections for the New Mexico Association of Museums Annual Meeting. This workshop was part of the Museum Infrastructure Project directed by Susan Barger and sponsored by the Institute of Museum and Library Services.

**Bob Hartzler** of the National Park Service is conducting two finishes studies – one for the Great Kiva at Aztec Ruins National Monument and another for the CCC Old Santa Fe Trail Building which

houses part of the Intermountain Region offices for the NPS.

**Angelyn Bass Rivera**, **Mary Slater**, **Kathy Fiero**, and **Lauren Meyer** of the Vanishing Treasures Program (NPS) at Bandelier National Monument are conducting the first systematic documentation and condition assessment of all of the 1000+ cavates of the 12th-16th century Frijoles Canyon Pueblos and the 14th-century Tyuonyi Pueblo. UPenn graduate intern **Sophie Middlebrook** worked with National Park Service conservation scientist **Lori Kleifgen** to map a group of cavates into a GIS (Geographic Information System) program.

*Regional Reporter:*  
M. Susan Barger

### PACIFIC NORTHWEST

**Claire Dean** is recovering from the hectic days of the October WAAC meeting in Portland. She wishes to thank all of those who helped out, those who attended, the WAAC Board, and a special thanks to 2001-2002 Secretary **Hiawatha Johnson** for all his hard work during the year. Without all of the above it would not have been such a successful event. Claire is off to Africa in November for her now annual jaunt to the southern hemisphere to scare black mambas and do some teaching and field work.

The Seattle Art Museum's painting conservation studio should be complete in February 2003. There will be space for two conservators, and **Nicholas Dorman** hopes that the studio will eventually be able to accommodate one or two students or fellows. Once the studio is complete, Nicholas hopes to be able to attract funding to establish the beginnings of a conservation library that might be a resource for conservators and students in the area.

The Museum's conservation department has just launched a conservation oriented web site that relates to the Mexican

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## Regional News, continued

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Modernism show that is on display at the moment. The site has been tailored to begin to introduce the museum public to some of the terms that conservators use for technical examination. We hope that it is something that teachers will be able to use to prepare classes for looking at these (and other) paintings. Although the show is on display only until the new year, the site will be accessible via [www.seattleartmuseum.org](http://www.seattleartmuseum.org) for at least four years.

**Gail Joice** and **Nicholas Dorman** are also working hard to provide the architects on the Olympic Sculpture Park and museum expansion projects with the requirements for preservation and conservation standards.

**Diana Dicus** is looking for a source for glass bristle brushes.

In Alaska, **Monica Shah** has been working on a preservation plan for two pictograph sites for the National Park Service. **Ellen Carrlee** is currently treating two Eskimo dolls and a Tlingit basket. **Scott Carrlee** went to Barrow, Alaska to do a conservation facilities report for the Inupiat Heritage Center. Monica, Ellen, and Scott attended the Museum's Alaska Conference in Fairbanks where they were joined by **Carmen Bria**, **Camilla Van Vooren**, and **Hays Shoop**.

**Nina Olssen** has opened a private conservation practice in Portland. She moved here from Florence, Italy where she had lived for 15 years. There, she co-founded a private atelier which treated primarily Italian painted works on canvas and panel and polychrome sculpture of the 13th to the 17th centuries for institutional and private clients. She taught restoration at the Istituto per l'Arte e il Restauro in Florence for eight years, and also taught the History of Restoration for the International Studies Program of the University of Michigan and the University of Wisconsin at the Villa Corsi Salviati.

*Regional Reporter:*  
Peter Malarkey

### ROCKY MOUNTAIN

**Karen Jones** reports that library materials from the former Rocky Mountain Regional Conservation Center Collection are now available at Jefferson County Public Library. This circulating collection is housed at Administrative Services and may be accessed on line at <http://jefferson.lib.co.us> under the subject heading "Myra Jo Moon Memorial."

At the Denver Art Museum **Carl Patterson** reports that museum reorganization will now free him of collection services responsibilities to devote full attention to conservation, fund-raising, and collections move to the new museum building.

**Carl**, **Jessica Fletcher** and intern **Kristy Jeffcoat** will be teaching an Introduction to Art Conservation course at the University of Denver during Spring 2003 term. Kristy, recently graduated from the Queen's conservation program, will be working with curators of the New World and Spanish Colonial departments on the analytical analysis and treatment of about 30 artifacts.

**David Harvey** is busy organizing the 2003 OSG program as the Objects Specialty Group program chair, and contributing to the AIC News as the editor of the New Materials and Research column.

Eileen Clancy

### HAWAII

**Greg Thomas** has moved back to the Mainland and will be restarting Art Care in Rockport, Texas. Greg's new mailing address is: P.O. Box 618, Rockport, TX 78381. His new phone number is 361-727-9900 and he can be reached by email at [gtartcare@earthlink.net](mailto:gtartcare@earthlink.net) or [artcare@mac.com](mailto:artcare@mac.com).

**Laura Gorman** performed an assessment of *The Fourth Sign* by Tony Smith for NEA/SOS!. She completed treat-

ments of numerous artifacts for the new "Arts of the Islamic World Gallery" at the Honolulu Academy of Arts, and several sculptures for the new Hawaii State Art Museum located in downtown Honolulu next to the State Capital building. She also cleaned a collection of Chinese lacquer for exhibit at the Academy.

**Larry** and **Rie Pace**, Pace Art Conservation Enterprises have been fortunate to have **Dawne Steele Pullman** working with them during a couple of her too brief visits to the Islands. Dawn helped them with the cleaning of two large murals painted on the interior walls of the open air McCoy Pavilion at Ala Moana Beach Park. Pace Art Conservation has been busy with the treatments of a variety of paintings including several paintings for the opening of the new Hawaii State Art Museum.

In conjunction with the public opening of the Doris Duke Estate, Shangri-La, the Honolulu Academy of Art opened a new gallery for which they worked on a pair of painted Islamic doors. Larry also ran in the Honolulu Marathon (his 10th Marathon) on December 8. The lengths he'll go to for a lousy T-shirt.

Larry Pace

### SAN DIEGO

No news.

### TEXAS

No news.

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*You wouldn't worry so much  
about what others think of you  
if you knew how seldom they do.*

*Phil McGraw*

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# Health and Safety

## Mercury, The Other Heavy Metal

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In the past, this column has devoted a lot of space to lead. It is arguably the heavy metal that potentially more conservators come into contact with than any other. This column will be devoted to the other heavy metal, mercury.

Mercury is one of the most interesting elements in all creation: the only metal that is a liquid at room temperature; a liquid of remarkable density ( $d=13.5$ ); an excellent conductor of electricity; able to amalgamate with many other metals; surprisingly noble (it can be found in its elemental form in nature); and an amazing toxin.

When we think of mercury poisoning, most of us recall Lewis Carroll's "A Mad Tea Party" from *Alice's Adventures in Wonderland*:

"There was a table set out under a tree in front of the house, and the March Hare and the Hatter were having tea..."

And the Hatter was mad, because, as I imagine you all know, hatters were exposed to mercury. The most credible mechanism of hatters' exposure to mercury can be found at [www.hgtech.com/Information/MadHatter.htm](http://www.hgtech.com/Information/MadHatter.htm). To wit...

The popular top hat of the time were made from beaver fur, but cheaper ones used furs such as rabbit instead. A complicated set of processes was needed to turn the fur into a finished hat. With the cheaper sorts of fur, one step was to brush a solution of mercurous nitrate on to the fur to roughen the fibres and make them mat more easily, a process called carroting because it made the fur turn orange. Beaver fur had natural serrated edges that made this unnecessary, one reason why it was preferred, but the cost and scarcity of beaver meant that other furs had to be used.

Whatever the source of the fur, the fibres were then shaved off the skin and turned into felt; this was later immersed in a boiling acid solution to thicken and harden it. The acid treatment decomposed the mercurous nitrate to elemental mercury. Finishing processes included steaming the hat to shape and ironing it. In all these steps, hatters working in poorly ventilated workshops would breathe in mercury vapor.

The website article goes on to say that mercurous nitrate was banned in 1941 in the US, noting also that the "the ravages of mercurialism among hatters had been known and tolerated in the United States" for nearly a century before the ban.

Conservators potentially come into contact with mercury in quite a few ways. It has been used as an insecticide in collections for years (generally mercuric chloride) to treat taxidermy and botanical specimens as well as a fixative for biological specimens. Decorative arts collections may contain elemental mercury and mercury amalgams in the silvering of historic mirrors. It is in the pigment vermilion (cinnabar). It can be found in mineralogical collections. It could still be present in historic felts like those ersatz beaver felt top hats. History collections (as well as your attic or

basement) can have industrial materials like dry-cell batteries, switches, historic medicines, etc which are mercury bearing.

These occupational exposures are in addition to the daily exposure from mercury in the environment. Add to that possible contact with dental amalgam, broken fluorescent light tubes, broken switches in auto trunks, thermostats and thermometers, and, of course, seafood.

This column was suggested by Dr. Chandra Reedy who passed on this cautionary story. You know those testing ovens found in almost every conservation lab. They usually measure about 3' x 2' x 2', are almost always set to 100° C, and are used for artificial aging and Oddy testing. You've seen them, they usually have a thermometer poking out of the top of the oven. (Oh, did I mention that another one of mercury's remarkable properties is that it doesn't wet glass and has a remarkably linear coefficient of expansion making it just right for use in thermometers and manometers?)

A colleague of Chandra's was heating samples in the lab oven. Unbeknownst to her, the thermometer cracked, and the mercury spilled out into the oven. After she opened the oven door and stood there for a while adjusting her samples, she noticed the globs of mercury all over the bottom. She had the presence of mind to shut the door, but by then had already breathed in the mercury vapors that had permeated the oven.

Although a subsequent blood test indicated her mercury levels were not dangerously elevated, she nonetheless had significant symptoms indicative of mercury poisoning for about six months after the incident. (It was also an ordeal to decontaminate the oven, as it had to be moved outside and left open until the safety officer found no detectable mercury levels. Fortunately there was a space available that was away from human activity.)

Chandra wrote that this story reminded her that she has seen lab ovens in a number of conservation labs with what appeared to be mercury thermometers poking out of the top.

There are three broad classes of mercury toxins: organic and inorganic which includes both elemental and mercury salts. Elemental mercury is just mercury, also called quicksilver. Inorganic salts include mercuric chloride and the mercurous nitrate that our hatter friends were so mad about. Organic forms include methylmercury, Thimerosal, and dimethyl mercury. As a rule, organic mercury is the most toxic.

Some of you will probably remember the story of chemistry Professor Karen E. Wetterhahn at Dartmouth College. She died from exposure to dimethylmercury. In August of 1996, she spilled between one and a few drops of the compound on her latex gloves. She died in June of 1997 in spite of treatment for mercury poisoning.

Inorganic mercury can be converted into organic mercury via some biological processes. In the environment, industrial mercury waste released into the air (the largest single

source is coal fired power plants) settles into river and ocean sludges where bacteria convert it into methylmercury. The low levels of methylmercury released into the environment by the bacteria bioaccumulate as big fish eat little fish. Towards the top of the food chain, the levels of methylmercury can increase to dangerous levels.

In 2001, the FDA (US Food and Drug Administration) issued a consumer advisory for pregnant women stating in part: "Nearly all fish contain trace amounts of methylmercury, which are not harmful to humans. However, long-lived, larger fish that feed on other fish accumulate the highest levels of methylmercury and pose the greatest risk to people who eat them regularly. You can protect your unborn child by not eating these large fish that can contain high levels of methylmercury: shark, swordfish, king mackerel, and tilefish."

They further recommended that: "While it is true that the primary danger from methylmercury in fish is to the developing nervous system of the unborn child, it is prudent for nursing mothers and young children not to eat these fish as well."

In response to the FDA advisory, the Environmental Working Group and the US Public Interest Research Group released "Brain Food: What Women Should Know About Mercury Contamination in Fish," contending that the recommendations do not go far enough to protect women and children from mercury contamination. (A pdf of the full report can be found at: <http://www.pirg.org/toxics/reports/brainfood/brainfoodreport.pdf>.)

The report recommends that the list of fish to be avoided during pregnancy be expanded to include: tuna steaks, sea bass, oysters (Gulf of Mexico), marlin, halibut, pike, wall-eye, white croaker, and largemouth bass as well as the four listed by the FDA. Further it recommends that consumption of: canned tuna, mahi mahi, blue mussels, eastern oyster, cod, pollock, salmon from the Great Lakes, blue crab from the Gulf of Mexico, channel catfish (wild), and lake whitefish be restricted to one meal per month. Lastly, they state that it is safe for pregnant women to eat the following fish: trout (farmed), catfish (farmed), shrimp, fish sticks, flounder, salmon (wild Pacific), croaker, blue crab (mid Atlantic), and haddock. (Personally, I find it something of a culinary insult to include fish sticks in the same sentence with wild Pacific salmon.)

Organic mercury salts are also used as preservatives in a wide variety of products. Now banned, it used to be mixed with marine paint to create antifouling paint (barnacles and such wouldn't grow on the hull). Fans of bad 1980's television might remember that one character on "Dynasty" induced psychosis in his brother by painting his office with marine antifouling paint.

Staggeringly, organic mercury (Thimerosal) is still used as a preservative in some over the counter medications and, most alarmingly, in some vaccines. While its use in vaccines in

the third world may be justifiable on the basis of lack of refrigeration and reducing the per dose cost, it is shocking that in the first world, where refrigeration is ubiquitous, that vaccine manufacturers can't package all vaccines in single dose units that don't require a preservative.

So, organic mercury is very, very bad. Elemental (or metallic) mercury is more vexing. Not unlike the metal itself, it is very difficult to grasp fully anything about mercury. The more you try, the harder it is to pick up all the disparate pieces.

Since mercury has an appreciable vapor pressure, mercury vapor poses the greatest risk and is far more challenging to control. Mercury vapor passes through the lungs with great ease. About 74% of the mercury vapor present in a breath of contaminated air passes into the body through the lungs. (Alcohol in the air or blood reduces this percentage.) Mercury vapors are not well absorbed through the skin although elemental mercury can enter the body through direct skin contact.

Once in the body, elemental mercury gets past the blood-brain barrier and through the placenta, a trick which inorganic mercury salts cannot manage. In the body, the mercury can be oxidized to the mercuric ion (Hg<sup>++</sup>) by hydrogen peroxide-catalase (an enzyme that protects cells from damage by hydrogen peroxide). Also in the body, the mercuric ion can be reduced to elemental mercury by a number of biological pathways. Thus the mercury can be recycled through the body changing from dissolved vapor to salt and back to dissolved vapor. One of the implications of this is that testing for mercury in urine and blood samples can be remarkably variable.

The ACGIH (American Conference of Governmental Industrial Hygienists) has published a BEI (Biological Exposure Index) for mercury. Mercury can be measured in the blood or urine. It can take up to 20 hours after exposure for increased mercury levels to show in blood. The half life of mercury in the blood is about 85 hours so blood test are only valid during a short window after a single exposure. Mercury collects in the tissue of the kidneys. This causes a latency in the elimination of mercury. It takes 4 to 6 months of continuous occupational exposure before mercury levels in urine correlate with exposure.

Mercury accumulates in the gray matter of the brain, the kidneys, and liver. The classical signs and symptoms of inorganic mercury poisoning include: tremors, emotional instability and irritability, peripheral neuropathy, gingivitis, stomatitis, erethism, ocular and vision changes, hearing loss, and renal impairment. Inhalation of high mercury vapor concentrations for relatively brief periods of time can cause pneumonitis, bronchitis, chest pain, dyspnea, cough, stomatitis, gingivitis, salivation, and diarrhea.

A developing fetus is particularly sensitive to mercury – remember the fish? Children are highly susceptible to mercury and cases of mercury poisonings in the home are both

disturbing and indicative of the need to prevent contamination of the home from workplace exposure. A 23 month old toddler suffered mercury poisoning from a broken carton of fluorescent light tubes. The carton was broken in a shed adjacent to the nursery. The glass and mercury were removed but the children continued to play in the area. 5 months after the tubes were broken, symptoms manifested.

Mercury is used in amalgam based tooth fillings. The major source of temporarily increased levels of inorganic mercury in blood and urine is fresh dental amalgams. Small amounts of mercury vapor are given off by dental fillings. Whether or not this low, ongoing exposure is harmful is a matter of ongoing debate. Mercury deaths have arisen from exposure in a residence from home smelting of dental amalgam in an attempt to recover the silver.

The most alarming and uncontrolled exposure to mercury in the museum is from collection items that have been treated with mercuric chloride. This would include taxidermy specimens, some ethnographic materials, herbaria collections, and the like. Recent research has been done by Catharine Hawks, Kathryn Makos, and coworkers.

The C/Kathys are both exofficio members of the AIC Health and Safety committee. At the most recent AIC H&S committee meeting, Cathy Hawks described their research program and their results which they are writing up as you read this. While the formal papers are being prepared, I've been told I can spill some of the beans and dangle a few shiny baubles to get everyone's attention.

The most exciting aspect of their research is that they've taken a commercially available product and developed a test-strip indicator that is exquisitely sensitive to mercury vapor. It is so sensitive that exhaling on the test strip will give a positive reaction if you have amalgam fillings in your mouth. (Machines costing tens of thousands of dollars can barely do that.) For the details, you will have to wait for them to publish. (So nudge them forward by sending them encouraging emails.)

Furthermore, I've developed a theory about what I think is happening with mercuric chloride treated materials. The choice of opening with a quote from Lewis Carroll is more subtle than you might realize. Carroll was an early photographer. Photography is based on silver chloride's reaction to light and forming metallic silver (which is developed into an image). I think much the same thing happens with mercury. A bold leap forward or a foolish conjecture? You decide.

Many of the clues came from my long discussions with Cathy. One clue was that they had found mercury was being released into the air from the collection items they were studying. Their testing couldn't determine the form of the mercury with absolute certainty, but it's a good bet it is elemental mercury. In fact, they found that opening a cabinet of herbarium specimens could expose the curator to a dangerously high level of mercury.

By measuring the mercury concentrations in the cabinet, the air exchange rates in the storage area, and factoring in the current TLV-TWA (0.025 mg/m<sup>3</sup>), they were able to come up with a protocol for safely opening the cabinets. Now, the curator goes into storage, quickly opens the cabinet of interest, and promptly leaves the nearby area for a proscribed amount of time. In that time, the climate control system will have diluted the initial high mercury concentration to safe levels. Then they can work with the collection items safely.

Another bit of evidence: Cathy said that they had observed that paper in the inner pages in plant specimen folders (where the floral matter had been treated with mercuric chloride) were free of discoloration. The edges of the pages of some folders, however, had developed dark stains. Many of the folders with discolored edges were known to have been stored in glass-fronted cabinets. They suspected that either light or external contaminants were the cause of the darkening.

They tested mercuric chloride on Whatman filter paper alone and in the presence of ionized sulfur contaminants. They found that mercuric chloride alone formed the stains on exposure to short wave UV light and that the darkening reverted when removed from the radiation. (They also found that the presence of sulfur prior to light exposure lead to the formation of a permanent stain.) Hmmm.

Another factor to consider. Remember that vermilion can turn from red to black with light exposure. (The change is not chemical. The hexagonal mercuric sulfide, red cinnabar, somehow changes to cubic mercuric sulfide, black metacinnabar.)

The chemistry literature I had at hand didn't mention anything about light interacting with mercuric chloride. I spoke with some chemist friends, exchanged emails with the H&S committee, and checked the web. And, with the correct search term, "photoreduction," supplied by a chemist friend of a chemist friend, I found the missing link.

Inorganic chemists don't seem know about mercuric chloride's interaction with light... but environmental scientists do! The research was sponsored by the EPA (US Environmental Protection Agency) and is published on their website: "Final Report: Light Induced Mercury Volatilization from Substrate: Mechanisms Responsible and In Situ Occurrence" by Mae Sexauer Gustin at the Environmental and Resource Sciences Department, University of Nevada-Reno <[es.epa.gov/ncer/final/grants/96/airchem/gustin.html](http://es.epa.gov/ncer/final/grants/96/airchem/gustin.html)>.

Dr. Gustin's research found that mercury vapor was always being released from mercuric chloride but the level didn't change with exposure to light. Cinnabar did release mercury in response to light exposure. But, and here's the good part, mercuric chloride does release mercury in response to light if it is mixed with organic matter or iron oxide.

So, I'll bet a dozen Krispy Kremes that this is what happens: When a specimen is treated with mercuric chloride, the

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## Health and Safety, continued

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substrate absorbs light and transfers the energy to the mercuric chloride which promptly is locally reduced to metallic mercury. The metallic mercury migrates into the crystalline structure of the mercuric chloride where it forms a reservoir from which elemental mercury vapor is slowly released into the environment.

The consequences of this scenario, Krispy Kremes aside, is that mercury release from collection objects that have been treated with mercury salts is ongoing – something that is also supported by the C/Kathys and coworkers' research. Short of removing all traces of mercuric chloride, we can never beat the problem. So the solution is to move to scavenging.

My suggestion is to co-opt an idea that came out of the GCI's research on organic acids in display cases. Some years ago, the Getty demonstrated the efficacy of using a small fan to draw air into a display case through a respirator cartridge designed to remove organic acids. I would think the same idea would be well suited for the mercury problem. Depending on how efficient mercury vapor cartridges are at removing the contaminant, one could probably place one of Cathy's indicator strips on the down-wind side and have a monitor that would signal when the cartridge was spent.

I don't think passive scavengers will be as effective because they will not protect specimens in the same case from cross contamination, but they should be tested, too. The metal sponges that are used for mercury spill clean-up are a possibility. Cathy said they successfully used Pacific Silver Cloth as a mercury vapor scavenger during their research. I suspect microchamber and other zeolite based products and activated charcoal will not be particularly effective at sequestering mercury vapor.

Clearly there's much work to be done on the subject.

I would like to express my deepest thanks and gratitude to Cathy Hawks and Kathy Makos for their work and contributions to this paper. I also thank Dr. Duane Chartier, Dr. John McNally, Dr. Chandra Reedy, and Tania Collas for thought provoking discussions on the subject.

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*Duct tape, anyone?*

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## Briet's Antelope:

### Some thoughts on Suzanne Briet (1894-1989)

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Renée-Marie-Helène-Suzanne Briet was born in Paris on February 1, 1894. Briet was a librarian and historian, and a pioneer of documentation. Before becoming a librarian she was a secondary school teacher, teaching English and history in Algeria. Ultimately she was employed at the Bibliothèque Nationale in Paris and was one of the first three women librarians employed there. While librarianship has been a historically female dominated profession in the US, this was definitely not the case in France when Briet joined the staff.

In the 1920's Briet became involved in the international documentation movement. The legacy of this movement has been institutions such as the UNESCO Documentation Centre, the ICCROM Library in Rome, and to a great extent, the Information Center of the Getty Conservation Institute, originally based on the UNESCO model. Documentation as a movement was viewed as a progressive Internationalist effort to codify knowledge and make it accessible as a means of facilitating peace and prosperity. Information and access to information were viewed as having a positive transformational power.

Briet is significant today because her theories allow us to view a wide variety of information objects in terms of their relationships. Her theories are proving to be an important foundation to understanding these relationships and suggesting ways in which they can be used to make diverse bodies of related information accessible. In the United States, the term document is generally understood to mean a text. Briet understood the term "document" in a different sense that included photographs, sound recordings, and cultural artifacts. Each of these was viewed as meaningful containers of cultural content that placed them in the framework of human knowledge.

"Documentation" for Briet was a scientific activity of the greatest importance. The process of documenting the world and codifying knowledge was viewed as the foundation of all scientific endeavor. Today, we view much of this activity as a colonial enterprise that seeks to categorize the world into a framework that serves the needs of the "developed world."

As a democratizing force and as an instrument of social justice the documentation movement has been a failure. Similar hopes have been raised for the Internet that sound remarkably like those raised by the documentarians. Whether or not the Internet will serve as an information dissemination vehicle promoting social justice globally remains to be seen. Today, the picture is mixed but it is likely that the Internet will increasingly serve as the latest media outlet for the cultural colonialism that dominates much of the world today. Ironically, documentation of the use of this new medium has become the latest surveillance tool for governments concerned about terrorism and potentially dangerous dissent. It is also a powerful means of analyzing the habits and desires of consumers. I am confident that this would seem to Suzanne Briet a perversion of the hopes and dreams cherished by her and her colleagues.

#### Briet's Questions

Briet is best known today for her provocative questions. It is worth quoting from Briet to illustrate this point. Writing in 1951 Briet stated the following :

"In our age of multiple and accelerated broadcasts, the least event, scientific or political, once it has been brought into public knowledge immediately becomes weighted down under a "veil of documents" (Raymond Bayer). We admire the documentary fertility of a simple originary fact:

For example, an antelope of a new kind has been encountered in Africa by an explorer which has resulted in the capture of an individual that is then brought back to Europe for our Botanical Garden (Jardin des Plantes).

A press release makes the event known by newspaper, by radio, and by newsreels.

The discovery becomes the object of an announcement at the Academy of Sciences.

A professor of the Museum mentions it in his lectures.

The living animal is placed in a cage and cataloged (zoological garden).

Once it is dead, it will be stuffed and preserved (in the Museum).

It is loaned to an Exposition.

It is played on a soundtrack at the cinema.

Its voice is recorded on a record.

The first monograph serves to establish part of a treatise with plates, then a specialized encyclopedia (zoological), then a general encyclopedia.

The works are cataloged in a library, after having been announced at publication (publisher catalogs and the French National Bibliography).

The documents are recopied (drawings, watercolors, paintings, statues, photos, films, microfilms), then selected, analyzed, described, translated (documentary productions).

The documents which relate to this event are the object of scientific sorting (fauna) and of ideological sorting (classification).

Their ultimate conservation and utilization are determined by some general techniques and by sound methods for assembling the documents—methods which are studied in national associations and at international Congresses.

The cataloged antelope is an initial document and the other documents are secondary or derived."

#### Culture and Documentation

Briet is describing here the cultural apparatus that creates meaning. Meaning must serve social aims or it becomes meaningless. An antelope grazing in Africa unseen by Europeans may have been known to indigenous people for thousands of years. They have a name for it, and it has a place in their culture. When one of these antelopes is taken to Paris and placed in the Jardin des Plantes, it is described and assigned a scientific name based on its anatomical characteristics and placed in a relationship to all other living things. It becomes a subject of study and is embedded in our culture. The same creature may mean very different things in two human cultures. Ancestors of Briet's antelope identical to her example probably trod the earth many, many years

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## and conservation documentation by Mitchell Hearn's Bishop

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before human beings devised culture with its taxonomies and functional descriptions. Human beings are naturally concerned with the meaning they create and few are interested in any sort of meaning transcending the utility of the world for human beings. Taxonomies reflect cultural values and are functional. We often assume that they are expressions of some basic set of facts beyond culture, but they are in fact, social constructs. Even the most rigorous forensic examination or scientific analysis is subject to interpretation.

So who cares, and what does this have to do with conservation?

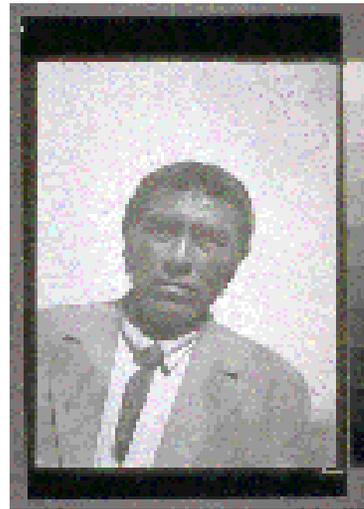
Documentation is then understood to be cultural activity. It tells a story about what it documents, and the fundamental premises of that story are embedded in the way that the culture understands and relates to the world. In an article by Orlofsky and Trupin in *JAIC* 1993 the way in which culture influences conservation treatment has been amply demonstrated. They give examples such as the Shroud of Turin and the shirt worn by the Lindbergh baby at the time of the kidnapping. Obviously these objects are treated very differently because of the "awe" inspired by their associations. Similarly, it is unlikely that a conservator would remove bloodstains from the garments Abraham Lincoln wore to Ford's Theater on the night of his assassination.

Conservation documentation per se is a recent phenomena as Moore pointed out in 2001 article in the *Journal of Conservation and Museum Studies*. It has not been codified by any means and is heavily influenced by context and practical matters such as who is paying for the conservation.

### Documenting Human Beings

An interesting way to understand this process is to look at instances in which human beings have been documented in the past. As mentioned before, this is relevant because documentation objectifies what it documents as part of the documentation process. If I document you, our relationship changes. I become the actor and you are acted upon. I see you as the subject of an attempt at "scientific" analysis or description. As a result, I may miss or ignore intangible or subjective aspects that are vitally important to you and really cannot be ignored if I am to document and understand you as a subject. I may also turn a blind eye to unpleasant things that I feel I cannot control or influence or of which I may simply disapprove.

The inhibiting effect of being observed and the function of observation as a means of social control has been eloquently stated by Foucault in his history of prisons. The rise of discipline and the internalization of discipline to increase the utility of human beings to the state and to industry seems to have also given rise to an anthropological and sociological urge to document the undisciplined. It records those who have never come under such observation or regulation or those who are outside it, the criminal, the insane, and the uncivilized. One thinks of Rousseau's "Noble Savage" and how eager Europeans were to find him or her and document their unobserved, and presumably undisciplined lives.



15-5403  
Ishi, full face  
Place: Southern Yana  
Date: 9/11

UC Berkeley, Hearst  
(Phoebe A.) Museum of  
Anthropology, Kroeber  
(Alfred L.) Ethnographic  
Photographs of California  
Indian and Sonora Indian  
Subjects, 1901-1930.

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Let us look at a story about an event that took place somewhat less than a hundred years ago.

Early in the morning of August 29, 1911 Ishi, the sole surviving member of the southern branch of the Yana Indians, wandered into the corral of a slaughterhouse a couple miles outside the town of Oroville in Northern California

At the time, my grandfather Lewis Melvin Hearn's was trying to raise a growing family in Oroville by reclaiming gold from the tailings left by gold miners in the area working as an electrical engineer on a dredger. What he thought of Ishi's arrival on the scene is unknown. He was an enthusiastic citizen of the Progressive Era and an eager participant in the cultural process of categorizing the world into a positivist taxonomy. He certainly would have been aware of the event since once word got out that the sheriff was holding a "wild man" it was a sensation, and people flocked into town to see the starving "wild" Indian who had wandered into town speaking no known language. Not knowing what else to do with him, Sheriff J. B. Webber handcuffed him, loaded him into a wagon, and took him into protective custody.

The anthropologist Alfred Kroeber and a young linguist Tom Waterman made the trip from Berkeley to Oroville, and Sheriff Webber handed his prisoner over to them. Waterman and Kroeber identified Ishi as a Yahi Indian, and Waterman was able to communicate with him. Kroeber later christened Ishi as "Ishi" which simply means man in Yahi. His real name is unknown. Ishi took up residence in the Museum of Anthropology and performed at the San Francisco Panama-Pacific Trade Exhibition, chipping arrowheads and demonstrating other feats for visitors. As an attraction he was a hit, but he contracted tuberculosis and died in 1916.

In spite of his wishes an autopsy was performed and his brain was preserved. Kroeber was on the east coast when Ishi died, and a letter instructing his colleagues not to conduct the autopsy but to cremate the body arrived too late.

Ishi's brain was sent to the Smithsonian, and the remains of his body were cremated and placed in a Pueblo Indian jar in a cemetery in the Bay Area. In 1999 his brain was rediscovered at the Smithsonian and repatriated after a request was made by Art Angle, the Chair of the Butte County American Indian Cultural Committee. The brain was returned and cremated. It was reunited with Ishi's ashes and was buried secretly by representatives of the Pit River Tribe on August 8, 2000.

To quote Suzanne Briet, "We admire the documentary fertility of a simple ordinary fact." After his appearance in Oroville, Ishi was indeed weighted down with a veil of documents. In fact, Waterman believed that the linguist Edward Sapir's "overworking" of Ishi was a contributing cause to his death. Sadly, some of the wax cylinders of Ishi's voice have melted and are no longer functional.

Kroeber changed the focus of his anthropological work after his friend's death. It appears that a major crack had appeared in Kroeber's scientific objectivity. Kroeber had also been working on "salvage ethnography" of the California Indians funded by Phoebe Hearst. Apparently, documenting genocide had precipitated a personal crisis.

When we document human beings, some interesting things happen. Usually the people being documented lose their humanity and become objects. Simple concepts like privacy are no longer theirs to claim. For instance, their wishes in regard to what is done with their bodies after they die can be disregarded.

It is easy for us today to look back on anthropologists of this period and judge them harshly. They worked among scenes of genocide and incredible human suffering and were seemingly unmoved. Earlier in his career Kroeber had worked with a group of Inuit brought back from Greenland by Robert Peary. He had been involved in staging a fake traditional funeral for the Inuit Qisuk while the actual remains were spirited away for dissection and the skeleton prepared for exhibition. In spite of a campaign in the press, his son Minik was unable to obtain his father's body. Kroeber was not a monster; quite the contrary, he was just doing what his peers did and ignoring any personal misgivings he may have had. For the rest of his life he was unwilling to discuss Ishi but toward the end of his life he did collaborate with his second wife Theodora Kroeber on her landmark book about Ishi.

As bad as the case of Ishi appears today, worse examples can be found.

Ota Benga was what was known as a "forest pygmy" and was brought back to the United States by a missionary. He was originally exhibited at the St. Louis World's Fair in 1904 and subsequently transferred to the New York Museum of Natural History where his "restlessness" led to his being moved to the Bronx zoo where he was exhibited in a cage with an Orangutan. He was quite small and his teeth were

filed to a point, which was considered beautiful by his tribal group. Europeans and Americans assumed it was a sign of cannibalism. Black ministers and some of the more humane members of the public tried to put an end to this racist sideshow, and Ota Benga eventually moved to Lynchburg, Virginia, had his teeth capped, and lived as a respected member of the black community. He committed suicide in 1916. Why he did so is unknown.

#### Documenting Intangibles

So, where does this leave us as conservators? Anthropologists have had to come to terms with a dilemma, can you simply study human beings whose lives and cultures are being destroyed and fly the flag of scientific objectivity? Is one obliged as a human being to become involved and intervene? If so, does this mean, by abandoning professional objectivity and detachment, one loses all professional credibility?

I think we can take this as a cautionary note and start to think more carefully about our own documentation. If there is no such thing as truly "objective" or "scientific documentation" perhaps what we as conservation professionals can do is to be more explicit about our point of departure and the influences we work under. We also need to be more sensitive to the subjective aspects of the things we document.

As an example we can look at an old tombstone in a small private cemetery near Mendocino California.



Upon examination, we see that it has been very clumsily mended by some well meaning person with a very goopy epoxy repair. Obviously this interferes with the appearance of the tombstone and could have been done in a vastly better manner.

When I visited this cemetery several things occurred to me. While unsightly, the presence of the gloppy repair is evidence that someone at one time deemed this headstone worth repairing and preserving. Many of the older graves such as this one had plastic flowers placed on them, apparently to dress up the cemetery. While I was there, a steady stream of people came through the cemetery to look at

a very picturesque sinkhole adjoining the cemetery that connected to the open ocean. At some point in the not too distant future, possibly after heavy rains and a big storm, part of the cemetery will undoubtedly fall into the sinkhole. Eventually all of it will.

If I were charged with the care of this cemetery, I would have a number of concerns. I would be concerned about the overall state of the place, broken and missing tombstones, the imminent danger of erosion, the stream of people wandering through who seemed to be using the place for a variety of purposes. There is currently legislation in California which seeks to protect and repair such cemeteries which are an important cultural resource for the state. This is a pioneer cemetery and each tombstone a historic document.

However, what is the purpose of this cemetery? New burials are not taking place. It appeared that few, if any, family members were visiting the cemetery. It has become a kind of de facto public park. If money was to be spent to "restore" or "conserve" it, what is the desired appearance? Should all the stones be reerected perfectly level and perpendicular? Missing pieces replaced by appropriate reproductions? Inappropriate repairs taken apart and redone properly? A new picket fence painted white or a wrought iron one painted black? Should this be informed by present day use or by the way it would have been used one hundred years ago?



Another cemetery, another kind of use, different historic documents. In the photo on the left we see what was probably a stone of some cultural significance to traditional Hawaiians. A hundred years ago it was turned into a Christian grave marker. This cemetery is in downtown Honolulu and is very well maintained. It contains the graves of many early Christian missionaries and many members of the Royal family from the period of the Hawaiian Kingdom.

Clearly it is used as a historic site and presented as such. However, some use is going on which is actually rather puzzling. You may notice that a lei has been draped over the shaft of the monument. Was this simply an impulsive commemorative gesture by a visitor? Is it a 20th-century Hawaiian practice I am unaware of to drape leis on gravestones? If I were the custodian of the cemetery, I would be less than happy about this since the leis die and dry. When it rains, they stain the marble and the other stones they contact.

How would I document these cemeteries? What would be my management plan? What are the cemeteries for? Who uses them? Is this use appropriate? I can't answer these questions but if I were responsible for this cemetery or the one near the sinkhole, I would have to do my best. The people paying me might prescribe a basic premise that I didn't agree with or that did not fit my observations. All I could do is to try to take all these things into account in my documentation and try to be sensitive to all the subjective elements, the conflicting interests of those who feel they have a stake in what I document.

Documentation is a "surrogate artifact"

Mary Brooks and Dinah Eastop tell their students at the Textile Conservation Centre at the University of Southampton that documentation is a "surrogate" artifact. What we know of Ishi and Ota Benga is from the documentation we have of them and their lives. In the cemeteries I showed examples from, the short documents in the form of headstones or markers are probably the only surrogate artifacts for the people who lie beneath.

A surrogate functions best when it bears witness and tries to present a faithful and well rounded representation. A bibliographic citation is a surrogate for the book it describes, a head stone is a surrogate for the person it commemorates, a photograph of an antelope is a surrogate for the antelope. None is perfect or complete but simply represent the view of whoever made the surrogate artifact and his or her intentions and limitations.

Conservation Documentation's Surrogate Function

Conservation documentation is a surrogate artifact, it is an interpretation of the artifact. In effect, a new "artifact" in the form of documentation is created to serve as a surrogate for the artifact (the initial document in Brietian terms). To use contemporary language, this new artifact "samples" and "appropriates" content from the original in the creation of an interpretive surrogate (the secondary or derived document) whose purpose is to present the artifact in light of conservation concerns.

It is specific to the time and place when it was created and as such is a subjective interpretation. Embedded with it is information about who did the documentation both explicit and implied. While "baseline" documentation intends to document the state of the artifact, structure, monument, or site being conserved prior to intervention, it is also subjective. It usually enfolds and draws from a variety of related documentation such as relevant archaeological, historical, or art historical documentation from other sources.

"Technical Art History" has been proposed as a term to encompass information about a work of art that relates to what it was made of, how it was made, and the techniques employed by the person or persons who made the object. For buildings, monuments, or archaeological sites there can be many other areas or disciplines from which we draw information.

We must also understand that the borders of “conservation documentation” are not neatly defined. Where conservation documentation ends and other forms of documentation begin can vary depending on the outlook and education of individual practitioners. Disciplinary points of view can also cause radically different variations. An architectural conservator's view of conservation documentation will differ from that of someone who conserves easel paintings.

As advocates for the objects they conserve, conservators speak for the objects and structures they care for and must explain their role in this regard, as well as the boundaries of their involvement and the function of their profession, its ethical posture, and their specialty.

Architectural conservators and conservators of electronic media are currently working to revise the documentation guidelines in the AIC Code of Ethics and Guidelines for Practice to accommodate the unique nature of their work. This effort illustrates the authorial nature of conservation documentation in that it must frame its purpose and point of view to fulfill its ethical mandate. It is important to understand that this shapes the authorial voice or intent in conservation documentation. This is rarely stated but usually underlies the text. The audience for these texts is unclear but seems to presuppose an audience of other conservators, conservation professionals, or a knowledgeable curatorial staff.

Let us look at a few examples to understand how documentation influences treatment and how the surrogate role of documentation plays out.

Consider a 15th-century panel painting created as part of an altarpiece in a church lit primarily by candle light. Today it may be separated from its companion pieces and viewed in strong artificial light. In a case such as this, good and complete documentation, for instance noting evidence of original structure, can contribute to explaining the context and function of this object to a surprising degree.

This information can have a dramatic effect on how the painting is conserved and how the piece is displayed. Inadequate or poor documentation, on the other hand could radically alter the treatment. This is the sense in which the documentation serves as a surrogate for the painting. It frames the painting contextually.

The documentation itself, however, is an intellectual construct subject to reinterpretation by varying individuals over time. When the initial document, or the painting, is still available for examination and documentation, it can be reinterpreted by subsequent viewers and will serve to contextualize the existing documentation. Frequently, panel paintings are treated many times over the years by a succession of conservators. These conservators may have different information available to them, such as the documentation of their predecessors, and may come to different conclusions or may have techniques and materials available to them that their predecessors did not.

Let us take another, more extreme example. For instance, a hypothetical wall painting from a Central Asian Buddhist grotto.

Perhaps it had been removed from the wall of the cave and placed in a museum in Dresden where it was destroyed by the Allied bombing of that city during the Second World War. Imagine also that extensive documentation of the expedition that discovered that painting and its removal from the cave wall existed in the British Museum and survived the Blitz.

In this case, the only evidence that the object ever existed would be the documentation. The surrogate, the secondary or derived document, is all that remains. The artifacts commenting on the artifact take on a new role and new importance. Since it documents an absent object, it becomes a presence evoking the initial document, i.e. the physical painting that was destroyed.

The great Buddha at Bamiyan, destroyed by the Taliban, is now largely absent. While it may be reconstructed from the rubble, the images that remain are now surrogates for that object and have taken on a meaning and a story completely different from that intended by the people who created it and the religion for which it speaks. (See AYMHM, p. 26, Ed.)

All too often, documentation is the only conservation that can be done under extreme circumstances, particularly with immovable cultural property. When this happens the original artifact, the initial document, can no longer be examined. It is in this way that the documentation, the secondary documents, become very important and are subject to being reinterpreted. An image of the Buddha becomes a symbol of the Taliban's iconoclasm and hostility toward all conventions regarding World Heritage.

How these texts or stories relate to the original is a question of relationship. If we are to recover a satisfactory understanding of the original, these relationships must be documented or retained as Suzanne Briet understood.

Stories told by conservation documentation may be intended as scientific, objective, and descriptive but culture, past and present imbues them with messages that represent the time when they were created, viewed, or reused. After all, the conservation of cultural property is about conserving material whose value, both cultural and financial, is not fixed and is, in fact, assigned and reassigned by subsequent generations.

Over time, these narratives are reused and turn into passion plays, stories of loss and redemption, or evocations of absences; absent humans, absent beliefs, absent works of art. These absences, like Suzanne Briet's absent antelope, are originary facts of great documentary fertility. As these documents drift through time and space further from the originals for which they are the surrogates they become increasingly weighted and culturally ornamented and are repurposed as needed.

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# WAAC Annual Meeting: Presentation Summaries

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*The 2002 WAAC Annual Meeting was held October 6 - 9 in Oregon at the Portland Museum of Art. The papers from the meeting are listed below along with summaries prepared by the*

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## **Your Lease is up! Preparations to Move Collection Materials to a New Warehouse in Three Months**

Albrecht Gumlich

The talk will focus on time saving choices and essential tools that made it possible to move three dimensional special collections objects from an old warehouse to a new facility. Staff from the Conservation and Preservation Laboratory at the Getty Research Institute had three months to conduct a condition survey of 130 objects, re-house numerous architectural models, and stabilize fragile items. Filemaker Pro database, a digital camera, and a clamp-on cutting edge were helpful tools to meet the tight deadline.

Sources of Materials Described:  
Tru-Grip, 30" Pro Clamp & Guide, \$35.99 at [www.woodhaven.com](http://www.woodhaven.com).

## **Laponite Residues on Paper and Parchment**

Andrea M. Totten

Laponite is synthetic inorganic clay of very small particle size that disperses in water to form a thick, thixotropic, colloidal gel. It is used as a poultice in the conservation of ceramics, textiles, books, and parchment to remove dirt and adhesive residues. Because the gel is extremely thick even at low concentrations of Laponite, it may be placed very specifically, giving the conservator a high degree of control and preventing the solvent from spreading to other areas of the treated artifact. The use of Laponite in ceramics conservation has recently been questioned due to the presence of residues that alter the surface characteristics of treated ceramics. Residues have also been found on feathers treated with a Laponite poultice.

This study intended to determine whether residue would also remain on paper and

parchment substrates treated with a Laponite poultice. Samples were coated with Laponite gel that was scraped off after a fixed amount of time. Portions of the samples were also swabbed with ethanol. The samples were examined using polarized light microscopy, ultraviolet fluorescence microscopy, scanning electron microscopy with energy dispersive x-ray analysis, and Fourier-Transform Infrared spectroscopy to determine if residues were left on the substrate surfaces. Samples were then artificially aged and examined using colorimetry for changes in visual appearance.

Laponite residues were identified on all substrates types and in some instances were visible under magnification as a dried, cracked film. All analytical techniques revealed the presence of Laponite except optical microscopy and ultraviolet fluorescence microscopy where results were inconclusive. After accelerated aging, samples treated with Laponite had yellowed and darkened more than untreated samples.

Sources of Materials Described:  
Laponite  
Rockwood Additives, Ltd. (UK) or  
Southern Clay Products, Inc. (USA).

## **Carbon Dioxide Cleaning of a Granite Base**

Andrea Morse, Catherine Hayes

This paper describes a relatively new cleaning technique that utilizes dry ice and its application in a specific conservation treatment. Referred to as dry ice or carbon dioxide (CO<sub>2</sub>) blasting, this method was originally developed for industrial use and has now, like many other industrial applications, made its way into the conservation world.

Originally, the city of Pasadena contracted Sculpture Conservation Studio (SCS) to treat the bronze portion of the Union Soldier memorial in Memorial Park. The success of the bronze treatment was viewed so well that SCS was asked to remove the paint coating on its base.

The roughly hewn, pink granite 6.7 foot high by 6.8 foot (at its widest) base had over the years successive applications of paint applied as a means to contend

with graffiti. The cumulative paint coating was excessively thick (particularly within the undercuts), faded from weathering, and had a patchy appearance due to more recent, mismatched paint applications. Additionally, the paint had some cleaving and losses.

Time was of the essence, since we needed to clean the base prior to the end of Pasadena's fiscal year. While the paint was highly soluble in acetone and Jasco paint stripper, time and physical labor would not permit such treatments. Also, as this base was within an elevated garden planter, a required cleanliness was desired, making a Jasco combined pressure wash treatment not feasible.

This project seemed to be an ideal opportunity to test CO<sub>2</sub> blasting, an application used by industry and fire disaster cleaning companies. It utilizes a spray of dry ice crystals under high pressure to blast at a surface. The physics of this process works at three different levels: 1) the force generated by the physical impact of the dry ice particle, 2) an instant thermal difference between substrate and coating that encourages cracking and delaminating, and 3) the ability of the sublimed CO<sub>2</sub> gas to work its way into crevices under the coating, where it expands upon warming, further promoting removal.

The limited budget allowed SCS to hire a disaster clean-up company for only one day. This resulted in the removal approximately 80 percent of the paint coating, leaving behind more deeply embedded paint in the rough stone surface.

It was observed during treatment that graffiti applied directly to the stone, some appearing to be aerosol based, was almost entirely removed with this process. It came as a relief that a poultice treatment was not necessary.

Additional paint removal and cleaning included minor use of Jasco paint stripper and power washing. After the base was thoroughly washed and rinsed of all surface residues, an anti-graffiti coating manufactured by ProsoCo, was applied to the base. Two coats were applied with a brush to all granite surfaces, with a third coat given to the more accessible, graffiti prone areas.

As treatments are sometimes governed by necessity, the usefulness of this technique proved ideal in expediting the removal of the paint coatings on the granite base. The benefits were, reduced labor, no alteration to the stone surface, and no secondary waste material.

The disadvantage of CO<sub>2</sub> blasting is the expense of the dry ice medium itself, which can make the regular use of such a method prohibitive. For SCS it was an ideal way to access more quickly and easily the structure of the base to complete the project.

Sources for Materials Described:  
Sacrificial Coating SC-1 removable anti-graffiti shield  
Prosoco, Harry A Lowry & Assoc. Inc.  
11684 Tuxford St.  
Sun Valley, CA, 91352.

Disaster Kleen-up, Better Floors and Restorations  
201 West Santa Fe Ave.  
Placentia, CA, 92870.

Cryogenesis  
2140 Scranton Rd.  
Cleveland, OH 44113  
<http://www.cryogenesis-usa.com/>.

### **Creating Easy to Use Site Monitoring Programs for Rock Image Sites in South Africa**

J. Claire Dean

In many struggling countries, particularly those with fractured histories and poor economies, the development of tourism — “environmental” or “adventure” tourism especially — is seen as an essential part of economic recovery and development with massive potential. For many nations it is also a means to rediscover their cultural heritage and attempt to redress previous distortions and misrepresentations of their histories.

South Africa is an excellent example of such a country. It has become one of the most popular winter destinations for European travelers tired of Spain and Florida, but who either do not want to travel as far as Australia or Hawaii, or cannot afford to do so. The rapid loss in value of the Rand over the past few years has also spurred a major rise in

tourists visiting the country, including an increasing number of Americans.

No longer content to show pictures of extraordinary botany, historic Cape Town, Nelson Mandela’s new home in Soweto, or spectacular wildlife, a recent South African tourism advert featured a photograph of one of the country’s most important and spectacular painted rock image sites, which also happened to be one of its least well protected. The Rock Art Research Institute (RARI) of the University of the Witwatersrand, Johannesburg, complained to the government demanding that such sites be managed and protected appropriately before facing the onslaught of uncontrolled visitation.

Lessons learned in other rock image rich countries, including Australia and the USA, have demonstrated that unmanaged visitation almost inevitably leads to rapid deterioration, if not loss. While much of this damage is unintentional and can be attributed to simple accumulation of wear-and-tear and a lack of understanding about the fragility of sites, the most immediate and destructive damage takes the form of deliberate vandalism — commonly graffiti and attempts to steal images.

The likely outcome of a lack of management coupled with the often remote locations of many South African sites, and the employment of poorly educated and ill-informed guides, formed the makings of a nightmare waiting to take hold of RARI’s already over stretched staff.

As a result of RARI’s protestations, the Institute was charged with the task of developing management plans for three very different rock image sites in various locations across the country. These plans included full documentation of the images and sites themselves and their condition, development of visitor facilities (including two new visitor centers), training of local guides, and the development of programs to monitor the on-going condition of the sites into the future. As RARI’s conservator I was given the task of carrying out the condition assessments of the sites and developing a monitoring program that was low-tech, user friendly, affordable, and easy for non-conservators to carry out.

This paper will describe the monitoring program that was developed using the site featured in the Tourist Board advertisement — “Game Pass” in KwaZulu-Natal — as a case study. It will also include a few examples of exotic wildlife for good measure.

### **Mill of Dunnydeer: the Saga Continues**

Jack Thompson

At the 1998 WAAC conference I described the medieval-style papermill I planned to build on my property in Idaho. During the summer of 1999 the pond was excavated. Over the winter it filled with water and retained the water through the summer of 2000. In September, 2000, the pond was drained through a ditch which was dug to allow installation of a pipe and valve to control waterflow to the millwheel, and the millsite was cleared and leveled.

By the summer of 2001 it was clear that water was draining from the pond through the filled-in ditch, so the ditch was excavated, and it was discovered that the pipe had been broken when the ditch was re-filled. New, and larger, pipe was laid in during the late summer of 2001 but it was not possible to install the new valve before the snows came.

In September, 2002, the new valve was installed. In October, 2002, following the WAAC conference, more pipe will be laid and the ditch will be re-filled, to await the rising tide. If water remains in the pond until the valve is opened, work can commence on the mill and millwheel.

Sources of Materials Described:  
Whiskey and Ibuprofen, widely available.

### **Museum Insurance and Risk Management: Post 9/11/01**

Gail Joice

The world of risk management and insurance is still experiencing the aftershocks of the terrible losses of 9/11/01. Museum exhibitions, major loans, art in transit, and insurance policies have all been affected by the tragedy of terrorist attack.

This paper will be reviewing the immediate effects of 9/11 on the transport of

traveling exhibitions, on the role of couriers under heightened security, and the changes in fine arts insurance coverage. The perspective of insurance underwriters will be presented in context of the recent history of major disaster claims, which have contributed to rising rates of coverage. Changes in US Indemnity coverage and a resolution by the Association of Art Museum Directors will also be discussed. Attendees are encouraged to participate in dialog about how to protect works of art in transit under the new restrictions.

### **Supporting an Abstraction: Design and Fabrication of a Support Mount for a Jean Dubuffet Sculpture**

Jamie Hascall

During the preparation for installation of a large foam and fiberglass sculpture by Jean Dubuffet, a sizable crack was discovered in one of the supporting "feet," and concerns were raised regarding the structural stability of this section of the piece, and especially its survivability in the event of an earthquake. We designed and fabricated a support system intended to take the weight of the sculpture and improve its stability in a seismic event. This paper will discuss the elements considered in the design and fabrication of the mount and the results of the project.

Sources of Materials Described:  
Phillyseal R (formerly Pliacre)  
Contact for local distributor  
130 Commerce Drive, Montgomerystown, PA 18936 USA  
Tel: 215-855-8450  
Fax: 215-855-4688  
www.philadelphiaresins.com.

System 3 Epoxy and fiberglass cloth  
Fiberlay  
2425 NW Market St.  
Seattle, WA 98107  
Tel: 1-800-942-0660  
www.fiberlay.com.

### **Investigation and Treatment of a Stone and Adobe "Kiva" Structure at Natural Bridges National Monument**

John Griswold

This paper summarizes the work performed by Griswold Conservation Associates and Dean and Associates

Conservation Services on Structure 5, a "kiva-shaped" structure of river stones and adobe mud, in a large rock shelter at Natural Bridges National Monument in Utah. Of particular concern was an unstable mud plaster panel bearing pictographic images.

Emphasis is placed on the examination and interpretation of physical evidence indicating the deterioration mechanisms involved.

The project presented an opportunity to compare systematically far-range infrared imaging techniques with surface temperature spot readings and moisture content readings using a Protimeter moisture meter. The importance of establishing the rate of visible deterioration through past documentation is underlined. Ethical considerations in formulating an amended or reconstituted adobe mud infill are explored.

### **The Charles M. Russell Hearse: It Ain't No Skunk Wagon**

John Kjelland

This horse-drawn hearse is considered a rarity and is not only one of the finest examples of such a vehicle but also bears immense historical significance. Manufactured by James Cunningham, Son & Company of Rochester, New York, it carried Mr. Charles M. Russell (America's cowboy artist) to his grave outside of Great Falls, Montana, in 1927. Mr. Russell loved horses but detested automobiles, referring to them as "skunk wagons." This hearse fulfilled his wish of being drawn to his burial spot behind horses. The carriage now lies at rest in the Trails End Gallery in the Charles M. Russell Museum in Great Falls.

The intent of the treatment was to return the hearse to its 1927 appearance. Since any treatment changes an object to a degree, conservation strategies must maintain an object's historic integrity. Therefore, a reasonable understanding of the degrading effects of environment and time on the materials was integral to the hearse's completed appearance.

The hearse was removed from storage and brought to the Trails End Gallery in the Russell Museum for onsite conservation treatment. The hearse was

first placed on a three-foot square iron dolly. The hearse could then be rolled and rotated to utilize natural and artificial lighting. Removing the young oil, or oil-bound resin top coating, from the earlier enameled paint coating was an arduous and time-consuming task. Aqueous gels and Histsolv-based gels were effective, with minimal swelling of earlier layers. Adequate fume ventilation techniques were used throughout the project. Other treatment tasks included cleaning and stabilizing textiles, leather, glass, and metals. Loss compensation included a seat covering and new front tires. The Gallery remained open with the hearse on display during the treatment.

Onsite conservation eliminates potential transportation damage and offers visitors a visual demonstration of a museum's commitment to its collection.

### **Getting Away from Wood: Low Cost Alternatives to Wood and Wood Products in Collections**

Jude Southward, Cheri A. Jones, Matthew F. Crawford, Robert Akerley

Over the past decade the Denver Museum of Nature & Science, Conservation Department, has undertaken a number of collection storage upgrade projects. These have included designing and building customized storage supports for large, heavy, or awkwardly shaped artifacts and specimens. Shrinking budgets and limited resources, which make many ideal but high cost solutions impractical, have marked this same decade.

Consequently, a recurring goal of our more recent projects has been to find alternative materials to replace the less desirable option of wood and wood-based products such as plywood and particleboard. The criteria for these alternative materials are that they should be chemically inert, relatively low cost, and provide the necessary strength to support objects safely. The materials chosen also need to be processed with relatively equal levels of skill and utilize no more specialized equipment or training than would be needed for wood.

The result of our efforts has been a gradual evolution in mount designs that completely replace wood-based products with inert plastic substitutes. The benefits

include removing potentially harmful acids and volatile organic compounds from the storage environment and eliminating the labor intensive and marginally effective process of sealing and coating wood surfaces.

This presentation looks at a number of materials and designs that we have adapted to meet our needs. Additionally, several new products are being considered for use that have been selected from the recycled materials industry and seem to be promising, reasonably priced alternatives to traditional wood products.

Sources for Materials Described:  
Coroplast™ corrugated board  
Composition: polypropylene, Manufacturer/Distributor: GE Polymer Shapes (303-744-3700), Price: 8' x 4' x 4mm = \$10/sheet.

Thermoclear™ (white or clear)  
Composition: polycarbonate, Manufacturer: General Electric, Distributor: GE Polymer Shapes, Price: 8' x 4' = \$50.22.

Acid-free blotter paper  
Composition: unbuffered 100% cotton blotter paper, Manufacturer: University Products, Price: 32" x 40"/50 sheets = \$142.

Polyplank™ polyethylene foam plank  
Composition: open-celled polyethylene foam, 3.8-pound density, Distributor: Katze Paper, Price: approx. \$100 per sheet.

Tyvek® sheeting 1422A  
Composition: high-density polyethylene – fiber/spun-bonded polyolefin, Manufacturer: University Products, Price: 60" x 50 yards = \$151.

Polyester batting  
Composition: 100% polyester, Manufacturer: University Products, Price: 40" x 30 yds. = \$77.

Tivar 1000  
Composition: Ultra high molecular weight polyethylene, Manufacturer: Poly-Hi-Solidur, Distributor: GE Polymer Shapes, Price: 4' x 8' = \$444.

High-density polyethylene - HDPE  
Composition: high-density polyethyl-

ene, Manufacturer: Poly-Hi-Solidur, Distributor: GE Polymer Shapes, Price: 8' x 4' = \$192.

Biofiber Composite Panels  
Manufacturer: Phenix Biocomposites, LLC., P.O. Box 609, Mankato, MN 56002-0609, Tel: 800-324-8187, Fax: 507-344-5522, Email: sales@phenixllc.com.

### **Suzanne Briet: Mother of conservation documentation?**

Mitchell Hearns Bishop

Renée-Marie-Suzanne Briet was an information science pioneer who published a seminal work that raised fundamental issues in regard to documentation and the nature of information. Briet asked if an Antelope was a document and went on to explain under what circumstances an animal might be regarded as a document. Automation of information and information seeking have caused Briet's ideas to be reexamined. Briet and her colleagues were highly influential in forming modern concepts of "documentation" that form the foundation for our basic assumptions about "conservation documentation." This paper will examine these assumptions and their history. It will also explore what these ideas mean in regard to the role of contemporary conservation documentation.

### **A Preliminary Report on the Removal of Fungus from Slides**

Niccolo Caldararo, Candis Griggs

Removal of mold from photographic slides is a difficult process and one that has not garnered much comment in the literature. Slides with mold are altered in ways that reduce or destroy the information they contain. Our recent experiments and developments in methods we have utilized for several years have produced a reliable and safe process for cleaning slides of mold.

### **The Conservation Department at Seattle Art Museum**

Nicholas Dorman

The conservation department at Seattle Art Museum was established in May

2001. At that time Julie Creahan (collections care manager), Marta Pinto Llorca (conservation technician), and Barbara Robertson (assistant conservation technician) moved across from the museum services department to join me (chief paintings conservator) in setting up the new department. Over the coming year, the department will expand to include an administrative assistant and an assistant conservator.

The conservation department will continue to address collections care issues (care of objects in storage and on display; monitoring movement of objects; liaising with independent conservators) and preventive conservation matters (pest and environmental control, earthquake damage mitigation). Framing, matting, and the provision of custom-made storage for individual objects will also be undertaken by the department.

In addition to managing such ongoing concerns, the department will also constitute an in-house facility for the conservation treatment and technical examination of works of art from the Seattle Art Museum (SAM) collections. Examination will form a fundamental part of the approval procedure for loans. It will also become the starting point for the conservation treatment of works of art and for displays or articles regarding technical aspects of their production. The proposed analytical resources include optical microscopy and lamps for ultra-violet fluorescence examination. In time we intend to campaign for the development of these facilities to include x-radiography and infra-red reflectography.

One of the first goals of the department is to establish a fully equipped conservation studio in the raw space that has been reserved for this purpose on the fifth floor of the downtown museum. The studio will be a flexible workspace, tailored to permit the treatment of a variety of objects by both staff conservators and independent consultant conservators.

Preventive conservation matters will remain one of the leading priorities of the department. The studio will also house an anoxic treatment tent for the safe fumigation of artifacts with non-toxic nitrogen or argon gas.

The department recently hosted the workshop *Safeguarding our Cultural Heritage: Emergency Response for Cultural Institutions*, held by the Foundation of the American Institute for Conservation of Historic and Artistic Works. In this intensive 3-day workshop a group of conservators, preservation architects, and librarians from the North West came together to consider strategies for the care of cultural property during and immediately following disasters.

In September the department will also host the workshop *Protecting Collections on Display and in Storage*, presented by the Balboa Art Conservation Center of San Diego.

The conservation department will be involved in docent training and lecture series such as the First Friday program.

Education will constitute one of the most important aspects of the department. Thanks to a generous donation, it has already proved possible for the department to host its first summer intern. Patricia Favero, from the conservation program at Buffalo in New York, has spent the last 6 weeks working on a documentation project for SAM. She has been examining a painting from the community, acquiring digital images of the painting, and seeking a format for the storage of conservation documentation at the museum. It is hoped that such internships and, ultimately longer fellowships will become an intrinsic aspect of the department.

### **Gamblin Conservation Colors, Their Development and Technical Notes**

Robert Gamblin

Gamblin Conservation Colors were developed over a seven-year period. The project began after Rene de la Rie identified a resin that he thought might prove valuable as a binder for inpainting. The principles of the team in addition to Rene were Mark Leonard of the Getty, Jill Whitten, now in private practice in Houston, and Robert Gamblin. This presentation will outline the development process of the retouching colors including the materials testing and field studies. Also to be discussed are notes on the working properties of the colors.

### **Unsanctioned Works in an Unimportant Place: The Painted Columns of the Lovejoy Ramp**

James Harrison

In 1948 the artist and Greek immigrant Tom Stefopoulos began a series of paintings on the columns of the old Lovejoy Ramp — a viaduct built to span the rail yard where he worked as a watchman. The paintings were a mix of Greek mythology, Americana, and biblical imagery, and became a part of Portland mythology. Learn about the ongoing effort to conserve and re-erect the 10 painted columns that were carefully extracted when the ramp was torn down in 1999.

### **Making it Work/Getting it Done: How Portland Maintains its Public Art Collection**

Robert Krueger

No abstract submitted

### **The Conservation of Damien Hirst's *Still Pursuing Impossible Dreams***

Rosa Lowinger, Christeen Taniguchi, Amanda Black

In the early 1990s, British artist Damien Hirst made a series of pieces that involved butterflies. The majority of these were canvas paintings with butterflies strewn on the surface, appearing to be trapped in the paint. *Still Pursuing Impossible Dreams* (1992) is a large-scale work from that period. With this piece, the artist not only utilized butterflies on the surface of two canvases that are laid end to end on a steel fulcrum, but also scattered them on the floor of a large steel framed glass box that enclosed the paintings.

*Still Pursuing Impossible Dreams* is in a private collection, having been purchased by its present owner at the time it was first exhibited a decade ago. The owner contacted Sculpture Conservation Studio (SCS) because she began to notice that the butterflies were “disintegrating.” Indeed the butterflies on the paintings were partially eaten, and the ones on the floor were completely destroyed. An important concern was to determine what to do about this. Should the butterflies be replaced? Should they be conserved?

How much visual change was allowable and what form should it take?

All of these questions were answered by the artist's London gallery White Cube2. Hirst made it clear that his preference was to have the damaged butterflies replaced. The challenge now became finding these insects and getting them ready for the treatment. According to the artist, it was not necessary to find exact matches; replacement butterflies could be similar to the originals in size and appearance. It was more important to maintain the overall meaning of the installation. By attaching cocoons on one wall, and butterflies both on the floor and trapped in the surface of the paintings, Hirst refers to an entire process of birth, transformation, and death.

The piece was located in a remote resort town and required on-site treatment. Therefore there were many preparatory steps to conservation. The first of these was to find a source for butterflies. As it turns out, they are generally sold in a folded, desiccated state which requires hydration. This process involved placing the butterflies in hydration containers with distilled water, and injecting the center of the thorax with hot water to hasten the process. This took a minimum of two days to achieve. Squeezing the center of the thorax on the side with the legs, and gently blowing between the wings tested readiness. Full hydration resulted in the wings opening up easily.

After hydration was achieved, the butterflies were mounted onto Styrofoam pinning boards by first using forceps to fold open the wings. The wings were lined level to the top of the board so that they dried correctly. Small glassine sheets were used to encourage the wings to open and were then pinned down. Forceps were then used to help spread the top wings from the hind wings. This entire process was long and painstaking, taking a staff of four people two full days to prepare the butterflies.

On-site conservation was carried out over the course of three days by one conservator. Attachment of the butterflies on the canvas involved several approaches. Wherever possible, butterflies were retained. In three instances, only a

missing piece of the body was replaced. In some cases, the disintegrated butterflies were removed and replaced with ones that were as similar as possible in size and appearance. The decision for replacement was made in each instance by the conservator in consultation with the client or her art coordinator.

The replacements were made retaining the portions of butterfly that were embedded in the paint layer. New butterflies were placed on top of these areas and bonded in place. The original appearance was retained either by matching the edges of the replacement to the embedded portion, or by inpainting on top of the replacement butterfly. The butterflies were bonded in place using a 40% solution of Acryloid B-72 in acetone.

Consolidation tests had been carried out in Los Angeles prior to treatment to see if it was possible to add resiliency to the butterfly wings. The tests were done with Soluvar matte varnish and Acryloid B-72 in xylene. The Soluvar blanched the surface. The B-72 was partially successful but saturated some of the subtler colors. At the site, a thin 3% solution of B-72 in acetone was used to consolidate the new butterflies, especially on body parts that are attractive to insects. This was done in the hopes that the presence of the resin would discourage future infestation.

Conservators rarely face the prospect of treating entomological collections in the course of their work, and SCS was excited by this challenge. Creative and successful replacements of butterflies and butterfly pieces were made on this Damien Hirst piece, and consolidation was effectively used as a potential tool to discourage future infestations.

Sources for Materials Described:

The butterflies were purchased and literature on hydrating and mounting were obtained from BioQuip Products in Gardena, California and Insect World in Spring Valley, California. Both sources were also directly consulted. Additional guidance was obtained via the internet from Ianni Butterfly Enterprises in Cleveland, Ohio.

White Cube2, a gallery in London, was consulted in regard to the artist's ideas of the piece.

### **Conservation of Relocated “Immovable Works”: Preservation at What Cost?**

Susanne E. Friend

Murals are, theoretically speaking, immovable works of art. They are generally commissioned for a particular architecture or become a lasting statement of the physical or cultural history of a site. However, reality dictates that tastes change and that the interest and attention paid to any installation is linked to many, often conflicting, factors and pressures.

When tastes change the art usually suffers and what should be “immovable” is moved. The consequences are often severe both from the point of view of materials damages and the drastic aesthetic changes that also must take place. This talk will focus on the problems with working on relocated murals and some of the important lessons to be learned.

### **Restoration of Emanuel Fremiet’s *Joan of Arc***

Jonathan Taggart, Nancy Thorn

Joan of Arc has been a symbol of determination, patriotism, feminism, and devotion since her resurrection to popularity in the 19th and 20<sup>th</sup> centuries. The gilded Joan of Arc equestrian sculpture by Emanuel Fremiet, located in Portland, Oregon, had fallen from this state of grace due to the ravages of time, neglect, vandalism, and pranksters. The sculpture, given to the city in 1925 gilded in gold leaf, is one of at least six others all from the original Fremiet casting. The coat of gold was its first and probably its last. The sculpture turned darker and greener until it blended into the foliage in the park-like traffic circle where it was placed. Most residents never noticed it, even though it stands twenty feet tall on its granite base.

The surface of the metal deteriorated as is typical of untreated outdoor bronzes, with the insulting addition of spray paint. The white granite stone surface was gray with graffiti. The statue's crown, flag, and pole were either deteriorated or missing. Inappropriate repairs in the past had led

to iron staining. Finally, this sculpture had become the subject of continual pranks: caps, capes, and a fall pumpkin head appeared regularly.

The restoration of the sculpture was a coordinated effort between the city body responsible for the care of Portland's outdoor sculpture, the community, and two interested conservators - Jonathan Taggart (an objects and sculpture conservator) and Nancy Thorn (specialist in gilded objects).

The proposed treatment for “Joan” was to return her to her original gilded state, replacing or repairing all of the damaged sculptural elements, improving the site, cleaning the stone base, and establishing a maintenance program. The missing elements were refabricated using historic photographs and detailed contemporary photographs from other versions of this sculpture located in Paris, Philadelphia, and New Orleans.

Our initial hope was to work with the existing corroded bronze surface by applying the appropriate primer and size, then gilding over it. This would provide the possibility of reversing the treatment and returning to the pretreatment appearance. Over time, it became clear that preserving the corrosion layer would substantially reduce the effective lifetime of the gilding and result in a substantially greater maintenance cost in the future.

The decision was made to chemically strip the bronze surface to bright metal in preparation for the application of the primer, size, and gold. The stripping of the bronze, which was not undertaken lightly or without trepidation, proved to be surprisingly easy and effective.

The proposed package of primers, size, and gold was rather standard, but further investigation during the treatment led to some product changes which we felt would improve the durability of the treatment. These changes lead one to wonder if there might be yet another choice of materials and layering that could further increase durability and improve the surface appearance.

This paper presents the process of cleaning and re-gilding, and the research in-

volved in determining the best course of action, which at times changed daily.

Sources of Materials Described:  
Sepp Leaf Products

Pacific Coast Paint

Imperial Paint Company.

### **The Treatment Strategy for the *Ram Caught in the Thicket*, Royal Cemetery at Ur**

Tamsen Fuller

The treatment strategy for the *Ram Caught in the Thicket*, one of the best known artifacts from the ancient Near East, from the Great Death Pit of the Royal Cemetery at Ur in present day Iraq, was influenced by several factors, including said fame.

The Ram was excavated by Sir Leonard Woolley, known in his lifetime for his skill in excavating, documenting, and preserving archaeological materials, a reputation which stands today. It was excavated in the 1928-29 season, in a time period when public attention was captured by the ancient archaeological past, such as the Carter's discovery of King Tutankhamen in Egypt. And at the time of treatment, discussions about the Ram between curatorial and conservation typically included curators from three different institutions and scholarly bents.

Although there are gaps in its perfection, the physical history for the Ram is relatively well recorded. This documentation was essential to its treatment in 1997. Woolley provided critical details in describing the reconstruction of the Philadelphia Ram, as well as that of its "pair," a similar figure excavated nearby which now belongs to the British Museum. In situ site photographs for each Ram were invaluable primary data. Once at the University of Pennsylvania, the Philadelphia Ram is known through notes in archives, photographs in photo archives, and conservation records once that lab was established in the early 1970's.

One of the overriding influences on treatment was that the Ram was needed

to travel for several years as part of a multi-venue Ur exhibit. This meant that the sculpture needed to be reconstructed in component parts for ease and safety in handling, packing, and transit. The parts needed to assemble and disassemble easily, and each part needed to be made durable in a way that the original almost certainly was not.

Some of the strongest directives placed on the Ram's treatment came from curatorial, for reasons of iconography and style. The first was to re-place the Ram's front hooves on the tree branches, as they are clearly seen in the in situ photograph, and the second was to give the animal's body a more characteristic profile.

Ultimately, the Ram told its own story, corroborating some details from other sources and altering some others. Many insights came from reconstructing the gold tree, a process involving reuniting torn and separated pieces of gold and working with the photograph of the Ram as found in the soil.

In the end, I was awed by the power to transform that is placed in a conservator's hands and, as an ethnographic conservator, even more respectful and fearful of that aspect of conservation called restoration.

### **Sampling Strategies and Testing Procedures for Identifying Arsenic and Mercury Pesticide Residues on Collection Objects at the Natural History Museum of Los Angeles County**

Tania Collas, Allyson Lazar

Arsenic and mercury salts have historically had widespread use as pesticides on anthropological and natural collections. The collections at the Natural History Museum of Los Angeles County are unfortunately no exception.

As a first step in assessing and mitigating the health risk of these pesticide residues for collection staff, Tania Collas, Conservator, and Allyson Lazar, Curatorial Assistant for Anthropology, with the collaboration of other collection staff, set out to develop sampling strategies and testing protocols to determine the

nature and extent of contamination in the collections.

The vastness of the museum collections, with roughly 30,000 organic anthropological objects and over 200,000 bird and mammal specimens, necessitated a sampling strategy that would be humanly feasible yet statistically valid.

To select samples, the authors used subjective criteria such as the provenance and collection date of groups of artifacts or specimens to identify the collection groups that had the most likelihood of contamination. They then randomly selected artifacts and specimens for sampling within the suspect groups.

For the pesticide identification process, the authors researched and attempted several simple spot tests for both arsenic and mercury on samples from anthropological artifacts and ornithology specimens. After struggling with the ambiguous results often obtained using microchemical spot tests, they were able to refine the testing procedures of two tests that are relatively quick and easy and are usually non-destructive.

While these tests can be useful for determining the presence of arsenic or mercury salts, they are qualitative only and cannot be used to determine the degree of contamination. Also, these tests cannot determine the presence of organo-pesticides. Other technical analytical procedures required for either quantitative results or identifying organic pesticides will be briefly outlined.

Sources for Materials Described:

Arsenic test kit  
EM Quant Arsenic Test Strips (100/pack) (cat. No. M100261) includes arsenic test strips, zinc powder, and hydrochloric acid.

Fisher Scientific  
Tel: 800-766-7000  
Website: [www.fishersci.com](http://www.fishersci.com).

Diphenylcarbazone  
Tri-Ess Sciences Inc.  
1020 W. Chestnut St.  
Burbank, CA 91506  
Tel: 818-848-7838  
Website: [www.tri-esssciences.com](http://www.tri-esssciences.com)  
(Also available from most chemical suppliers).

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## Articles You May Have Missed

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**“Gold Buddhas in Cambodian Jungle,”** *Arizona Republic*, August 27, 2002.

New restoration work on Cambodian sites of 1970s Khmer Rouge destruction is unearthing more than political memories. Twenty-seven solid gold Buddha statues, as well as more of silver and bronze were found buried under a ruined pagoda: “The workmen were supposed to be rebuilding the temple which was smashed up by the Khmer Rouge, but then they found these golden Buddhas and the whole construction work has had to stop.”

**“Old Master Bargains - Two for the Price of One,”** by Tim Radford, *The Guardian*, August 26, 2002.

Renaissance art hidden for 500 years has been retrieved for the public gaze with computer technology and the kind of vision used by an owl or a fox.

Underdrawings - the outlines of the pictures-to-be, often in charcoal or ink on a white surface - will make up the body of *Art in the Making: Underdrawings in Renaissance Paintings*, an exhibition at the London National Gallery in October. Since the drawings lie concealed under thick oils and tempera works by giants such as Raphael, Breugel, Cranach the Elder, Altdorfer, and so on, their discovery through a technique called infrared reflectography represents the ultimate bargain in the Old Master market: buy one, get one free.

*A Flight into Egypt*, by someone known only as The Master of 1518, reveals a touch of production line approach. The underdrawing reveals the separate hands of a figure expert who did the foreground figures and a landscape expert who supplied the trees and the distant landscape. In the finished work, the original landscape design was ignored, and a different view painted on top, suggesting a third hand at work.

**“A Rude Awakening,”** by Richard Morrison, *The Times* (UK) August 30, 2002.

Starting in the mid-18th century, museums began holding back items in their collections deemed too...shall we say...startling...for visitors of refinement. For example, a long, slimy, yellow, clingy film tube, with two little pink ribbons at the open end. Could it be? An absolutely genuine 18th-century condom, made out of very finely stretched sheep gut. And

it’s reusable!

This and other curiosities are housed in Cupboard 55 in the Department of Medieval and Later Antiquities at the British Museum. Cupboard 55, otherwise known as the Secretum, is the most notorious corner of the entire museum world.

By the 1830s the British Museum had started hiding away items considered potentially too corrupting to be perused by ordinary mortals - particularly women and the lower classes. Such material, it was felt, would lead to moral degeneracy, which in turn would lead to the collapse of social and economic values.

However, by the early 20th century the BM was feeling more relaxed about its penises. Many of the most interesting Roman and Greek items were transferred into the general galleries by the 1930s, and over the years many more have followed.

“What’s left in the Secretum now is fairly pathetic,” admits curator Andrew Hamilton. “It’s kept here because it’s second-rate and not worthy of display anywhere else.”

**“D.C. Throws Art Party, Gets Bashed as Unfair,”** by Connie Cass, *Chicago Tribune*, Aug 29, 2002.

The Animals-on-Parade public art project has been adopted (without incident) by dozens of cities around the world. But Washington DC has found itself in court this summer over that city’s version of the painted animals. First, the Green Party sued to get its party symbol (a sunflower) included alongside the elephants and donkeys. Then People for the Ethical Treatment of Animals convinced another judge that the city violated their First Amendment right to protest the treatment of circus animals when it rejected the group’s portrayal of a weeping, shackled elephant.

**“Bamiyan Buddha Niches AT RISK,”** by Martin Bailey, *The Art Newspaper*, August 23, 2002.

The niches which once housed the Buddhas of Bamiyan will be “gone within a decade” unless urgent conservation work is undertaken, according to Paul Bucherer, director of the Afghanistan museum in exile in Switzerland.

He reports that explosions

caused by the Taliban have weakened the cliff face, causing cracks and allowing rain water to percolate into the decorated caves. The water then freezes at night, enlarging the cracks.

Mr. Bucherer proposes to drill deep holes up to 100 meters into the cliff at an angle. Metal rods would be inserted, with cement added, and this would secure the cliff face to the mountain side. Costs for the hundreds of these supports could amount to \$40 million.

A Unesco meeting of experts in Kabul has backed the call for urgent action on the Bamiyan cliffs. The Kabul resolution, released on 11 June, states that “the first emergency priority is the stabilization of the cliff face and niches and caves carved into it which are in a serious state of conservation and a matter of grave immediate concern.” Specialists are to begin work on a feasibility study after the Japanese government pledged an initial \$700,000.

The Kabul meeting decided against the immediate reconstruction of the Buddhas, although this might be done at a later stage. This decision was taken after a passionate debate, and Mr Bucherer was among those pressing for rebuilding of the statues, both as a symbol and as an attraction for tourists, who represent an important potential source of income for the valley.

The meeting eventually determined to pass sole responsibility for the decision to the Afghan government, although the balance of opinion was against rebuilding the Buddhas. The final resolution agreed that the concept of reconstruction was not a priority when humanitarian aid for the Afghan people was urgently needed today.

**“A Self-Inflicted Restoration Problem,”** by Lidia Panzeri, *The Art Newspaper.com*, November 21, 2002.

Giorgione’s altarpiece of about 1505 in the Castelfranco cathedral depicting the Madonna and Child between Saints Liberale and Francis, is being restored. The painting has deteriorated over recent years because of the extremely dry climate, which in fact is jeopardizing all the paintings in the cathedral.

In addition, for many years it has hung on a wall behind which the central heating boiler had been sited.

This had been pointed out more than once by AIDA, the Italian association for art law, and a question was even asked about it in parliament. Once it has been restored, the altarpiece, which is one of the few paintings confidently attributed to Giorgione, will be returned to its usual position – only, however, after the infamous central heating boiler has been removed and the chapel adequately air conditioned.

**“Laser Treatment for the Alhambra Lions,”** *The Art Newspaper.com*, November 21, 2002.

The famous marble lions that surround the fountain in the central patio of the Alhambra in Granada are being restored. After 700 years, the lions were showing signs of wear from water erosion, exposure to the elements, and pollution. The lions are of white marble from Maceal, at present hidden by a thick crust of dark carbonated calcium. They have been lifted out of the patio by crane and are being cleaned by laser.

**“A Fight to Save a Time Capsule from the Early Age of Electricity,”** by Winnie Hu, *New York Times*, November 18, 2002.

A fight is underway to preserve the Mechanicville Hydroelectric Station on the Hudson River north of Albany. The power plant once lighted the entire region and operated serenely for 100 years, from 1897 to 1997. Before the station was closed, it was listed on the National Register of Historic Places as the oldest continuously operated hydroelectric plant in the state. A coalition of engineers, historians, and preservation groups from the Northeast are proposing to restore the station and turn it into a working museum of the region’s industrial past.

**“A Miracle at Assisi,”** *New York Times*, October, 19, 2002.

The great basilicas of Italy house some of the most important sculpture, painting, and craft work in Western art. One of the most prized holdings — a series of 13th-century ceiling frescoes by the ground-breaking painters Giotto and Cimabue — was thought to be forever lost when an earthquake ravaged the basilica of St. Francis in the town of

Assisi five years ago. Those who have visited this soaring structure since the restoration was unveiled last month are relieved to see that the pessimists were wrong.

When the quake settled, the ceiling frescoes lay shattered on the floor in tens of thousands of puzzle-like pieces that were mixed in with general debris. The restoration was carried out by a team of professionals, students, and volunteers who were willing to sift through the rubble endlessly, often going for days at a time without finding a single fragment of an artwork.

The saints emerged gradually with the discovery of an eye, a nose, or a few wisps of hair. Though somewhat diminished, frescoes of several of the figures in the chapel’s ceiling have now been put back into recognizable form. St. Jerome has lost most of his beard; his cloak is eaten with holes, but it is nonetheless inspiring to see that he has risen from the rubble.

**“ ‘Miraculous’ Image of Guadalupe Painted,”** by Joe Nickell, *Skeptical Inquirer*, Sept-Oct, 2002.

Mexico City’s *Image of Guadalupe*—a sixteenth-century portrait of the Virgin Mary supposedly imprinted miraculously on an Aztec convert’s cloak—has been confirmed as merely a painting. Nevertheless Pope John Paul II is scheduled to confer sainthood on the Aztec, Juan Diego, despite the pleas of some Catholic scholars. These include the former curator of the Basilica of Guadalupe, who doubts the historical existence of Juan Diego and said such a canonization would be “recognition of a cult.”

Now a ubiquitous symbol of Mexican Catholicism, the image, say critics, was painted by a native artist named Marcos Cipac de Aquino. It was probably utilized by Spanish conquerors to convert the Indians to Catholicism. (Recently, the results of a secret 1982 scientific study of the image were reported by the Spanish-language magazine *Proceso* in its May 12 and 19, 2002 issues).

Art restoration expert Jose Sol Rosales examined the cloth with a stereomicroscope and determined it did not *AYMHHM, continued*

originate supernaturally but was instead

the work of an artist who used materials and methods of the sixteenth century.

**“Met’s 15th Century ‘Adam’ Shatters as Pedestal Collapses,”** By Celestine Bohlen, *New York Times*, October 9, 2002.

A 15th-century marble statue of Adam by the Venetian sculptor Tullio Lombardo crashed to the ground in the Velez Blanco Patio at the Metropolitan Museum of Art sometime Sunday evening, scattering its arms, legs, and an ornamental tree trunk into dozens of pieces.

The statue’s fall — a museum’s nightmare — was confirmed yesterday morning by museum officials, who said they had delayed an announcement for a day while a preliminary investigation took place. The indoor patio, originally located in a castle in Spain, was screened off to the public yesterday as curators combed the tile floor for fragments. The museum barred news photographers from taking pictures, even from the balconies above.