

May 2009

Volume 31 Number 2

President's Letter

Scott Carrlee

Dear Membership,

I am sure you are all eagerly awaiting the next installment on Carson's development, so let's get that out of the way right in the beginning. He has started Montessori preschool which, for anyone not familiar with their program, instills a love of "meaningful work" in all of their charges. The unintended consequence so far has been an enduring obsession with vacuum cleaners and frequent floor cleaning sessions. It is amazing how assertive a toddler can be at six o'clock in the morning. But "meaningful work" isn't the only thing that occupies Carson. He has ample attention for trucks, balls, domestic

animals, and other fun things. His is a fitting metaphor for our upcoming annual meeting for which I am putting together a program that balances work and play.

In keeping with the theme of conservation in the extreme I have the following talks so far:

- Conservation in Antarctica
- Treatment of waterlogged baskets and other materials from Alaska
- In situ conservation of a 50-year-old acrylic window mosaic
- Treatment of organic materials recovered from melted ice patches in Canada
- Research into recovery methods for soot covered books
- Treatment of archaeological sled runners from Barrow.

I am still looking for more papers so let me know if you wish to present.

As far as play is concerned I can recommend a few great activities. If you want to take a great boat trip I recommend the *Adventure Bound*. Captain Steve will take you into the Tracy Arm fjord which is hundreds of feet deep but only a hundred yards wide in places. At the end of the fjord is the Sawyer glacier which calves off into water, often before your very eyes. Momma seals hang out on the icebergs with their newborn pups. You can also ride a helicopter up onto the ice field and actually touch down for a stroll on a real glacier. For the more adventurous crowd there are plenty of hikes where you can gaze upon one of the 7 glaciers within the city limits. (Juneau's city limits are very large!)

Even if you did not come up to Juneau aboard the Alaska Marine ferry there are still several ferry trips to be had. Sitka is a wonderful destination by ferry. A six hour ride puts you in the former Russian capital and the only really picturesque city in Alaska. If you are looking for off the beaten path, try a ferry ride to Pelican, a hardy fishing village of 135 inhabitants. You can stroll the boardwalk without fear of cars as there are none. A forty five minute floatplane ride back to Juneau completes the journey. There are also seakayaking possibilities for day rentals or longer trips. Contact me if you have any questions.

And what president's letter would be complete without the mention of cheese? In late February, we held a very successful mid-year board meeting in the back room of the Cheese Store of Beverly Hills. In between bites of double-cream brie and aged goat cheeses, we discussed such heady topics as how to keep WAAC current with the expectations of an internet age and what WAAC can do to help the membership in these troubled economic times. I am very happy to announce that we are making progress in simplifying membership renewals and registration for the annual meeting online. Very soon both of these activities will be available from the WAAC website. As for our current economic crisis which will undoubtedly affect the lives and livelihoods of all of our membership, we discussed how the very nature of WAAC can be its own economic stimulus package of sorts. It is through collegial support and networking that we will weather this storm. We encourage you all to reach out to your colleagues and be supportive. Keep conservation relevant to the higher ups and the general public. Continue to promote conservation, not as a frill but as an essential part of keeping our culture alive and healthy. In these hard economic times, you may

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President's letter, continued

feel like cutting back, hunkering down, laying low. What we need to do is the exact opposite. We need to redouble our efforts for public outreach, we need to be prominent in the public eye so as not to be forgotten or marginalized. Now if ever is the time to get out there and make some noise.

For example the Juneau meeting will be a great opportunity to network and to go public with conservation. There will be multiple opportunities to bring conservation to the public's attention. The Angels project in the St. Nicholas Russian Orthodox Church will be a very public way of bringing conservation to the forefront. We received an FAIC Angels project grant to help fund the supplies. There is still time to join in and help out. There will be a conservation clinic on the Saturday following the conference at the Juneau Douglas City Museum.

Public outreach should not only occur during the annual meeting but should be a part of our consciousness and our daily work.

I hope to see you all in Juneau!

Scott

Regional News

Marie Labinis-Craft, column editor

ALASKA

Monica Shah is working on the installation of the Yup'ik Science exhibit at the Alaska State Museum, as well as assisting with relocating artifacts in the Anchorage Museum.

Janelle Matz continues to work on the installation of Dena'ina objects for the Cook Inlet Tribal Council and the treatment of a rare ink on hide painting by Wilbur Wallick for Alaska Pacific University. She is also investigating potential consolidants for delaminating baleen.

Ellen Carrlee is working with **Dana Senge** of DKS Conservation to compile information about PEG treatments for basketry on the Northwest Coast for upcoming treatments of waterlogged archaeological materials. She is also blogging about objects conservation at <http://ellencarrlee.wordpress.com>.

Scott Carrlee is busy planning the annual meeting in Juneau, Aug. 19-21. He is also keeping busy placing interns around the state at smaller museums. Two conservation interns are working in Alaska this summer. **Jennifer Dennis** is working in Kodiak at the Baranov Museum and at the Alutiiq Museum. **Jennifer McGlinchey** is working at the Alaska Historical Library and the Alaska State Archives in Juneau. Both are finishing up their second year at the Buffalo State College Conservation Program.

Regional Reporter:
Ellen Carrlee

ARIZONA

Martha Winslow Grimm was the coordinator for the Costume Society of America's Angels Project held in May at the Phoenix Museum of History. Twenty five volunteers gave a one day of work processing the museum's costume collection for storage. The project was funded by an IMLS grant.

Brynn Bender worked on a museum management plan for Grant-Kohrs Ranch National Historic Site in Montana. The lab continues treatments to the historic boats on site at

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Deadline

Contributions for the *May Newsletter* should be received by the Editor before **August 25, 2009**.

Western Association for Art Conservation

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.

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Scott Carrlee

VICE PRESIDENT

Marie Laibinis-Craft

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New Memberships
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Payments

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Donna Williams

Individual Membership in WAAC costs \$35 per year (\$40 Canada, \$45 overseas) and entitles the 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 \$40 per year (\$45 Canada, \$50 overseas) and entitles the institution to receive the WAAC Newsletter and 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, at <http://palimpsest.stanford.edu/waac/>.

Regional News, continued

Grand Canyon National Park this spring and summer. Brynn is presenting the conservation project as a lecture to the general public assembled by the Grand Canyon Association at three venues across Arizona this year.

Maggie Kipling and Brynn conducted a condition survey of objects on exhibit at Chiricahua Natl. Monument. Maggie, **Audrey Harrison**, and **Ester Echenique** continue to treat ceramics in the NPS collections.

March is Archaeology Month in Arizona. **Nancy Odegaard** presented an Arizona Archeology Month lecture entitled "Lucy's Luggage- Should an Ancient Fossil Travel?" She and **Teresa Moreno** organized and hosted a workshop on basketry care at the Arizona State Museum (ASM) conservation lab. The event included both a lecture and a hands-on workshop for members of the public. Nancy and Teresa also taught another workshop on "Packing and Storage Materials for Safeguarding Collections" at the Annual Meeting of the Museum Association of Arizona in Bisbee, in May. In addition, Nancy assisted the University of Utah Natural History Museum with their exhibition conservation plan. She presented lectures at the American Museum of Natural History, the NYU Conservation Center, and the University of Delaware.

Teresa Moreno is working on a condition survey and storage improvement project rehousing the ASM's collections of Native American silver and turquoise jewelry. She is also preparing for another season of excavation at the Sanctuary of Zeus on Mt. Lykaion after which she will be on sabbatical from ASM and the University of Arizona through June 30, 2010.

Meghan McFarlane, WUDPAC third-year intern at ASM continues her work on a technical study of a group of Hopi Kachina dolls in the museum's collection using a variety of analytical techniques including XRF, FTIR, and portable Raman.

Marilen Pool continues to work part time at ASM on the treatment phase of the SW Pottery Project. She is also working for the Arizona Historical Society, Southern Division on an NEH grant project to assess collections and prepare plans for an eventual collections move.

Paintings conservator, **Esther Echenique** from Santiago, Chile has joined the studio

of **Linda Morris** part time. **Alison Pinto**, a graduate student at ASU, commutes from Scottsdale to study paper conservation. **Rachel Shand** while interning with Linda was offered the position of Assistant Registrar at the Tucson Museum of Art, but happily is still able to work at the conservation studio one day a week.

Regional Reporter:
Brynn Bender

GREATER LOS ANGELES

Yosi Pozeilov, photographer at LACMA, announces that his publication on digital photography is now available: *Digital Photography for Art Conservation* Ed. 2; self published, available through www.lulu.com - publication Num. 4002004. Yosi has also made available online a presentation originally given at the WAAC meeting in Los Angeles, which reviews the methodology for producing ultraviolet-excited fluorescence photography and reflectance UV photography using off-the-shelf digital cameras and filters.

In Dec.2008, the Getty Villa opened three conservation related exhibitions. *Fragment to Vase: Approaches to Ceramic Restoration* explores contemporary issues in vase restoration, providing a behind-the-scenes look at how Getty conservators assemble ancient pottery fragments into understandable forms. *Reconstructing Identity: A Statue of a God from Dresden* examines the history of a Roman statue that has been successively restored as Alexander the Great, Bacchus, and Antinous in the guise of the wine god. *The Getty Commodus: Roman Portraits and Modern Copies* shows how curators and conservators have determined the date of an ancient bust of the Roman emperor Commodus, which was once thought to have been made in the 1500s.

The Antiquities Conservation Department is collaborating on a conservation project with the Georgian National Museum (GNM) in Tblisi, Republic of Georgia. **Jeff Maish** is heading up the project in which two unusual bronze oil lamps excavated from the Black Sea site of Vani in 2007 will be studied and cleaned in consultation with GNM conservator **Nino Kalandadze**

Regional News, continued

who visited the Villa in April. Two related bronze lamps from Vani were studied in 2008 by **Richard Stone** at the Metropolitan Museum of Art, and he visited the Villa in May to consult with Jeff and **Marc Walton** from the GCI, on the continuing study of this unusual group of bronzes.

Marie Svoboda has begun a collaborative project with the Antikensammlung in Berlin on the treatment of a group of South Italian vases, from the site of Ceglie, dating to the 4th century BC. Getty conservators will be studying, examining, and treating 4 vases all of monumental size, over the next 4 years. The project will culminate with an exhibition of all 13 vases at the Villa, documenting their unique restoration history and the conservation collaboration.

The Apollo Saettante, a slightly under life-sized ancient bronze, has come to the Getty Museum from the National Museum of Naples for a year-long conservation and re-stabilization project being undertaken by **Erik Risser**. This will encompass extensive analysis and documentation of the object's composition, structure, and manufacturing technique. Treatment will address the statue's structural stability and aesthetic presentation, allowing it then to be placed on view at the Getty Villa until March 2011 and afterwards in the public galleries in Naples.

David Armendariz, **BJ Farrar**, and **Mckenzie Lowry** (mountmakers in antiquities conservation) and **Jerry Podany** are preparing for the fourth collaborative conference on protecting collections from earthquake damage. This latest conference will take place in July, at the National Museum of Western Art in Tokyo.

Allison Lewis, 2008-2009 graduate intern in the department of Antiquities Conservation will be a Kress fellow next year at the Phoebe A. Hearst Museum of Anthropology, UC Berkeley. She will be working on Egyptian material in preparation for the upcoming exhibit *The Conservator's Art: Preserving Egypt's Past*, opening in April 2010 and coinciding with the annual meeting of the American Research Center in Egypt in Berkeley.

Decorative Arts and Sculpture Conservation at the Getty Center was been involved in two exhibitions: *Tales of Sprinkled Gold: Japanese Lacquer for European Collectors*, featured the V&A's Japanese lac-

quered Mazarin Chest and other objects from their collection, including a historic collection of Japanese lacquer tools and materials. A major conservation treatment was recently completed on the chest bringing a Japanese lacquer master to work in London with V&A Furniture Conservator **Shane Rivers**. The conservation work was funded by the Getty Foundation.

Open June 30 through September 27: *Cast in Bronze: French Sculpture from Renaissance to Revolution* brings over one hundred bronzes to the Getty Center, including a wide range of works from monumental Renaissance figures to exquisite allegorical groupings. As a continuation of the research carried out for the catalogue by **Jane Bassett**, **Francesca Bewer** (Straus Center), **Richard Stone** (Metropolitan Museum of Art), **David Bourgart** (C2RMF, Paris), and the Museum Research Lab of the Getty Cons Center is in its final stages, due to be published in the fall of 2009.

Arlen Heginbotham is collaborating with **Michael Schilling** and **Herant Khanjian** of the Getty Conservation Institute on the analysis of 17th and 18th-century Asian lacquer ware in the Museum's collections. Using very precise sampling techniques combined with detailed py-GC/MS and FTIR analysis, they are discovering evidence for the use of a wide variety of additives and adulterants in Asian export lacquer destined for Europe.

In Rome this year researching the history of art vandalism, **Rosa Lowinger** delivered a lecture on the subject at NYU's Villa La Pietra in Florence, Italy.

Regional Reporter:
Virginia Rasmussen

NEW MEXICO

Betinna Raphael writes: "Over the past few years, I have headed a volunteer committee for the care and maintenance of an historic adobe artist's home here in Santa Fe, NM. The artist, Olive Rush, left her studio to the Santa Fe Friends (Quakers) to use as their meetinghouse along with many of the original furnishings and examples of Ms. Rush's watercolors, prints, and frescoes. As a member of the Quaker

Meeting and head of the Building Committee, I find this experience has expanded my mind with new interest in the challenges of historic preservation, or "the big object in situ." I've learned new respect for many of the building arts and the approach of Southwest preservationists. Recently I have been consulting on the preservation of another artist's studio/home in Santa Fe, the Gustave Baumann House. Come take a look at these wonderful buildings if you find yourself in Santa Fe.

M. Susan Barger shattered her shoulder while making museum site visits early in December and is now in "aggressive" physical therapy after surgery and two months of shoulder immobilization.

Regional Reporter:
M. Susan Barger, PhD

PACIFIC NORTHWEST

At the Royal BC Museum, all hands were on deck for the arrival of the *Treasures: The World's Cultures from the British Museum* exhibit, which opened May 1st. **George Field** conditioned over 1200 pounds of silica gel to a variety of specified RH microclimates to satisfy the requirements of the artifacts in this exhibit.

Kjerstin Mackie is wrapping up work on the artifacts associated with Kwaday Dan Tsinchi (Long Ago Person Found), the frozen preserved human remains discovered in northern BC almost ten years ago. This has been a multi-disciplinary, multi-national research project involving scientists and members of First Nations Communities, leading to two symposia, and soon, a publication summarizing the results of the research.

Lisa Bengston has furthered her research into testing for pesticide residues employing handheld XRF technology. Interest in the technology has now spread as **Betty Walsh** is using the analyzer to identify photographic processing techniques and the Museum's archaeologists have used it to investigate the manufacture and uses of stone tools in the collection.

Colleen Wilson continues to write entertaining and informative articles for the

Regional News, continued

RBCM's *Discovery Magazine* and deliver gallery-based textile conservation programs.

Robert Davison has joined RBCM Conservation Services, focusing on the archive's cold storage project for AV and some Museum plastics.

The Museum's ACR data loggers are currently being replaced with networked loggers using ISP technology to improve downloading efficiencies, provide LCD instant readings, and enable email notification of extreme events. **Kasey Brewer** is managing this project.

Finally, digital conservation documentation went live on April 1, 2009, providing the conservators with the ability to link their inspection records, condition, treatment, and analytical reports, as well as associated photodocumentation to the catalogue records of the collections. Likewise, all catalogue information is available to the conservators for reference.

Claire Gerhard was recently featured in her alumni magazine, *The Carleton Voice*, in an article entitled "Risky Business" which focused on some Carleton alumni facing hazards-like surviving fire and ice, and the occasional encounter with a grizzly bear in their work... Clearly, they wanted to highlight the risks in conservation!

Claire, **Nicholas Dorman**, and **Mitchell HERNs Bishop** served on a panel discussing conservation of modern art at Cornish College of the Arts in Seattle as part of Eros, Bios, Thanatos: Conundrums in Conserving Contemporary Art; a program organized by **Elizabeth Darrow**.

Miriam Clavir was awarded the Canadian Association for Conservation's Charles Mervyn Ruggles Award for outstanding contribution to the field. The category for the nomination was promoting the ethics and ideals expressed in the CAC/CAPC Code of Ethics and Guidance for Practice. Miriam is Conservator Emerita and a Research Fellow at the UBC Museum of Anthropology and an Adjunct Lecturer in the Graduate Program in Museology at the University of Washington, Seattle.

The conservation department of the Seattle Art Museum has been focusing on the treatment, study, and documentation of 98 works of art from the SAM collections that

will travel to five venues in Japan as the exhibition, *Luminous Jewels: Masterpieces of Asian Art from the Seattle Art Museum*. Their team of staff and contract conservators included: **Liz Brown**, Nicholas Dorman, **Alice Bear**, **Tomokazu Kawazu**, **Patricia Leavengood**, **Vina Rust**, **John Twilley**, **Marta Pinto-Llorca**, **Tim Marsden**, and intern **Annika Finne**.

The museum received support from the Getty Foundation for a digital catalog project of the Chinese paintings collection. The project includes funds for a guest conservator to study and produce condition documentation for each painting.

Nicholas Dorman served as Facilitator for the Raising Public Awareness team as part of the Connecting to Collections initiative which aims to develop a statewide preservation strategy for Washington State. Nick was relieved to have a quiet month in March as emergency contact for the AIC-Cert emergency response group and encourages other members to volunteer. You get lots of support from the AIC team, and it didn't turn out to be a dreadful addition to his workload even with a volcano, tornadoes, and a large portion of the northern US under water.

Tim Marsden gave a presentation to SAM docents and volunteers about conservation and maintenance of art at the Olympic Sculpture Park.

The Seattle Art Museum is hosting an afternoon of talks entitled "Art Conservation in the Pacific Northwest" in October. The conservation department at SAM has been awarded an FAIC Lecture Grant to help support the event. The scheduled talks will highlight several areas of conservation and remind communities of the preservation of collections within the region.

Dana Senge has been collaborating with the museum staff at the Hibulb Cultural Center to prepare and stabilize important artifact donations from the Tulalip community for safe entrance to the storage facility. Many of these large pieces (including house posts, canoes, and a story pole) require some maintenance and treatment prior to entering the museum buildings.

Marie Laibinis-Craft is working with conservation scientist and Portland State University professor, **Tami Lasseter Clare**, on a technical examination of the Portland

Art Museum's money tree from the Eastern Han Dynasty. The bronze money tree is a rare type of funerary object found in tombs in southwest China and is named after the coin motif often used in the design of the branches. The examination includes analysis using x-radiography, XRF, and FTIR.

Regional Reporter:
Dana K. Senge

ROCKY MOUNTAIN REGION

David Turnbull will be leaving the Denver Art Museum to move back to Canada. He will be working as a conservator for the Edmonton Public Art Program. David is sad to be leaving the DAM but is happy to be living near family and babysitters and is looking forward to the challenges involved with his new job.

Mark Minor is happy to report that he has finally finished his new studio in Howard. It's a two-story, 1600 foot passive and active solar heated space, with lovely views of the Northern crest of the Sangre de Cristo Mountains. He considers the view a well-earned perk from all the years he's spent laboring in basement conservation labs (of numerous institutions).

Paulette Reading completed work on a wedding dress exhibit at the Heritage Center in Lakewood, CO. The show will be open through August. She is currently preparing Navajo weavings for an exhibit at the University of Colorado Museum of Natural History.

Regional Reporter:
Paulette Reading

SAN FRANCISCO BAY AREA

Martha Little has been working on a condition survey of the Islamic manuscript collection at the Natl. Library of Egypt. She spent three weeks in Cairo in the fall of 2008 and another three weeks in April of 2009, as part of a small international team of conservators who have been training Egyptian library staff. The survey of mostly Persian, Turkish, and Mamluk Egyptian manuscript books is the first stage of the Thesaurus Islamicus Foundation and Dar al-Kutub Manuscript Conservation Project.

Recent news from SFMOMA: After over a year of construction and the temporary move of the conservation lab, the staff enjoyed the opening of the new Rooftop Garden in May. In addition to a lovely outside space for sculpture, the fifth floor galleries were expanded to include an overlook. The conservation department is also preparing for a large show of the permanent collection to celebrate the 75th anniversary of the museum.

Jill Sterrett published an article, "Art on View" in *artpress2* and **Michelle Barger** published, "A Delicate Balance: Packing, Handling, and Installation of Ephemeral Works by Eva Hesse" in *JAIC*.

A bit late on the introduction but not on the welcome, **Leah Noelle Johnson**, daughter of **Amanda Hunter Johnson**, celebrated her first birthday in March.

Karen Zukor returned in early March from spending a month in Punjab, India, working on a long-term manuscript project. She was accompanied by **Jamye Jamison**, now at ICA in Cleveland. Before starting the work, Karen and Jamye traveled to Udaipur and surrounds, taking in ancient forts, Jain and Hindu temples, and what is billed as the World's Largest Turban. It was dusty.

This spring, Karen taught a series of workshops on archival materials and framing techniques, for art students, practicing artists, and framers. The presentations are given in tandem with **Aletha Worrall**, a conservation framer based in Oakland, CA.

Architectural conservators **Mary Slater** and **Kelly Wong** of Architectural Resources Group (ARG) are conducting a condition assessment of the 1926 Santa Barbara County Courthouse, a National Historic Landmark, designed by William Mooser and Company. The condition assessment is part of a historic structures report that will be produced in the near future. The courthouse features many original wood furnishings and elaborate metal light fixtures, as well as decoratively painted ceilings by Giovanni Smeraldi and sandstone sculptures and a fountain by Ettore Cadorin.

ARG Conservation Services has been working on several projects. With the assistance of preservation masonry specialist **Devlin McDonald**, **Mersedeh Jorjani**, and **Katharine Untch** recently completed

conservation treatments for the San Francisco Museum of Modern Art including the treatment of a large broken sandstone that was part of a contemporary sculpture installation. Katharine has been consulting on an outdoor sculpture by Roy Lichtenstein; on appropriate methods for cleaning brick and metal substrates for historic buildings in Sacramento; on the conservation treatment of the historic beacon at Mt. Diablo State Historic Park; and on the treatment of historic cannon at the Golden Gate National Recreation Area. Katharine and historic preservation specialist, **Ted Dunn**, are also working on a ceramic tile mural in Monterey.

Architectural conservators **Mary Slater**, **Kelly Wong**, and **Lacey Bubnash**, as well as construction specialist **Nina Saltman** recently completed an on-going effort to survey the exterior conditions of nine original buildings (c. 1910) at San Francisco General Hospital.

Regional Reporter:
Beth Szuhay

TEXAS

On March 5th, **Mark Van Gelder** was the invited guest speaker at the Austin Artist's League, a group which has been meeting in Austin regularly since 1927. His talk focused on the significance of preventative measures in paintings conservation.

Gregory Thomas, has returned to Hawaii. Greg established his private practice, Art Care, offering painting and paper conservation in Kailua, HI in 1987. Over the past several years Greg has continued providing fine art conservation services to clients in the Pacific Region, while working on the mainland from his previous studio in Rockport, Texas. Greg's new address is: Art Care, P. O. Box 331, Kailua, HI 96734. Same e-mail address: artcare@mac.com and new phone #: (808) 397-0900.

Regional Reporter:
Ken Grant

WAAC Publications

Handling Guide for Anthropology Collections

Straightforward text is paired with humorous illustrations in 41 pages of "do's and don'ts" of collection handling. A Guide to Handling Anthropological Museum Collections was written by Arizona State Museum conservator Nancy Odegaard and illustrated by conservation technician Grace Katterman. This manual was designed to be used by researchers, docents, volunteers, visitors, students, staff or others who have not received formal training in the handling of museum artifacts. Paperbound and printed on acid-free stock.

Price: \$8.85

(\$6.60 copy for orders >10 copies)

Back Issues of WAAC Newsletter

Back numbers of the *Newsletter* are available. Issues Vol.1 - Vol.14, #3 (Sept. 1992) are \$5/copy. Issues Vol.15 - Vol.29, #3 (Sept. 1997) are \$10/copy. Issues Vol.30 (Jan. 2008) and after are \$15/copy. A 20% discount will be given to libraries seeking to obtain back issues to complete a "run" and for purchases of ten copies or more of an issue.

Prices include shipping and handling. Make checks payable to WAAC drawn in US dollars on a US bank.

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Send prepaid orders to:

Donna Williams

Forging Ahead

Or, how I learned to stop worrying and love eBay *by Charles Stanish*

A little over a decade ago, archaeologists experienced a collective nightmare—the emergence of eBay, the Internet auction site that, among other things, lets people sell looted artifacts. The black market for antiquities has existed for centuries, of course, with devastating consequences for the world's cultural heritage. But we could at least take some comfort that it was largely confined to either high-end dealers on one end of the economic spectrum or rural flea markets on the other. The sheer physical constraints of transporting and selling illegal artifacts kept the market relatively small. But the rise of online auction sites promised to drastically alter the landscape. And so it did, just not in the dire way we had anticipated.

Back in the pre-eBay days, the cost of acquiring and selling an antiquity was high. The actual looter was usually paid little, but various middlemen down the line added huge costs. During my 25 years of working in the Andes, I have often seen this dynamic at work. In years past, transporting an object was a big expense, even for portable artifacts, and the potential for arrest added to the total cost of doing business. In addition, the expense of authentication, conservation, and occasional restoration of the pieces, made buying and selling quality antiquities a wealthy person's vice.

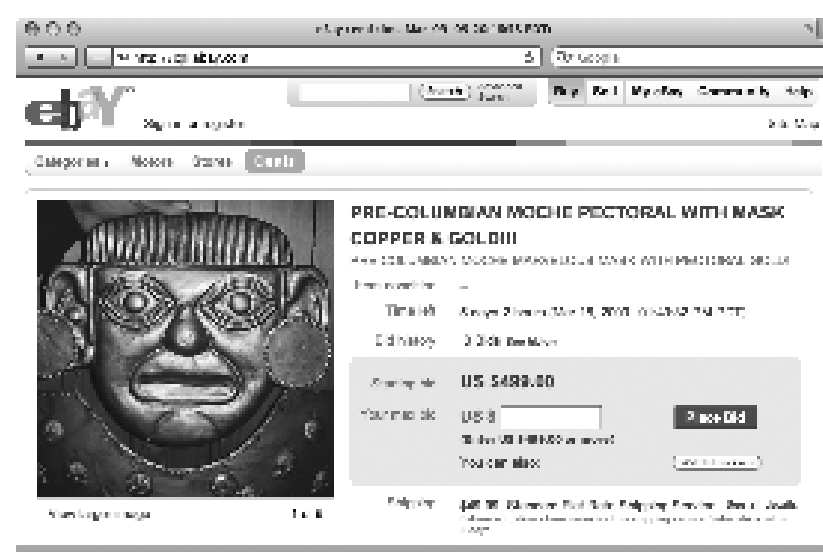
Our greatest fear was that the Internet would democratize antiquities trafficking and lead to widespread looting. This seemed a logical outcome of a system in which anyone could open up an eBay site and sell artifacts dug up by locals anywhere in the world. We feared that an unorganized but massive looting campaign was about to begin, with everything from potsherds to pieces of the Great Wall on the auction block for a few dollars. But a very curious thing has happened. It appears that electronic buying and selling has actually hurt the antiquities trade.

began around 2000, about five years after eBay was established. It is true that fakes have been around for centuries. In 1886, the celebrated Smithsonian archaeologist W. H. Holmes described countless bogus antiquities in Mexico.

A few decades later, Egyptologist T. G. Wakeling noted that many ancient Egyptian artifacts were, in fact, fakes. In the 19th century, American and European museums purchased large numbers of "Etruscan" ceramic vessels and sarcophagi that came straight from the kilns of rural Italian farmers. But these were usually the really good fakes, labor-intensive pieces that required lots of work and skill. Today, every grade and kind of antiquity is being mass-produced and sold in quantities too large to imagine.

In the pre-Internet days, no one thought that so many people would be willing to put down good money for a low-end piece of tourist art. People who used to make a few dollars selling a looted artifact to a middleman in their village can now produce their own "almost-as-good-as-old" objects and go directly to a person in a nearby town who has an eBay vendor account. They will receive the same amount or even more than they could have received for actual antiquities. I have visited a number of these workshops in Peru and Bolivia. Using local materials and drawing on their cultural knowledge, small manufacturers can produce pieces that are, in some cases, remarkably accurate reproductions of actual artifacts. The really smart ones do not reproduce pieces at all but create an ever-so-slightly modified version of real artifacts that have the look and feel of an authentic ancient object. Perhaps the ultimate achievement is the work of the famous Brigido Lara, who created tens of thousands of fakes in the 1950s and '60s, practically creating his own "ancient" culture in Veracruz, Mexico, in the process.

The economics of these transactions are quite simple. Because the eBay phenomenon has substantially reduced total costs by eliminating middlemen, brick-and-mortar stores, high-priced dealers, and other marginal expenses, the local eBayers and craftsmen can make more money cranking out cheap fakes than they can by spending days or weeks digging around looking for the real thing. It is true that many former and potential looters lack the skills to make their own artifacts. But the value of their illicit digging decreases every time someone buys a "genuine" Moche pot for \$35, plus shipping and handling. In other words, because the low-end antiquities market has been flooded with fakes that people buy for a fraction of what a genuine object would cost, the value of the real artifacts has gone down as well, making old-fashioned looting less lucrative. The value of real antiquities is also impacted by the increased risk that the object for sale is a fake. The likelihood of reselling an authentic artifact for more money is diminished each year as more fakes are produced.



How is it possible? The short answer is that many of the primary "producers" of the objects have shifted from looting sites to faking antiquities. I've been tracking eBay antiquities for years now, and from what I can tell, this shift

Forging Ahead, continued

Another economic factor—risk of arrest—is also removed by eBay fakes, since you can't be arrested for importing forgeries. Should you import what you think is an illegal antiquity but it turns out to be a fake, you run little risk of prosecution. The risk from lawsuits or criminal charges is effectively removed from the sale of antiquities when they are not really antiquities, a fact that reduces the cost and risk to both buyer and seller.

Transport cost is also dramatically reduced by commerce on the Web. One vendor on eBay advertises a Greek marble head dated to around 300 B.C. For this "rare artifact," the shipping costs from Cyprus are a whopping \$35 to anywhere in the United States. This is a far cry from the old days when a real illegal antiquity had to be couriered by a specialist who not only knew how to care for the piece, but how to doctor it up to avoid being arrested at customs. The same is true for objects from just about every well-known ancient culture in the world. Chinese, Bulgarian, Egyptian, Peruvian, and Mexican workshops are now producing fakes at a frenetic pace.

Even more remarkable than the growing demand for cheap fakes is the fact that the low-end market phenomenon is actually distorting the mid-range and lower high-end markets as well. Again, this seems counterintuitive. How could the selling of bad fakes and tacky tourist art as inexpensive antiquities distort the higher-end markets? Surely the sophisticated high-end buyers would not be affected by the rubes who pay \$223 (plus \$30 shipping from Lima) for a "genuine pre-Columbian Moche III Fineline" piece (which, by the way, can also be bought for \$15 from the woman selling pottery outside the tourist buses in the Peruvian city of Trujillo).

But the high-enders are indeed affected. It was only a matter of time before a few workshops producing the cheap fakes started turning out reproductions that can fool even supposed experts like me. A number of these workshops have swamped the higher-end market with beautiful pieces that require intensive study by specialists and high-cost tests to authenticate. This manufacturing business never could have developed on such a scale without the Internet, and these forgers have forever transformed the antiquities market into something that we could not have imagined just a decade ago.

The wealthier collector who up to now has been laughing about the naive folks who buy on eBay is in for a surprise, too: those dealers that provide private sales are some of the forgers' best customers, knowingly or otherwise. In fact, the workshops reserve their "finest" pieces for collectors using the same backdoor channels as before, but now with a much higher profit margin because they are selling fakes. As a former curator myself, I know that an embarrassingly high percentage of objects in our museums are forgeries. What fools the curator also fools the collector.

From the professional's point of view, there are really three kinds of "antiquities" on eBay. About 30 percent are obvious fakes or tourist art that can be detected by looking at the pictures, even the fuzzy ones. These are easy to pick out because they are not intentional reproductions, but simple pieces manufactured for tourists and sold as such. The cre-

ators of these pieces mix up iconography and choose colors and shapes for visual effect. Such objects are clearly not ancient. Another five percent or so are probably real, while the rest are in the ambiguous category of "I would have to hold it in my hand to be able to make an informed decision." This latter category has grown fast.

In the first years of eBay, I observed about a 50-50 real-to-fake ratio in Andean artifacts. About five years ago, my informal assessment was that about 95 percent were obvious fakes and the rest were real or dubious. This was the period when the workshops first went into high gear; the market was flooded with low-end junk. Now, the workshops are producing much higher-quality fakes, increasing the category of ambiguous objects now available.

I base these estimates not only on what I see on eBay, but also from my occasional work with U.S. Customs, in which I help authenticate objects. Additionally, I am fascinated with antiquities dealers and "manufacturers" in South America. I've learned much by hanging around the men and women who produce these objects. I know, for instance, of one fellow who makes grass-tempered reproductions of a 2,000-year-old pottery style. Having worked on archaeological projects for years, he learned to get the grass for his fakes from ancient middens near his house. If fired properly, and if the organic residue in one of his pots were carbon dated, it would appear to be a very old piece indeed.

Looters on the north coast of Peru have discovered not only the famous 12th–15th-century A.D. Chanca anthropomorphic vessels, but also the original molds used to make the vessels. Thanks to publicly available archaeological reports, they also now use the original clay sources and minerals to make and paint the pottery. They can create virtually perfect reproductions.

In an antiquities store in La Paz, I recently saw about four shelves of supposed Tiwanaku (ca. A.D. 400–1000) pottery. I told the owner that most were fakes and she became irritated and called me a liar. So I simply touched one at a time, saying "fake," "real," "real from Tiwanaku," "fake," "fake made by Eugenio in Fuerabamba," and so forth. She paused for a moment, pulled one down that I said was real, and told me that it was also a fake. I congratulated her on the fact that her fakes were getting better and she just smiled. My mistake is an instance of what San Francisco State University archaeologist Karen Olsen Bruhns has identified as a very real problem—the experts who study the objects are sometimes being trained on fakes. As a result, they may authenticate pieces that are not real.

You can use thermoluminescence dating, which determines the amount of time elapsed since a clay object was fired, to definitively establish the antiquity of a pottery vessel, if it is old enough. However, the cost of hiring a professional to take the sample and run the analysis is high for mid-range market, one sample can cost as much as \$400. Since forgers commonly include fragments of ancient pottery in their work, multiple samples are necessary, making thermoluminescence

Forging Ahead, continued

dating prohibitively expensive for the low-end market.

Some eBay vendors are brilliant in this regard. They state that they will return a buyer's money if they have a letter from a recognized specialist that proves the piece not to be authentic. However, this guarantee is nullified if you conduct any kind of "destructive" analysis on the object. To the nonspecialist this seems reasonable. However, the sampling of a few specks of clay from a vessel for thermoluminescence dating by a professional conservator is not even noticeable to the naked eye. While standard procedure in the museum world, this is technically a type of destructive analysis. It nullifies the guarantee, but it is the only way that a recognized specialist can possibly prove the authenticity of a piece of ancient pottery. As a result, the guarantee is meaningless.

Well-made stone and metal reproductions are almost impossible to authenticate. Some kinds of spectrographic analyses can rule out certain objects as fakes. But if the ancient source materials are used by the producers, it is very difficult to prove definitively whether a piece is authentic or not. The auctions on eBay are full of stone objects purported to be ancient. With the advent of laser lathes and chemical techniques to forge patinas, anyone who buys an "Assyrian alabaster stone Mask 700 B.C." or "Ancient Chinese Jade Carvings-Frog Arrowhead" thinking that they are real antiquities is, in my opinion, a thoroughly naive fool.

There is another looming factor that dealers rarely discuss. As the sophistication in forgeries continues to increase, museums, law enforcement, and other institutions charged with protecting our cultural heritage will look for even more reliable means of authenticating objects. A time will come when technology will outpace the looter and antiquities dealer. The cost of these technologies will likely always fall over time, but the price of professional labor will always rise, adding another expense for dealers. Like radiocarbon dates for organic objects, the application of these new techniques will become standard practice for all antiquities bought and sold. This will also inject a new element of risk for the buyer that will dramatically add to the risk of illicit, high-end trafficking. Who wants to spend \$50,000 on an object "guaranteed" to be ancient by today's standards, when someone can come along in five years with a new technology that definitively proves it to be a fake?

So where does the illegal antiquities market go from here?

Certainly, looting will continue. There will always be the gamblers who do not act economically rational and will continue to look for a jackpot. The highest-end dealers will be around for a long time, but with significantly higher marginal costs associated with their illicit trade. But for most of us the Web has forever distorted the antiquities trafficking market in a positive way.

There have always been Moche, Chimú, and Nasca reproductions that were difficult to distinguish from the real thing, but in recent years I have seen many, many more.

The traditional workshops in the Peruvian towns of Piura and Ica have been around for decades and the quality of their high-end products continues to rise. Workshops in new tourist destinations such as Puno and Ayacucho are popping up every year. As the fakes increase in both quality and sheer numbers, the real antiquities and the obvious fakes available will decrease. If you can sell a \$15 Moche knockoff for \$200, imagine what you can do with a really good

reproduction. We can only hope, but it is just conceivable that online commerce will actually put a lot of antiquities looters and traffickers out of business by the sheer volume of sales and quality of products that fool even the experts.

What drives this new dynamic is the small fraction of people who actually believe that someone will sell you a real Moche Fineline pot for \$200 (actual price: about \$15,000) and have it shipped from Peru by mail without any risk. It is this money that provides the capital for the cottage industries to keep producing and fueling the cycle of ever-increasing quality and quantity of forgeries. There is, in reality, no mystery to all of this. It is the logical outcome of all buyers, sellers, and producers acting in their individual economic self-interest. I suppose if people stopped believing that they can buy a pill that will help them lose weight without dieting or exercise, then it is possible that people will stop buying fakes online, and we will return to old-fashioned looting. We just have to wait and see what surprises the Internet brings us in the future.

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Filming in Museums

Even those of us who live in Los Angeles, where we should be accustomed to it, get a bit of a buzz when we encounter a filming location. The trucks, masses of equipment, cables crisscrossing, people standing about, people focused on arcane tasks, is this one of my favorite shows? maybe a movie? any stars? at least, some really good actors?

Now, imagine what fun it would be to have it all happen in your own museum, with you in the role of supervisor, safeguarding the floors, the walls, the fittings, and, oh yes, the collection.

The following set of articles was assembled as a reference for these situations. It includes: two articles by conservators who have supervised shoots, Chris Stavroudis here in LA and Laurie Gibbs of Hampton Court near London; a glossary of film jargon so you can possibly understand what crewmembers are saying to each other; a compilation of the guidelines given to production companies from the Natural History Museum of Los Angeles County, the Los Angeles County Museum of Art, the Museum of Modern Art in New York, the Boston Museum of Fine Art, the National Gallery in Washington, DC, and Hampton Court; and finally an sample of a request for filming from a location company.

Never Yell “Cut”

(A brief guide to filming in museums)

by *Chris Stavroudis*

There are a number of occasions in which a film crew can be found working in a museum, gallery, historic house, or around artwork. They can range from a couple of people with a single camera to an entire movie or television production, a process that is an amazing thing to witness, dozens, if not hundreds, of people working intently together for a single goal – entertaining or educating an audience out there somewhere. Unfortunately, however, in many cases these focused intent professionals are somewhat less concerned about the well-being of their immediate environment.

The role of supervising a production will often fall to the conservator, as our familiarity with the materials and what can harm them, makes us the most obvious choice. The purpose of this article (and the others as well) is to provide a primer for conservators on the production process as it relates to our environments, and how to insure that filming does not compromise the artifacts, artwork, or historic structure.

To be entirely fair, an experienced crew has done its job hundreds if not thousands of times. Our conservation concerns often border on insulting the professionalism of the crew. They throw rolls of gaffer’s tape around the set all the time, and they never miss the intended recipient. However in a cultural institution, throwing anything, by anyone, is simply not acceptable. This difference in perspective must always be remembered and accommodated.

During the course of filming, the conservator is often called upon to make judgment calls as to safe practices. If appropriate, there may be acceptable “bending” of the rules, but when push does come to shove, the conservator needs to be prepared to be assertive and lay down the law. While it may never be used, the conservator or someone else from the museum on the set must have the authority to shut down a production that doesn’t follow the guidelines for filming or continues to pose a risk to the collection or structure after the potential danger has been pointed out to the production.

The Script and Cast

A museum, gallery, or historic house is something special to us as preservation professionals. However, to the production, it is a set. The degree to which the production interacts with the set will establish parameters for the supervising conservator. And no matter what the size or complexity, there should be security staff appropriate for the site.

Perhaps the least invasive filming is something on the scale of news coverage of an event. This might involve a camera-person, a hand-held camera, perhaps a light, perhaps a talking head, and a microphone. In these cases, monitoring the “set” is pretty straightforward. Watch for people backing up or walking while not looking (the camera operator or the talking head). Watch for food and drink brought in surreptitiously. Watch light levels on sensitive objects. The light is apt to be tungsten or quartz halogen so UV will likely not be a huge worry unless it is a very fragile object. This sort of filming is usually quite fast, and the crew is in and out. The light is normally only on for the actual shot so the exposure is also brief.

The next level of interaction between production and set is something like a documentary about the collection or house or a show or movie featuring aspects of the collection or site. These productions are somewhat more intensive, require a larger crew, and will have greater demands on control of the captured image.

In this situation, control of lighting, shadows, color temperature, and how characters or a narrator looks will usually call for a surprising amount of setup. Additional lighting will be needed which in turn often necessitates additional electric power. There will be a number of stands, cables, and other accoutrements needed to make the magic happen. There will most likely also be a more complicated system to hold the camera: a tripod, a dolly, or any of a number of other systems.

Never Yell “Cut”, continued

All of the extra equipment requires a number of additional people: gaffers, grips, wardrobe, makeup, camera operators, and one or more people who are in charge - the director and possibly an assistant. (A movie lingo glossary is on page 14.)

Further up the list of invasive productions would be filming scenes for a movie, a television production, a commercial, or a music video. Similarly, a still photo shoot for advertising or publicity would also be considered in this category. These productions can run from one day (or night) to perhaps a week. Often, to avoid conflict with the museum’s public, filming will be performed after hours. It is not uncommon for a production to begin at 5:00 pm and work through the night, wrapping at 6:00 the next morning.

In these larger productions, there will be more lights, perhaps a second camera, and more elaborate ways to hold and move the camera(s) (a dolly or two, dolly tracks, a crane, a steady-cam operator), and more people than mentioned above. There is apt to be a producer or two, maybe an art director, the property department (props), lots of assistants, talent (actors and extras), stand ins, and, if children are involved, their parents, and often an on-set tutor. If you are lucky, you may have special effects and stunt people.

Suddenly, the museum staff is faced with supervising a very large number of people doing many things at once. Security must control access into and out of the museum, watching that food and drink don’t come in, and that collection items don’t go out. The conservator’s responsibility is to the safety of the objects in the collection and historic structure.

Most of what the people from the production are doing in your museum is innocuous (after all, this is probably happening in the same space that visitors and student groups occupy on a daily basis). However there are a number of film-specific actions that require the conservator’s close attention and possible intervention. There is also the psychological problem that the crew is working, and it is easy for them to think of the location as just another work site. As a consequence, they may not use their museum manners.

A further escalation of a production’s intrusion is something like an ongoing filming – a series or a movie that is largely set in the institution. (See *It’s a Wrap*, page 16.)

Pre-production

First, before any filming can be even agreed upon, the people planning the production must be given a list of guidelines for filming. Ideally, the director or producer should sign off on having received and distributed the guidelines to all departments. The guidelines specify the rules under which the actors and crew are expected to operate. Before shooting begins, all members of the crew must be given copies of the filming guidelines. (See samples and suggestions for filming guidelines, page 20.)

The filming guidelines lay the framework and establish the authority of the conservator to intercede in situations where the collection or structure may be jeopardized. The

institution may also have representatives on hand to make sure that the content of the filming is compatible with the mission of the museum (e.g., no pornography) and also someone who is familiar with which items can and cannot be filmed due to copyright issues and lender/owner wishes. These tasks can also be delegated to the conservator.

Depending on the site’s popularity for filming, there may be a site rep from a location company – a person or company that acts as the agent representing the museum to potential productions. They also act as liaison to the production company and will have a person or two on-site during filming. These guys are on our side, as they have responsibility for the fabric of the building, floors, walls, etc. They watch over productions every day (actually, usually every night). Befriend them. They are extra eyes on the scene and tell great stories. In Los Angeles, the good site companies are licensed real estate brokerage firms.

A larger production will have on their staff a location manager, the person who has coordinated using your museum, gallery, or site for the production. The location manager will have made sure that parking issues have been arranged, necessary permits were obtained, and may well be present for the filming or at least the beginning of filming. There also may have been a location scout, the person from a production that looks at various places to film and makes recommendations to the director.

On Set

Before any work begins on the set, the conservator should be introduced (or introduce themselves) to the producer(s), director, assistant director(s), location manager, and site rep. It is very nice if one of these people makes an announcement reminding the crew about where they are and how they are expected to behave.

To repeat myself, a good production is an amazing beast.

Because there are so many people working together (sometimes for a long period and other times for just a few days) decorum on set is quite informally formal. Everyone is (or should be) extremely-polite on set. Often as someone becomes more annoyed, they will behave more and more politely. (Although this general rule does not necessarily apply to directors or producers at all times.) You will hear lots of “yes sir’s” and “excuse me’s.” It is a means of everyone getting along and also an acknowledgement that everyone has to work together to make the magic happen. At times it feels a bit stilted and forced, but it is expected.

If the conservator can maintain a polite, respectful, informal demeanor, the production will go much more smoothly. (I have forgotten this rule on occasion and gotten really snippy replies to an insufficiently-polite tone. Unless the crewmember’s offence was egregious, a sincere apology from the conservator is called for after things have settled.) So you keep your voice down; say please and thank you, even if inside you want to scream. However, it is also entirely fair not to give a

Never Yell “Cut”, continued

second warning. If a cast or crewmember repeats unacceptable behavior, show no mercy. You may even ask that they be removed from the set. They are expected to be professionals, and professionals shouldn't have to be asked twice.

Remember that many jobs on set are union. You can ask a grip to move a light, but he/she will call an “electrician brother” to actually move the equipment.

There is a distinct chain of command. The director is in charge. Producers are the money-people and get lots of respect and deference and often work closely with the director. There will be a cameraman (DP, director of photography) and camera crew. The cameraman will often work very closely with the director – by just watching it can be difficult to tell who is who. Depending on the size, scale, and budget of the production, there is apt to be an AD (assistant director) or two (first AD and second AD). There will be the sound people (at least two), and a script person. There will invariably be at least one PA (production assistant) and perhaps many. (PAs tend to be young, overworked, underpaid, and hoping to make it in the business.)

If there are actors, there will be makeup, wardrobe, hair stylists (I've even seen a beard stylist), stand-ins, and sometimes actor's assistants. There may be extras – the people that mill around in the shot for background. (Extras are generally treated as a lower form of life on set. It's a really tough gig. They are treated like cows, idiots, children, or all three. They often they live up to their stereotype – particularly when in a large group. They also are expected to remember their movements and recreate them over and over. As a testament to their importance they generally eat last at meal breaks.) If you are offered a walkthrough on a production, think seriously about the implications. First, you won't be able to watch everything that is going on. And, you will also have become, if only for a moment, an extra.

There will often be a bevy of people hanging around the producer and director. Sometimes these are friends, family, investors, or part of their entourage. These folks come along for part of the shoot because your museum is an exotic location. They are generally harmless and usually hang out in the video village in “directors chairs.” They can get bored and may wander off into other areas of the museum that may be off limits. So, do keep an occasional eye on them.

Your Role

As conservator on set, you want to be omnipresent. When supervising a shoot, I rarely sit down. I try to keep my eye on areas that have more activity, but filming guidelines can be broken anywhere. I roam. I let people know I'm watching. If someone bends a rule slightly, even if I don't say anything, I want them to know I saw it.

It is really good to get to know the head lighting person: the gaffer or key electrician. They are very knowledgeable about light, light levels, and color temperature -- it's their job. They usually have really cool light meters and are of-

ten happy to talk about lighting. If you have a light meter with you, particularly a UV meter, you can have an I'll-show-you-mine-if-you-show-me-yours moment. In my experience, after a short conversation (not lecture), they understand our concerns about light levels in the museum.

The gaffer works with the director and director of photography (DP) when a scene is being set-up (blocked). It is the gaffer who decides where to put lights and what type of light is necessary to light the scene. You really want the gaffer to be on your side. However recognize that both the director and DP overrules them.

Anyone on set, including you, has a few other obligations. Stay out of the way as much as possible; particularly stay out of the camera's line. When filming starts, be absolutely quiet. If possible, don't move. Make sure your cell phone is off or on vibrate. (The best line I've heard for this is the admonition, “Set your iPhones to stun.”)

Lights

The conservator's gravest concerns will be the lights. There are questions of visible light levels, UV levels, and heat build up.

Lights are also apt to be placed high in the air on stands and are often quite heavy. There are lots of rules in the various guidelines about setting up lights in the museum, but to me, the fundamental rule is that the light must be out of striking distance from any and all collection objects and fragile surfaces. So, should there be an earthquake, or someone yanks a cable somewhere, the light simply cannot fall on an object. This gives flexibility to the crew – if the light is low, it can be closer to an object, but if it is high, it must be further away. This prevents an argument about why it is not OK to put a light on a 12-foot stand 6 feet away from a collection object – “but the filming guidelines say they only have to be 6 feet away.” It also makes sense to the crew, sometimes begrudgingly, but sense nonetheless.

There are so many different lights available, and those big trucks seem to carry every imaginable type.

The gentlest light is a Kino, a bank of fluorescent tubes that can be switched and dimmed independently. The tubes are covered with plastic sleeves, presumably to protect the bulbs, but the sleeves also absorb UV. They run cool, the light is diffuse and not intense, and there is no UV. They are also comparatively lightweight. They take a few minutes for the light to stabilize, so they are not good for short term turning on and off.

The opposite end of the spectrum, if you will, is the HMI®. These are unbelievably large, heavy, bright, and hot. The larger units swallow up 18,000 Watts (and are much more efficient than tungsten to boot, so it's an amazing amount of light). HMI® stands for Hydrargyrum Medium-arc Iodide and have color temperatures of 5600K. In night shoots, these are often used to make areas look like they were lit by

Never Yell “Cut”, continued

sunlight. This can be disorientating because after a while, your body begins to think that it is real sun and that it's daytime. The visible light level sends my meter off scale, and if the UV levels are to be trusted, they put out lots and lots of UV. This is in spite of a UV filter in the lamp. (Without the internal UV filter, you could get serious burns and sunburn your eyes.) The UV level can be reduced by shining the light through a plastic diffuser. The lighting crew can also be requested to bring transparent, UV absorbing gels. Obviously, the HMI® is not for many lighting situations in museums.

The tungsten incandescent light (often called an “inky”) remains a popular option, as well. These can be as large as 20,000 Watts in the stereotypical, fresnel-lensed, movie light, to arrays of bulbs that look rather like old-fashioned auto headlamps. These are usually referred to by a number of names and their wattage.

Lights are positioned on stands and are moved around to get the lighting effects necessary for a shot. Often, the light needs to be modified – bounced, diffused, color corrected, or blocked off from some parts of the scene. All of the tricks to modify lighting are usually accomplished with the aid of a C-stand, a three-legged stand that can be folded flat (the two of the three legs swing around and nestle with the third leg). The C-stand can be fitted with arms and connectors to hold just about anything. Of most interest to the conservator, the C-stand can be used to position flags, large black cloths on a wire frame that can be used to block light.

Camera

The camera is the most valuable piece of equipment on set, although some of the camera mounts (dollies, and some cranes) can also be unbelievably expensive. The people who work with the camera are every bit as fastidious as conservators. Once when filming a group of children, one of the kids bumped his head on the camera (it was on a crane). Everyone rushed over with looks of grave concern playing across their faces. They all went to check the camera.

Action

From the conservator's perspective, when “action” is shouted, you can generally relax. All other work on the set should stop. Everything should be set and safe. It is fine to watch the action (make sure you are out of the way – listen for the admonition “clear the lens”). Also, be aware that some actors don't work well when they see people watching them work (you are in their eye line). So as a general rule, try to find a vantage point that is out of their sight lines. If you hear “clear the eye line,” it usually means you should move out of the way. If you want to watch what is happening, you can wander to the video village and watch the scene on a monitor. Most of the production will be there too, often sitting in their directors chairs. The producer will usually be there and sometimes the director. Don't get in the way and be very polite – there is no way you can claim your watching is anything other than curiosity.

The conservator can't relax during action if there is something happening in the scene that does require your supervision. I've sometimes found it necessary to place myself behind the camera crew to make sure they don't back up into a case. Or I stand beside the person working a camera crane to make sure they don't swing wide and go near something they shouldn't. Always remember that these people are pros. I usually explain my presence as being there for my peace of mind, not because I don't trust them.

Back to the eye line of the actors. If you find you have to be in their eye line, don't look at the actors. Make it clear by your actions that you are watching the camera, a crewmember, or whatever you are doing. (You might just exaggerate your watching the whatever to make it clear you are not looking at them.)

The times when the conservator is most occupied is watching when stuff gets moved around. Oftentimes there may be setup in two or even more areas at the same time.

Load in, when the lights, C-stands, cables, lunch boxes, carts, etc., are brought into the museum is a busy time, but usually they are initially staged somewhere out of the way.

After all of the necessary equipment is unloaded and in the staging area, the electricians will string cables for powering the lights. The cables are run where it is hoped that they won't show in the filming. You need to make sure that the cables aren't put in places they shouldn't be, and watch that no one bumps into anything while placing the cables.

Then the fun begins. The electricians will begin bringing in the lights and grips will be setting up C-stands and bigger stuff to control the lighting. Lots of carts will be rolling in. The video village (monitors, directors chairs) will be setup somewhere near by, the sound cart will be rolled in, and camera, lenses, film, dolly will all be brought closer to position. Set dressers and props may be bringing in fake objects, fake displays, furniture, trays of prop food, and just about anything else you can think of. This all may be happening in different areas within the museum. While we can't be attentive to everything, we need to know what is going on in different areas and keep more of an eye on the areas that seem more risky. If there is more than one person supervising, it makes these busy times much easier.

Once everything is set, there might be a rehearsal and then the scene will be filmed. Keep an ear out for “last looks,” this means everything should be ready to film. (Often makeup, hair and wardrobe will run in and make last minute tweaks to the actors.)

Eventually, you will hear “rolling” or “rolling, rolling” to let everyone know that the camera is running, sound will chime in with “speed,” and the director or AD will say “action.” Filming is underway in earnest now, and usually you can relax, maybe very quietly sneak off to craft services. The scene may take a number of takes. There may also be a number of scenes shot in the same location with some mov-

Never Yell “Cut”, continued

ing of lights and cameras. These moves can happen rather suddenly, perhaps a shadow is falling in the wrong spot, or they like the shadow falling in the wrong spot and want more. Because every one is waiting, these changes are made very quickly, and you need to make sure that no corners are cut.

When filming is done with a set and a successful take is in the can, you will hear “check the gate” which means to make sure there were no equipment problems. (Checking the gate to make sure that there is no hair or crud in the camera where the film is exposed. Sometimes anachronistic in this video age, but you will be surprised how often film is used.)

Eventually you will hear the magic words “moving on.” This means that the shooting is done with this setup and that equipment will be moved to the next location. Again, things go from no action to intense moving of lights, stands, props, cameras, and sometimes even the video village.

While supervising, keep an ear out for any of the following:

“Watch your back” or “points” will mean that something unwieldy (or sharp) is being moved around. If you don’t see what’s going on, find it.

If you hear “patching” or “repatching,” it means that something electrical needs to be moved around and that a light will be turned off briefly, i.e., it might get suddenly dark. And, just so you know, a stinger is an extension cord.

And, after a long shoot, hearing “martini” is a wonderful thing. The martini is not a call to an open bar (actually you should never see anyone drinking on set), but the announcement of the last shot of the day.

This also means that everything that has taken hours and hours to setup will be taken down and removed in a few minutes. It happens staggeringly quickly and can really catch you by surprise. Perhaps you made a mental note to watch something leave, but if you are not quick, it will be gone before you wander over to supervise.

While the crew are consummate professionals (and by this time, you should know who the less professional professionals are and watch them more carefully), it’s been a long day. The only thing between your museum and a warm bed is getting all the stuff out. This is an important time to be extra watchful. Tired and in something of a hurry, people might cut corners and rules might not be followed. Using the most polite tone and wording is important at this point.

And...

No matter what happens, never, ever yell, “Cut.” If something horrible happens and you need to intervene, you can yell anything else, even something that would give the film an “R” rating, but never “cut.” This is an unforgivable intrusion into the director’s domain.

Chris Stavroudis is a private conservator in West Hollywood. He really enjoys being the conservator on all-night film shoots.

Glossary of Film Terms:

Arm up: To raise the arm of a crane. Arm down, of course, you can figure out for yourself

Assistant Camera (A.C.): Responsible for the care and maintenance of the camera and all of its associated pieces and parts. The **first A.C.** works closely with the **camera operator** and the **director of photography** at the cameras, while the **second A.C.** loads the film and runs the **slate**.

Assistant Director (A.D.): The assistant director is the film set referee. His job is to keep everything going smoothly and on schedule and maintain peace among the cast and crew. An assistant to the **director**, the **first A.D.** runs the set and is responsible for carrying out the director’s instructions. The **second A.D.** signs actors in and out and is usually the person in charge of **production assistants**. Third Assistant Director is an assistant to the second assistant director; responsible for (among other things) directing the movements of extras.

Bar: A horizontal metal tube from which lighting equipment or scenery is suspended. (Also called a barrel, batten, or pipe.) A batten is also a narrow strip of wood or metal that fastens or makes secure the lighting or scenery, as in "batten down the hatches" of a ship.

Beef: The power of a light. "Give me some more beef on the baby."

Best Boy: The second in command of an electrical or grip department. This lieutenant of grips is also in charge of delegating tasks. The second in command of any group can also be referred to as the best boy.

BFL: Big Fucking Light. Any of the bigger, heavier lights on a set. As in "Let's wrap the BFL's early tonight." Sometimes bowdlerized as Big Fat Light.

Blackwrap: Black aluminum foil used either to mold the direction of light or as heat insulation.

Boom Operator: Responsible for operating the boom microphone.

Boom up: To raise the entire camera when it is mounted on a crane or dolly. (To lower the camera is to "boom down.")

Camera Operator: Runs the camera during shooting. On low-budget films, the D.P. may also serve as the Operator.

Craft services: The department made available to provide buffet style snacks and drinks to the crew throughout the shooting day. Not to be confused with catering, provided by an outside company, which serves regular hot sit-down meals that occur every six hours or so.

Condor: An extendable boom arm, capable of hoisting lights 30 to 120 feet high. The term derives from the company that originally made them, but now refers to many

A small selection of terms one might need to know in order to keep track of things on set. For the whole vocabulary, there is a small, very interesting book, *Movie Speak, How to Talk Like You Belong on a Film Set*, by Tony Bill, oscar-winning producer and director. Some of the terms below are from the book.

high-lift devices, such as cherry pickers.

Dance floor: An area covered with (usually) plywood to enable the dolly to move smoothly in any direction.

Director: Controls the action and dialogue in front of the camera. The principal creative artist on a movie set.

Director of Photography (D.P.): Responsible for the “look” of the film; works with the **lighting director** to set-up shots and camera moves. Sometimes called the **cinematographer**. The D.P. has a number of possible duties: designing and selecting lighting, directing the gaffers of lighting, shot composition (in consultation with the director).

Dolly: A dolly is a small vehicle or truck that helps transport the camera and its crew, sometimes including the director.

Dolly Grip: Prepares the camera dolly and associated hardware, and operates the dolly during the shoot.

Electrician: A member of the electrical department; reports directly to the **Best Boy**.

Flag: An opaque cloth set in a metal frame used to prevent light from falling where it's not wanted. Also known as a solid, or a gobo.

Gaffer: Specifically, the head electrician. Generally, the head of any department. Works with the **D.P.** and the **lighting director** to light the scene. Handles the equipment.

Grip: A rigger, generally in charge of putting the camera anywhere the director wants it. The backbone of the film shoot, grips are the crew specialists assigned to the tasks of hammer and nail technology, the rigging of cameras and lights, and the moving of various equipment.

Key grip: The head of the grip department. Key grips work closely with the gaffer.

Kill it: Turn it off; cancel it. Usually in reference to a light.

Knock it down: To take the shine or newness off something, usually immediately and temporarily, by spraying it with a dulling spray, often a hair product called Streaks 'n Tips. Then the request is often simply reduced to the order "Streaks 'n Tips." (Clearly the use of hairspray in the museum is to be avoided and should be in violation of your filming guidelines, so keep an ear out for the phrase “knock it down.” Also, keep an eye on the hair stylists as they may sneak a can of hairspray onto set. Luckily, aerosol spray makes a distinctive sound when used. Know, too, that cans of aerosol water are sometimes used to add beads of sweat onto an actor’s face. It is still a violation of the filming guidelines, but, in all honesty, in most locations it is harmless.)

Lighting Technician: A member of the electrical department that is responsible for operating lights and lighting equipment on a set.

Lunch: The meal served halfway through the shooting day, no matter what time of the day or night it is served. Similarly, the shooting day is always called the day - even if it is actually night. Breakfast is usually made available out of a catering truck or at a table at the start of the shooting day. There is no such thing as dinner, only a *second meal*, usually modest. There is a distinct pecking order to the lunch line: director first if they want; stars; cast; crew; extras. Conservators will probably be forgiven if we don't know our place, but it's probably a good idea to eat with the crew.

Manmaker: Any device used to make an actor taller. May also be used in reference to any crewmember (operator, grip, etc.) needing to be made a few inches taller for the job at hand. also **pancake**, **apple box**, **half apple**, **quarter apple**.

Production Assistant (P.A.): The runners, ‘gophers’ on the set. On set the job can include holding back onlookers, getting coffee, escorting actors to locations, acting as a stand-in while a short is worked out, or performing any other tasks required to make the production run more smoothly.

Property Assistant: Responsible for the placement and maintenance of props on a set. Also **Set Dresser:** A person who has total charge of decorating the set with all furnishings, drapery, interior plants, and anything seen indoors or on the walls.

Second Unit: These are crews that are in charge of filming minor scenes, usually at a separate location.

Slate: A board (usually black and white) placed in front of the cameras at the beginning or end of each take of each scene, identifying the scene and take numbers.

Still Photographer: A person who photographs the action (often alongside the camera) to be for publicity.

Sound Recordist: Responsible for operating the audio recording equipment on a set.

Storyboard: The storyboard is an outline consisting of renderings to illustrate the sequence, flow, and general look of a film or scene before filming begins.

Stunt Coordinator: The stunt coordinator is in charge of designing and scheduling stunt performances. Stunt performers are specially trained to act in potentially dangerous scenes, usually in the place of the regular actors.

Transportation Captain: Makes sure everyone gets to the location. Responsible for all vehicle movement and parking. All drivers report to the transportation captain.

Technical Advisor: Technical advisors provide advice on the many technical aspects of creating a film.

Wrap: The act of finishing a shot, the day’s work, or the entire production

It's a Wrap! Protecting Hampton Court Palace during Filming

Historic Royal Palaces is an independent charity which looks after the Tower of London, Hampton Court, the Banqueting House, Kensington, and Kew Palace (or five palaces in and around London). HRP has been a charity for the last ten years, and as we do not get any funds from either the government or the Crown, we need to earn a living. Income generated from events helps us to care for our palaces.

Ten years ago 85% of our income came from our visitors who were mostly Northern Americans. Since September 11th, we have had to diversify in order to survive. In 2008 our visitors still bring in 65% of our yearly revenue, but events and filming brought in 8.5%. Or in hard currency: £4 million through functions and events in all our palaces, and £50k is our annual filming and photography income target. So it is not surprising that the directive from our directors and trustees is to “make it happen.”

This article is meant to describe the policies and practices we have developed to protect the properties, or, you could say, what to do when a film crew wants to convert Hampton Court into a debtor's prison.

The Conservation and Collection Care Department is responsible for preserving and monitoring the historic interiors. The department is made up of a textile section, set up over one hundred years ago to stop the deterioration of the tapestries, and a preventive section only twelve years old. We have eleven preventive conservators to look after five palaces, which is quite a large team. It is the preventive section's job to make sure the palaces are not at risk during events and filming. All our conservators are trained to supervise events.

Functions and Filming

Functions cover everything from private dinners, weddings, citizenship ceremonies, and corporate dining which could be just dinner in the Great Hall, all the way to the music festival in June which uses pretty much the whole palace and lasts fourteen nights. We call events anything which doesn't involve catering such as ghost tours, theatre plays, “Kids go Free,” ice skating, and educational events. Florimania is held in the Queen's Apartments in time for Mother's Day.

Our largest event to date was in 2005 when thirty two heads of state came together for a European Union meeting. That was the only time that we have ever closed Hampton Court Palace. We had to in order to provide the very high level of security that they needed, and also to accommodate the press and secretarial support. As you might imagine, the problems of functions and events are complex and interesting, but for this article I will address only those related to filming.

Filming includes: still photography, documentaries, live broadcasts, the Antique's Road Show, BBC series such as *Lorna Doone* and *Little Dorrit*, Hollywood blockbusters like *To Kill a King*, *The Libertine*, and *Vanity Fair*.

What conservators worry about: damage

All the different events at Hampton Court have a large potential for impact. Protection is about limiting damage, and the best protection is tailor-made to each specific type.

The risk of fire is something that we always consider, not just because at Hampton Court we did have one in 1986 which destroyed the King's Apartments, and it is still in the backs of our minds, but because we are often asked about using real candles and flambeaux. We tend to try and ask the technical crew to use some of the wonderful new electric tea lights, virtually undetectable from real ones. Every request is carefully assessed for risk, but if we can, we prefer to stay away from naked flames.

Damage to objects is also rare, but we have had instances of film crew members concentrating hard on what they have to do and forgetting their surroundings, and that's the reason why we always supervise.

Damage to what we call the “fabric of the palace,” doors, floors, walls, panelling etc., is much more common and usually happens during set up and take down. Damage to doorways is due to people carrying overly large equipment, too much at once, or simply lack of care. Damage to paneling happens when equipment is leant against walls. Damage to floors results from cloth tape and moving equipment. These are the areas that our protection addresses.

But we also count up the more discreet damages, the ones more difficult to quantify such as light, pests, dust, and vibration. These tend to show up in our quarterly reports. This year we started to use KPI's or key performance indicators for light and dust, and it will be interesting when at the end of the year we calculate how many extra lux hours are due to events and filming. Even more difficult to calculate is how these events impact the cycle of cleaning for delicate objects such as textiles. Protection for these is much more difficult.

What locations managers want

As I said before, our remit is to make events happen and to come up with a positive attitude and some creative solutions. So before we go into protection overdrive, what we need to do is have a look at what the organisers want.

For filming and photography they want a historical setting, exteriors and interiors, because it is difficult and expensive to recreate rooms with two hundred years worth of ancestral portraits and artefacts collected on Grand Tours. Being surrounded by a sense of history is also loved by actors as it helps them get into the part. So we can forget about removing furniture and paintings, because that's what event and location managers and their customers want.

As part of the negotiations, many of their questions will have to be answered such as:

How early/late can we start setting up?

Will the visiting public be in our way?

How much space can we have for kitchens, for staff changing rooms, for make-up, for VIP's?

How many trucks, cars, generators can we park?

What are the restrictions for lighting?

Can we bring in flowers, extra furniture?

How much power can we have, where will it come from?

Can we have phone and fax lines?

by Laurie Gibbs

Running events and filming in a historic house can put a lot of strain on a building, especially as the set up has to be done in a very short time after our day visitors are gone. The way I see it, protection comes in three phases: 1) planning and negotiation; 2) supervision; and 3) physical barriers.

Be prepared, planning and negotiations

For both filming and photography prospective clients will be sent our conservation guidelines, and we are in the fortunate position to have helped write those guidelines. (*For more about guidelines, see p. 20 Ed.*)

Upon receiving a request for any type of filming or photography, one of the very first documents that companies have to read and sign is the “interior filming and photography conservation rules and regulations.” This document addresses all the main issues such as always having a protective barrier between any equipment or prop and the fabric of the building, not touching objects or furniture, and light levels. Very importantly it also states that a conservator will be supervising at all times and can stop work if they think that damage is likely.

Following that there are two other application forms, one for small scale photography or filming, and the other for large scale. They ask questions like how much equipment do you have, what type, will you need lighting, sets etc. This paperwork trail help us form a clear idea of what the clients want and if we will be able to accommodate them. For conservators guidelines are something to lean on and help with planning and negotiations. When things go wrong during any type of event, it is usually due to the guidelines not being adhered to or enforced.

After the guidelines, the next part of the negotiations is the recce (a pre-shoot reconnaissance of a film location, there may be more than one for large events) and the follow up discussions. The recce is the first point of contact for the conservator, but will usually also involve other members of staff (such as maintenance, security, warders, and operations) so that the client has all the information he needs to plan.

Bearing in mind that we are there to facilitate as well as minimizing risk to our interiors, a recce is the time to listen to what the client wants and take notes. Some requests are routine and will be covered by the guidelines, others may throw you. Our policy is: don't say no, do some research and get back to them. If we have to say no to a request, we try to find an alternative which is acceptable. This is when a bit of lateral thinking is useful.

For filming involving interiors there will be more than one recce. For large film shoots we like to have about three months of planning time.

The follow-up planning is the stage that our PR manager finds the most time consuming: forms have been sent, signed, and sent back to us but there are still a huge number of details to go through. At this stage we expect to receive lighting proposals and drawings from the set designers for any additional pieces of scenery which will have to be brought in.

Supervision at all times

Trained conservators attend every function, event, filming, and photography (for big events, several conservators may be needed).

Preventive conservators are specifically trained to safeguard the palace, which they learn by having the guidelines explained to them and working with an experienced colleague for as many events as it takes for them to feel comfortable. The conservator on duty will have been briefed, so will know what was agreed during the planning stage, and will introduce themselves to the person in charge of the production, so they know who we are, and what our role is. We have a right of veto in case we think that immediate action is crucial to prevent damage, but it is generally better to anticipate problems and have a word with the location or PR manager who is also on duty during every event.

For simple photography, we may be needed just to make sure that no one gets too close to objects, that the lighting does not give out UV radiations and is turned off when not needed, and that protection goes under all the equipment brought into the palace.

We may also have to move furniture at the request of the director, monitor the amount of crew in smaller rooms, and generally anticipate when technical staff is in danger of forgetting their environment. We start work when the crew starts setting up, while they shoot (behind the camera is a good place to be), and until everything has been removed from the room. After large film shoots, we meet to identify and discuss what worked well and what did not.

Physical barriers, and more

Our first rule for protection when filming occurs is that there needs to be a protective layer between any equipment which is brought in and what we call the fabric of the building which is walls, floors etc. It is the same rule for inside and outside the palace. The following are some examples.

Doorways receive the heaviest protection, usually plywood with cushioning behind.

We use drip trays under the many trucks brought in for a shoot as the oil drips look unsightly.

A variety of material is used to protect floors from equipment as long as it is cushioning and stops scratches, such as woven blankets /Correx/hardboard/ rubber sheeting. Tennis balls are inserted under tripods (easy to see from a distance).

All sets must be pre-cut, pre-drilled, pre-painted, and be ready for assembly before being brought on site. Self adhesive foam is good as an isolation layer at the back surface of sets. Any on site retouching will be at the discretion of the conservator on duty.

The second major rule is that all lighting is to be UV friendly. It needs to be cool if close to objects, and we ask directors to switch off lights between takes.



If we do remove objects from rooms for filming, it is usually at the request of the director. Either because it doesn't look right for what they want, or because they want a piece of furniture they can actually use.

Real food and drink are strictly regulated. If food is needed as a prop it is removed overnight. Actors eat and drink in regulated areas away from the Royal Apartments.

We have, at times, had animals for shots. For *To Kill A King*, they wanted a long shot of King Charles I walking along a gallery accompanied by half a dozen spaniels. We did worry about dogs jumping on furniture and accidents, but the trainer was very efficient. The dogs were kept in a compound until needed, used for the shot, and then whisked straight out. We had no problems at all. They were very well-behaved.

For *Lorna Doon* we had every animal in creation for shots in our courtyard. We were assured by the animal handler that horses never pee on a hard surface because they don't like splashes against their legs, which is rubbish. Fortunately the deal was that one person from the BBC was solely responsible for clearing up mishaps, and he was kept very busy!

We have allowed some of the doors in our courtyards (which are painted green) to be repainted and faked as old wood as long as a layer of latex is used first. This technique allows for the extra layer to be simply peeled off. (It's actually quite fun to remove afterwards.)

We allow our courtyards to be covered in earth or leaves as long as there is a protective membrane underneath (easier for clean up and no seepage into our walls). And we allow water based fog outside, but not inside.

The cost of earning a living: staff time

For our last film shoot, *Little Dorrit*, the total planning time was sixty five hours and one hundred and fifty five hours of supervision spread over ten days of filming. (For comparison, for the music festival last year we did one hundred and seventy hours of supervision and seventy hours of protection for an event which lasted fourteen days.)



These are considerable figures, which have a large impact on our core work. People get very tired. We have tried to fall within EU regulations which state that workers should have 12 hours rest between shifts. So if you work until 2am you should not be at work until 2pm the next day, which means that you then have to work until 9pm or lose your overtime. We have not managed to work that one out yet.

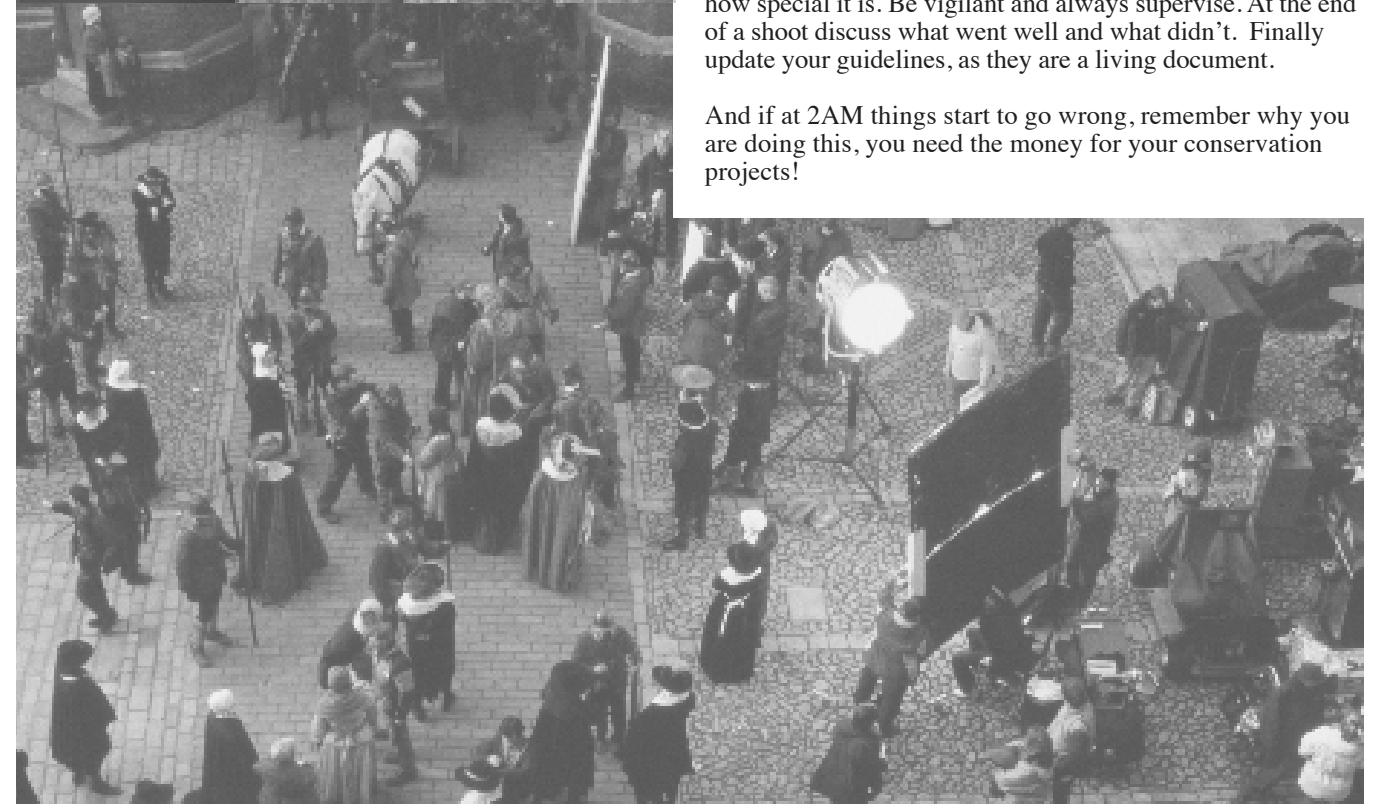
Conclusion

If I had presented this material just a few years ago, the actual "hands-on" side of the work, would have made up about half of my talk. But not anymore. Now my daily life is all about protection and risk management. The reason for this is we have become much more sophisticated in our approach. We now follow Churchill's dictum "To jaw-jaw is always better than to war-war." We spend much longer on negotiations and reaching compromises.

We have to be aware that in times of recession there is more pressure than ever on our PR team to earn money. This in turn puts pressure on the conservation department to flex guidelines in order to secure a contract, which can confuse staff and increase risk to the building.

Some final advice if you are faced with the prospect of having to supervise a film crew at work: don't panic. Insist on being involved from the beginning, be very prepared, ask lots of questions during the recce and take notes. Make friends with the location manager and later with the director. Explain what your role is and what your concerns are. Talk to the crew about the history of your building, so they understand how special it is. Be vigilant and always supervise. At the end of a shoot discuss what went well and what didn't. Finally update your guidelines, as they are a living document.

And if at 2AM things start to go wrong, remember why you are doing this, you need the money for your conservation projects!



A Compilation of Guidelines for Filming

by Carolyn Tallent

The following is a compilation of guidelines from a number of museums: the Natural History Museum of Los Angeles County, the Los Angeles County Museum of Art, the Boston Museum of Fine Art, the Museum of Modern Art, the National Gallery of Art, and Hampton Court Palace, blended together and sorted into topics.

The point of pulling these all together was not to produce a rather daunting and stringent list, but to cover a wide range of situations that could be sorted through to suit a particular institution. Obviously, a large, basically empty, atrium will require less than an historic house with confined spaces and densely placed objects.

One can always establish rules with the option of flexibility on site / on set.

Introduction / general museum policy statement

The primary functions of the Museum are to preserve and interpret our cultural and historical heritage through research, collecting, education, and exhibition. Therefore, permission for filming at the Museum may be granted if production will not hinder operations or prohibit the general public from visiting and enjoying the facilities, grounds, and/or collections. It is extremely important that production companies respect the need to preserve and to protect Museum property.

PRELIMINARY NEGOTIATIONS

In the application for filming the production company must state name of production, name of company, size of crew, and number of talent; number of police department personnel; number of equipment and support vehicles; and names of key personnel to be present on filming day.

A script must be submitted, with all final shooting scenes and production schedules for the Museum noted prior to granting permission to film. The Museum does not permit the filming of violent or sexually explicit scenes on the premises; therefore, scripts are reviewed for content, not purposes of censorship.

Set design shall be approved prior to the date of filming. All set alterations that affect the Museum facility (attaching decorations, movement of Museum property, use of lights or fountain) require approval of the Museum filming coordinator. The specific objects or display cases to be filmed must be specified in writing.

Structures and equipment must be broken down into manageable parts of less than 6 ft. in any dimension, to facilitate safe movement in and out of the Museum.

A walkthrough/scout with all necessary parties (Museum representative, location manager, first assistant director, director, producer, etc.) must be scheduled as far in advance as possible – if a two week advance walkthrough is possible,

that is advised. At the time of this walkthrough, all filming areas must be agreed upon, as well as building access, parking needs, and crew set-up areas.

An appropriate staff member from the curatorial or conservation department must be notified, at least 48 hours prior to filming/photographing in the galleries. The conservation department will determine which materials are sensitive and establish the maximum lighting levels and exposure times permitted for the individual works of art. (For a summary of these materials and their lighting limitations, see below.)

Production companies are required to have the unit production (crew) and location manager sign a copy of the guidelines to be placed on file at the location prior to the day of filming. It is the production company's responsibility to duplicate and distribute these guidelines to the production crew. The production company will be held responsible for the actions of their employees or subcontractors and their staff.

A floor plan schematic indicating the designated filming, set-up, no access areas, etc. will be provided by the Museum.

Filming and photography should be scheduled during periods when the facilities are closed to general public use.

DURING FILMING

Supervision

A person who is familiar with this document and is aware of all the Museum's requirements as specified in the guidelines should be designated by the production company. This person will be the contact for Museum staff should issues arise during the filming/photography. This person should have a signed copy of the contract on hand and should have direct influence over the production.

The contact person/location manager shall communicate only with the designated Museum representative. No requests are to be made of any other Museum staff, as they will not be addressed.

Depending on the size of the crew an appropriate number of Museum staff (curatorial, conservation/collection management, or guards) must be present to oversee activities.

All crew members must sign-in with security upon entering the Museum. After signing-in, they will receive a contractor's badge, which must be worn at all times.

Only those essential to the scene in production are permitted on a location. All other talent and crew must wait in a designated area until called.

Production crew members are limited to the areas designated for their use as noted in location itinerary. Any occupation of a non-designated Museum area requires the accompaniment of Museum security.

or, in the most extreme case,

All crew members are to be escorted by Museum staff AT ALL TIMES, both at the filming locations and while walking around the Museum.

General

Film crew members may not handle Museum objects under any circumstances. Museum objects or gallery display cases or pedestals may only be moved by Museum collection staff and only if prior arrangements have been made. No members of the crew are allowed within two feet of a work of art.

Floors, and in certain circumstances also doorways and walls, must be protected from accidental scratching and gouging when moving the components of a structure in and out of the Museum and during installation and take-down. The contractor is to provide protection materials.

No smoking, food, and/or liquids (even in sealed containers) of any kind, are permitted in the galleries or near works of art. (Although one museum does allow bottled water in designated areas within the museum.)

No atmosphere-generating equipment, such as a fog machine, is allowed in any gallery or collection area.

Flammable and noxious substances are not permitted on Museum grounds.

Equipment

Cameras on dollies, tripods and camera booms with wheels, or ladders are not allowed in the exhibition areas without the prior written permission of the Museum. All equipment on wheels must have locking systems to prevent them from moving when not in use. And must never be unattended. (One museum does not allow the use of tracks, dollies, or boom mics in the galleries at all, and approval to use this equipment elsewhere must be obtained in advance.)

During filming, hand held booms or microphones must be carefully supervised to prevent bumping into artworks. The Museum strongly encourages the use of Lavalier microphones (wireless).

The crew must place cardboard or other barrier material on the floors to protect the surface onto which equipment is unloaded. If necessary, Museum staff should place stanchions (or a similar barrier) around the art in set-up areas.

Cables and wires must run along the walls if possible and must either be secured with tape or sandbags. (Note: Cables are not to be taped to any of the hardwood floors.)

All equipment must be placed specified distances (usually at least 10 ft.) from art as determined by a conservation representative to prevent equipment from accidentally falling onto art work.

Crew carrying equipment should walk single file through the Museum's galleries. No hand carrying of large equipment. If necessary, had trucks can be provided.

Items measuring 4 ft. or bigger in any dimension must be carried by no less than two individuals.

When moving a tripod or light stand, it must be carried vertically.

All stands should have rubber or nylon tips at their feet and need to be steadied at the base with sandbags. Lead weights are not recommended.

All equipment not in use shall be stored in a non-intrusive, non-threatening area.

Lighting

Museum electrician(s) shall be consulted prior to use of power in the facility, and a staff engineer shall be present when additional lights require access to Museum's power.

The Museum may designate that certain sensitive objects be illuminated at extremely low light levels. These materials must not be exposed to quartz iodide or halogen lights, due to the extreme heat they produce. The following lighting measurements are guidelines for understanding the sensitivity of materials. Actual lighting and exposure times for filming and photography must be determined by Museum staff.

Five foot-candles or 50 lux or less must be used for all sensitive works of art, including, but not limited to:

Paper: discolored acidic paper or colored paper; paper fans; watercolors and gouache; brown inks and washes; pastels; Japanese prints; photographic papers and emulsions (including but not limited to albumen emulsions); salted paper prints (calotypes); cyanotypes; hand colored prints; color photographic processes; gelatin emulsions.

Textiles: tapestries and rugs; costumes; embroideries; silks; linen wrapped mummies.

Contemporary Paintings: paintings with exposed canvas supports (i.e., Morris Louis).

Other: tempera paintings; Indian and Islamic paintings; paintings with light collage elements; illuminated manuscripts; Asian scrolls and screens; collodion emulsions (including ambrotypes and tintypes); basketry and similar organic materials; papyrus; Urushi (Japanese lacquer).

Fifteen (15) foot candles or 150 lux or less must be used for the following works: paintings, decorative art and ethnographic objects; ivory and bone inlays; leather surfaces; polychrome sculpture; modern sculpture and furniture with plastic elements; painted wood; furniture; books; leather bindings.

Artifacts and specimens deemed light sensitive by the conservator may only be filmed using available light.

A Compilation of Guidelines for Filming, continued

Lights may not be left on continuously or unnecessarily. Camera setup, camera focusing, and scene blocking should be done in available light only. Lights should be turned on only for final placement, exposure readings, and actual filming.

Light should be reflected or bounced whenever possible rather than aimed directly at an object.

Time limit: To prevent heating of surfaces during shooting, lighting with hot lights on any one object will be done for no more than 10 minutes at a time with a 15 minute rest period between lightings. Heat and light measurements using a hand held meter should be monitored by both the crew and Museum staff.

If glare from external lights cannot be eliminated from objects in vitrines or behind glass, objects should be filmed using available gallery lighting and/or by shooting at an angle, or through the use of polarizing filters or polarized light sources.

Screens and Filters: Screens must be used on tungsten, incandescent spot, or flood lights to control heat and protect object(s) from flying glass as a result of exploding bulbs. UV filters and heavy Pyrex and wire screens must be used on all light sources when possible to minimize exposure and contain debris should a tube explode. This is mandatory for quartz iodide, halogen, tungsten, and all continuous light sources. Fire retardant scrims must be used.

Electronic flash: Flash units must be at least 10 feet from the object being filmed/photographed, and far enough away from adjacent objects so that if a unit falls, it will not touch objects or walls. Flash units must be filtered to absorb all radiation wavelengths shorter than 380 nanometers (using, for example, Rosco UV Filter, Therma-shield).

Museum authorized staff may at any time require film crews to turn off the lights if there is heat building up near sensitive works of art or if there is any increase in ambient temperature.

Care must be taken not to alter the relative humidity in climate-controlled galleries. It must be monitored during filming. This is dependent on the types of objects being filmed in the gallery. Measurements will be taken at the surface of the art by a staff member to determine safe limits.

Maximum power levels: Equipment using more than 20 amps is not permitted (check with staff electrician prior to shooting if necessary).

Miscellaneous

The Museum reserves the right document, by still photograph, any film shoot occurring on its property. These photographs will be placed in the Museum's files for archival purposes, and any use of them will be cleared with the representatives for the film.

Production companies may not use any Museum equipment, supplies, or other facilities unless designated by the film coordinator.

The film company must have a fire inspector on duty.

All rubbish is to be removed by the function's contractor before leaving the area.

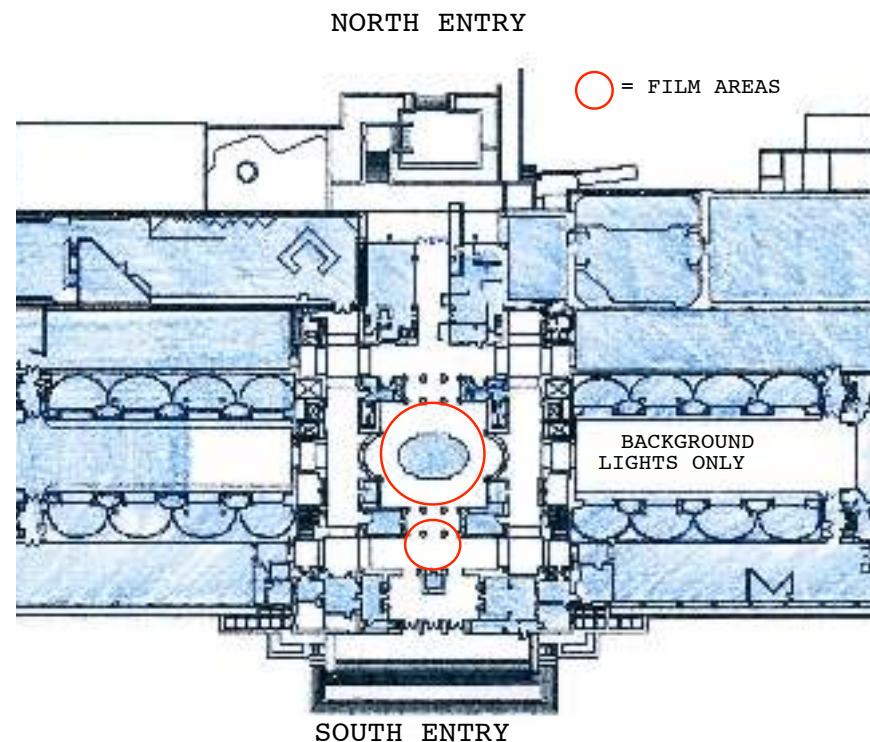
and finally,

Enforcement

Any individual who fails to comply with the guidelines or whose behavior otherwise puts collection materials at risk will be asked to leave the premises.

The Museum reserves the right to suspend production and declare the permit null and void if any of the stated procedures are violated. In such cases location fee will be prorated and unused amount refunded. By signing the agreement permittee agrees to pay all staff time and material costs accumulated.

Floorplan for the shoot described on the opposite page.



Sample of a production company filming request

TO: Museum co-ordinator
 FROM: Location management company
 DATE:

FILMING REQUEST
 Natural History Museum of Los Angeles County

Please review the following request for filming:

NAME OF PRODUCTION: Television Pilot "Untitled Project"

PRODUCTION COMPANY:

DESCRIPTION OF PRODUCTION AND BUILDING USE:

The scene that will be filmed is of a mother and daughter meeting in the American Natural History Museum in New York. They sit in front of the Dueling Dinosaurs and have a conversation. A copy of the script has been faxed to you for your reference.

Areas use for filming: South Entrance and Grand Foyer.

The doors to the North American Mammal Hall will be open so the camera can see inside as background. The production would like to place some small lights inside these rooms so it does not look completely black. The camera will be placed just inside the door of the African Mammal Hall looking out into the Grand Foyer. The camera will never see inside the African Mammal Hall. The same type of camera crane that has been used before will be used by this production. The production has asked if one of the carts can remain in the Grand Foyer during filming.

Areas used for load-in, load-out, equipment storage, etc.: Load in and out shall take place through the North and South entrances and the west loading dock. A generator will be placed outside the south entrance. Prep only may take place during the public hours beginning at 4 PM. During all public hours, all equipment and cables will not block or cross any halls, doorways, or entrances, will be stored in a safe, taped off area in the corner of the Grand Foyer. The production will restore and vacate the Museum before it opens at 9:30 AM on Friday and 10:00 AM on Saturday.

Number of cast & crew: Cast: 2, Extras: 35, Crew: 85, although most will not be inside the Museum.

Changing out of lights for color correction required: Lights will be placed above the large molding near the ceiling in the Grand Foyer as has been done in the past. A scissor lift will be used for this task. The production has asked for the Museum's Audio/Visual Coordinator to remove the 2 large S4 lights in the middle of the Dueling Dinosaurs and to replace them afterwards. The production has asked for the Museum's Audio/Visual Coordinator to remove the glass gels from the spotlights around the edge of the Dueling Dinosaurs so they may place their plastic gels over these lights.

Special lights & equipment that are not included in Guidelines: None.

Please refer to the attached floor plan and floor plan explanation. Shaded areas are off-limits to production personnel.

A copy of the Filming Guidelines has been provided to the production and the production has agreed to work within these Guidelines. The Filming Guidelines are included in the Filming Contract with the production.

DATES NEEDED:

Set Preparation: Thurs., 3/22, 4 PM – 4 AM (12 hours)
 Filming, Set Striking & Location Clean-up: Fri., 3/23, 4 PM – 6 AM (14 hours)

MUSEUM STAFF REQUIREMENTS: The production will probably not work the full length of time listed above and should finish a couple hours earlier each night.

Security Guards: For times listed above we will need 4 Security Guards – one for the loading dock (starting at 4 PM), and then the North entrance, South entrance, and relief (starting at 5 PM). In addition, there will be one Guard required during the public hours on Friday, for any equipment and set dressing.

One Building Engineer will be required for freight elevator for all times listed above.

One Conservator will be required for all times listed above.

All production personnel must vacate the Museum no later than 9:30 AM on Friday and 10:00 AM on Saturday, and equipment and set dressing will be stored in a safe manner without blocking any public access during public hours.

“Dusting Off a Serene Jewel Box,” *New York Times*, 12/31/2008

The Emperor Qianlong, the fifth emperor of the Qing Dynasty, spent five years building himself a retirement palace -- a fanciful collection of pocket gardens, banquet rooms, prayer halls and a single-seat opera house. The Palace of Tranquillity and Longevity, as it is known, would be a place to meditate, write poetry and enjoy the reviving company of his many concubines.

However, Qianlong died, at 89, without ever having spent a night in his retirement home. Emperors came and went, but somehow Qianlong's two-acre jewel box remained untouched. In 1924, when China's civilian rulers tossed the last emperor out of the Forbidden City, the gates to Qianlong's miniature palace were chained shut and largely forgotten.

Word eventually reached the World Monuments Fund, a nonprofit organization dedicated to saving imperiled historic sites across the globe. Six years and \$3 million later the first building to be restored, Juanqinzhai, or Studio of Exhaustion From Diligent Service, has just been completed. In a country where historic preservation usually entails razing a structure and replacing it with a brightly painted replica, Juanqinzhai is something of a milestone.

The pavilion's slavishly faithful restoration is an archetype that both Chinese and American conservators hope to replicate over the next eight years, as the remaining 26 buildings are refurbished. Juanqinzhai's most beguiling elements are the panoramic murals of the pavilion painted on silk. The blend of traditional Chinese painting with the Western use of perspective and optical illusion is a testament to Qianlong's embrace of Giuseppe Castiglione, an Italian artist and missionary who lived in Beijing at the time.

“Pulling Strings: the Marionettes and Art of Gustave Baumann,” *Press Release (PR.com)*, 1/1/2009

After a lengthy and extensive restoration process, the marionettes carved by Gustave Baumann in the 1930s will be on view beginning January 30, 2009 through May 10, 2009 at the New Mexico Museum of Art in the exhibition *Pulling Strings: The Marionettes and Art of Gustave Baumann*.

Nearly all the puppets had to be restrung, leather joints had to be replaced, costumes had to be restored, and touch-ups to the paint were required. This will be the first time in forty years that the original puppets have been on public display. Gustave Baumann (1881-1971) learned his wood-carving skills after his family emigrated from Germany to the United States in 1891.

In 1918 Baumann moved to Santa Fe and worked in the basement of this museum on his woodcut prints -- for which he is perhaps better known. Intended in large part to entertain their daughter and friends, the marionette theater became an important part of their creative lives. After Baumann's death in 1971, his wife Jane and daughter Ann, gifted the marionettes, stage materials, and related items to the New Mexico Museum of Art.

“Babylon Is Targeted in Project of World Monuments Fund and Iraq,” *Bloomberg.com*, 1/8/2009

The World Monuments Fund is launching a project with Iraq to preserve the ancient city of Babylon, where King Nebuchadnezzar II (630-562 B.C.) built his hanging gardens, one of the Seven Wonders of the World.

The New York-based nonprofit group, will work with Iraq's State Board of Antiquities and Heritage to develop a master plan to promote conservation and tourism in the city, located about 55 miles south of Baghdad on the east bank of the Euphrates.

The World Monuments president said the city has never been mapped, and there have been very dramatic changes to it. The ancient city, founded around the 18th century B.C., has sustained damage in recent years from Saddam Hussein's efforts to make it a tourist attraction, from looting after the U.S.-led invasion in 2003 and from being used as a military base during the Iraq War.

The World Monuments Fund's project marks the second initiative this decade to aid Babylon. In October 2003, the fund partnered with the Getty Conservation Institute to set up the Iraq Cultural Heritage Conservation Initiative to help preserve museums, archeological and historical sites in Iraq.

“Damage to Historical Monuments ‘Significant’,” *The New York Times*, 04/06/2009

The earthquake in Abruzzo did not spare the region's artistic patrimony, though government officials said Monday that it was too soon to determine the extent of the damage to historical buildings or works of art.

In L'Aquila, the regional capital, the earthquake caused “significant damage to monuments,” said Giuseppe Proietti, secretary general of the Italian Culture Ministry. The rear part of the apse of the Romanesque basilica of Santa Maria di Collemaggio, much of which was restored in the 20th century, collapsed and cupolas in at least two churches in the historic center had cracked open.

The third floor of the 16th-century castle that houses the National Museum of Abruzzo was also affected by the quake, though officials have not been able to verify the damage to the art collection there. The Porta Napoli, built in 1548 in honor of the Holy Roman Emperor Charles V, was destroyed in the quake.

The earthquake, with a 6.3 magnitude, was not the first to strike the central Italian city. In 1703, a quake destroyed much of the medieval historic center, which was then rebuilt in the Baroque style, according to Alessandro Clementi, who has written several books on the history of L'Aquila, which was founded in the 13th century and had its moment of greatest socioeconomic importance in the Renaissance.

“Six-figure Sum Needed to Right Wrongs of the Roundheads at Chichester Cathedral,” *West Sussex Gazette*, 01/08/2009

Unique early-16th century paintings in Chichester Cathedral which roused the wrath of Cromwell's soldiers during the Civil War are being targeted for a major restoration and conservation scheme. One of the huge pictures,

painted on wooden panels in the South Transept, depicts the faces of kings and bishops.

Another, in the North Transept, features a range of representations of one Bishop of Chichester, gleaming with gold leaf. The pictures show the founding of the See of Chichester, and the renewal of the charter by Henry VIII to Bishop Sherburne, with richly-robed figures. But the wood is visibly cracked and splitting, and an appeal for funds to restore the paintings, by artist Lambert Barnard, is planned.

A small number of the portraits were damaged and blotted out by the rampaging Roundheads, who also caused other damage in the cathedral, defacing tombs, and to the City Cross, after the siege of Chichester in 1642. It is not yet known whether any portraits, or remains of them, are hidden under the blacked-out areas.

“Long-lost Calder Banners on Display in Philadelphia,” *Philadelphia Inquirer*, 01/12/2009

Eight banners by Alexander Calder that were feared lost or destroyed have been discovered unharmed in the bowels of a Center City office tower.

For the first time since the mid-1980s, the vanished Alexander Calder banners - part of one of the greatest public art legacies in Philadelphia history - will be on public view until March at the Central Branch of the Free Library on Logan Square. The eight banners are so large - ranging from 18 feet to 28 feet in length - that only the four shortest could be hung in the library's central lobby.

The only banners that Calder ever designed owe their existence to developer Jack Wolgin, who commissioned three signature works in 1975 as part of the Redevelopment Authority's percent-for-art program requirement. He enticed Calder to design a set of banners that eventually filled the space with the bold primary colors of the sun and floral garlands and the silvery tints of the moon and starry night.

In the early 1980s Wolgin sold Centre Square and the new owners decided to spruce up the interior. The banners were taken down. The Calder-designed steel armature from which they were to hang, a piece of sculpture itself, was never used and is in a Centre Square parking garage.

“How Old is that Photo, Really?,” *Los Angeles Times*, 01/12/2009

Scientist Dusan Stulik, researcher Art Kaplan and photographic conservator Tram Vo have developed a new way to authenticate historic photographs. Instead of relying on human eyes and microscopes to date photographic images, as in the past, the Getty specialists devised a scientific method that can determine the age of many photographs made in the 20th century.

The key, they discovered, was to identify hidden chemical “signatures” associated with particular processes. Taking precise measurements of barium and strontium proved to be most productive because those two metallic elements were used in mineral coatings applied to photographic paper from the end of the 19th century until the 1970s -- but in concentrations that varied according to the manufacturer and time period.

Working with several French organizations, including the Henri Cartier-Bresson Foundation, Stulik and Kaplan recently performed a chemical analysis on Cartier-Bresson’s original photographs. It’s the first step in building an archival database of the artist’s work, to be used as a basis of comparison for dating other vintage prints by Cartier-Bresson -- and for exposing forgeries.

“Past the Crowds to be up Close at the Prado,” *Los Angeles Times* 01/14/2009

Spain’s Prado Museum has teamed with Google Earth for a project that allows people to zoom in on the gallery’s main works -- even on details not immediately discernible to the human eye. The initiative, announced Tuesday, is the first of its kind involving an art museum. It involves 14 of the Prado’s choicest paintings, including Diego Velázquez’s “Las Meninas,” Francisco de Goya’s “Third of May” and Peter Paul Rubens’ “The Three Graces.”

Google Spain director Javier Rodriguez Zapatero said the images now available on the Internet were 1,400 times clearer than what would be rendered with a 10-megapixel camera.

The images can be seen by going to Google, downloading the Google Earth software, then typing in Prado Museum in the search engine. Once the museum zooms into focus, click on the square with the name of the museum.

“Getty Exhibition Showcases Japanese Lacquer Masterpiece, Restored through Getty Grant,” *Art Daily*, 01/15/2009

Sometime around 1640, Japanese craftsmen at a lacquer workshop in Kyoto finished a masterpiece of black and gold lacquer known today as the Mazarin Chest. Lavishly decorated with scenes from Japanese literature, the chest is among the finest examples of a type of lacquer decoration perfected by the Japanese for European consumers.

In 1882, it was purchased by the Victoria and Albert Museum in London, however, centuries of cumulative exposure to light and changes in humidity and temperature caused a gradual deterioration in the chest’s condition, rendering it too fragile for display or transport by 2004. Because raw urushi is extremely toxic and is difficult to obtain in the West, Western craftsmen and conservators have in past years unsuccessfully used Western-based materials, such as waxes and natural and synthetic varnishes. In Japan, however, urushi objects are still restored by urushi masters.

Frequent use of raw urushi can build up an immunity in some craftsmen, though not all. The exhibition at the Getty marks the completion of a major research and conservation project on the Mazarin Chest at the Victoria and Albert Museum in which a Japanese conservation expert worked together with V&A staff. This international collaboration marks the first time a Japanese urushi conservator has traveled outside Japan to treat an object and to train another institution’s staff in the restoration process.

“Asking the Artist for a Do-Over,” *Wall Street Journal*, 01/22/2009

Art is long and life is short, according to the old Roman saying, but sometimes art doesn’t hold up its end of the bargain. New artworks may look like old works in a short period of time, leaving their buyers perhaps feeling as though they have been had.

Art is sold “as is” by galleries or directly from artists. But it’s not fully clear what responsibility artists bear to their completed work, especially after it has been sold. That’s particularly the case for artists who purposefully use ephemeral materials in their art. A question arises of when or if to call in the artist if physical problems arise with the artwork.

Tom Learner, a conservator at the Getty Conservation Institute in Los Angeles, leans toward contacting the original artist. A recent instance of re-doing the past occurred in 2006 when Damien Hirst’s 1991 shark-in-a-tank work “The Physical Impossibility of Death in the Mind of Someone Living,” which had been deteriorating badly because the artist hadn’t used a sufficient amount of formaldehyde, was replaced. In fact, Mr. Hirst cleaned out the tank, sawed in half another shark, and made sure that this one was more properly pickled.

An artist’s sense of obligation to his or her work sometimes may be time-limited, contractually -- public art commissions usually contain a clause in the agreement stipulating the artist’s responsibility for “patent or latent defects in workmanship”.

Back in the 1990s, Stella refused to take part in the restoration of a 25-year-old painting that had been brought in for repairs to Brooklyn conservator Len Potoff, who had contacted the artist as a matter of practice. “He said that he couldn’t do it,” the conservator said. “He’s not where he was 25 years ago, and he couldn’t put himself in that zone. At the time, I was really p-, but now I find that point of view commendable.”

“Art Club Seeks £1m to Restore Lost Rennie Mackintosh Frieze,” *Sunday Herald*, 01/24/2009

Charles Rennie Mackintosh’s first major frieze has lain hidden under layers of paint for nearly a century in the Glasgow Art Club. Painted in 1893, the stencilled frieze features sage-green thistles intertwining on a light-yellow background to create an art nouveau lattice.

It was the centerpiece of the art club’s gallery but, due to its position under the eaves, it suffered water damage and was eventually plastered over. The money will also go to conserve the rest of the gallery, located in an elegant townhouse, whose existing fireplace, grills and door fittings were also designed by Mackintosh when he was a 25-year-old assistant for the firm Honeyman and Keppie.

Mackintosh’s influence over the art club gallery, described by art historian Sir Kenneth Clark as “one of the most perfect small galleries in Europe”, was relatively unknown until recently. The very existence of the frieze was lost knowledge until 2000.

“A Prayer for Archimedes,” *Science News*, January 2009

For seventy years, a prayer book moldered in the closet of a family in France. Behind the text of the prayers, faint Greek letters marched in lines up the page. In 1998, Christie’s auctioned it off—for two million dollars.

For this was not just a prayer book. The faint Greek inscriptions and accompanying diagrams were the only surviving copies of several works by the great Greek mathematician Archimedes.

A nine year research effort has led to the decoding of much of the almost-obliterated Greek text. The results were more revolutionary than anyone had expected. Archimedes wrote his manuscript on a papyrus scroll 2,200 years ago. At an unknown later time, someone copied the text from papyrus to animal-skin parchment. Then, 700 years ago, a monk needing parchment for a new prayer book cut pages from Archimedes’ book in half, rotated them 90 degrees, and scraped the surface to remove the ink. Then he wrote his prayers on the nearly-clean pages.

Reviel Netz, an historian of mathematics at Stanford University who transcribed the text, says that the examination of Archimedes’ work has revealed “a new twist on the entire trajectory of Western mathematics.”

“The Painted Tomb-Chapel of Nebamun Delights,” *The Times*, 01/25/2009

A jazzier institution than the British Museum might have called its new display of Egyptian wall painting Death and the Accountant, because that, basically, is what it tackles. A tomb-chapel is an ancient Egyptian burial complex with an underground grave surmounted by a suite of painted rooms, in which the deceased’s story is told in pictures.

The paintings were ripped off the walls of Nebamun’s tomb with crowbars and saws in the 1810s by a disreputable Greek tomb-burglar known as Yanni. The British consul in Egypt at the time, the infamous Henry Salt, employed Yanni to locate things and remove them. Salt then sold the paintings to the British Museum as part of a job lot costing a modest £2,000.

The murals were removed in 1997 for a full restoration that took seven years, and the creation of a suitable museum context for them has taken until now.

The 11 surviving fragments of tomb wall have been carefully repositioned behind glass; and where previously they were treated as individual scenes, and shown in bits, the aim this time is to evoke the ambience of the tomb-chapel.

“Simple Elixir Called a ‘Miracle Liquid,’” *Los Angeles Times*, 02/23/2009

It’s a kitchen degreaser. It’s a window cleaner. It kills athlete’s foot. Oh, and you can drink it. Sounds like the old “Saturday Night Live” gag for Shimmer, the faux floor polish plugged by Gilda Radner.

But the elixir is real. It has been approved by U.S. Regulators. And it’s starting to replace the toxic chemicals Americans use at home and on the job. It turns out that zapping salt water with low-voltage electricity creates a couple of powerful yet nontoxic cleaning agents. Sodium ions are converted into sodium hydroxide, an alkaline liquid that cleans and degreases like detergent, but without the scrubbing bubbles. Chloride ions become hypochlorous acid, a potent disinfectant known as acid water. “It’s 10 times more effective than bleach in killing bacteria,” said Yen-Con Hung, a professor of food science at the University of Georgia-Griffin. “And it’s safe.”

There are drawbacks. Electrolyzed water loses its potency fairly quickly. Machines are pricey and geared mainly for industrial use. The process also needs to be monitored frequently for the right strength.

“Experts Unveil New Leonardo Portrait,” *Associated Press*, 04/02/2009

Experts unveiled Thursday a previously unknown portrait of Leonardo da Vinci showing the artist and inventor as a middle-aged man with piercing eyes and long, flowing hair.

The painting was discovered in December in the collection of a family from Italy’s southern Basilicata region. Who made the painting and when it was done is still being investigated, but experts have ruled out it being a self-portrait. Medieval historian Nicola Barbatelli, who found the painting, said carbon-14 analysis of the wood supporting the canvas dated the material to the late 15th or early 16th century, when Leonardo (1452-1519) was alive.

However, experts cautioned that the age of the wood didn’t necessarily mean the portrait was painted at that time. Alessandro Vezzosi, the director of a museum dedicated to Leonardo in his hometown of Vinci, said the painting may have been made much later as it is consistent with the depiction of the artist found in a 17th-18th century portrait kept at the Uffizi Gallery in Florence.

The newly discovered portrait, partially damaged by scratches and measuring some 60 by 45 centimeters, shows Leonardo wearing dark robes and a black, feathered hat.

“Officials Erase Historic Berlin Wall Mural,” *Der Spiegel*, 03/27/2009

One of the most famous paintings on the Berlin Wall, depicting Soviet leader Leonid Brezhnev kissing his East German counterpart Erich Honecker, has been destroyed by the authorities.

The image became one of the most famous pictures on Berlin’s East Side Gallery, the mural bedecked Wall which is now Berlin’s longest remaining stretch of the former frontier of the Cold War. Artist Dmitri Vrubel painted the picture in 1990, just months after the Wall was officially declared open. Just days after the East Side Gallery was opened on Sept. 28, 1990, the German Democratic Republic ceased to exist.

The open-air concrete canvases have since developed into a tourist attraction and the whole stretch has been protected by a preservation order since 1993. But time has taken its toll and the paintings are graffiti-covered, flaking and faded. Efforts to restore the gallery are turning out to be less of a renovation and more of a complete overhaul.

In order to preserve the Wall, all the remaining art works are to be removed using steam. The underlying concrete will then be restored and, finally, the original painters will have to come and repaint their section of the Wall.

But Vrubel, who never agreed to his artwork being destroyed, is not happy. “I’ve got no problem with a restoration, but now it will be a new picture. I can’t simply repeat my first painting.” Instead he’s considering painting a new kissing scene. Brezhnev and Honecker’s embrace will remain the motif, but he may give it a different perspective. “This wasn’t actually intended as a political image,” said Vrubel. “It’s about love.”

“Keeping Art, and Climate, Controlled,” *The New York Times*, 04/03/2009

Since 2000 catastrophic rainstorms have become so prevalent in England that the National Trust has gradually retrained its emergency teams to cope with floods, in addition to its time-honored enemy, house fires.

A week after Cragside, a Victorian house museum in England was flooded in 2008, Sarah Staniforth, director of historic properties at the National Trust in Britain, moderated a panel discussion on climate change as it pertains to museum collections at the annual conference of the International Institute for Conservation of Historic and Artistic Works. The forum was the brainchild of the institute’s president, Jerry Podany, the chief conservator of antiquities at the J. Paul Getty Museum in Los Angeles, who believes the panel was the first of its kind.

A major issue confronting museums is to figure out whether their current climate guidelines can be refined. Although they have been debated for centuries, those in use today date to 1956, with Harold J. Plenderleith’s “The Conservation of Antiquities and Works of Art,” the first comprehensive guide on the subject. Research into different approaches is already under way at conservation and study centers like the Getty’s, the Canadian Conservation Institute and the Center for Sustainable Heritage at University College, London.

The Image Permanence Institute at the Rochester Institute of Technology has integrated some of its findings into computer programs that can predict damage in many different materials. Historic house museums are on the front line in the battle against climate change. Most manage already without HVAC systems, which are hard to install without destroying the historical integrity of a building. The National Trust in particular, with more than 300 houses, is something of a green museum resource center.

“Field Museum Leak: Artifacts in 3rd-Floor Storage Room Get Wet,” *Chicago Tribune*, 04/06/2009

Field Museum officials rushed to work before dawn Friday to frantically remove nearly 200 historical artifacts from a storage room, where a leaking

roof had caused many of the objects to get wet, said Lance Grande, a senior vice president of the museum who oversees collections and research.

The items, including masks, textiles and baskets, were in a large third-floor storage room, which houses 25,000 artifacts from around the world. At about 5 a.m. Friday, an alarm alerted museum staff to a leak in the roof, apparently from a broken drainage pipe, Grande said. Museum officials discovered a wet patch—nearly 2 feet square—in the storage unit’s ceiling that dripped water onto shelves.

Only three of the wet objects were damaged, said Grande, although he could not specify which three. He said that the museum’s staff would be able to restore them within a week, and that the broken drainage pipe and leaking ceiling would be repaired Tuesday.

“Classic Craftsman: 17th-century Style Furniture,” *Los Angeles Times*, 04/10/2009

Patrice Pinaquy doesn’t just make furniture that looks like it came from the 17th century. He builds furniture as though this were the 17th century.

Using techniques that are as antique as his tools, the craftsman can spend more than 1,000 hours on a single table. He says his collection of antique woodworking tools may be one of the largest in the world. If a tool breaks, there’s a good chance he will simply make a new one, just like his predecessors did in 1700.

Pinaquy, 61, came to the U.S. in his early 20s, eventually landing an office job in Los Angeles. As he explored the city, he wondered: Where was the evidence of the kind of artistic craftsmanship that surrounded him in Europe?

Using the processes of eras past is not some Renaissance fair stunt but rather a logical approach to replicating, restoring or repairing 300-year-old furniture, he says. Pinaquy is one of a few experts called by the Huntington Library, Hearst Castle or the Getty when an antique needs restoration.

“Restorers ‘Wiped Away’ Precious Details from Rare William Shakespeare Portraits,” *The Telegraph*, 04/14/2009

When the only known portrait of William Shakespeare was unveiled

earlier this month, it was hailed by academics and fans alike as taking us a step closer to the true likeness of the great playwright. Experts believed the newly discovered painting, called the Cobbe portrait, which was painted when the writer was still alive, and another version called the Folger portrait had both been altered after Shakespeare’s death.

But it has emerged that art conservators who joined forces to restore the two portraits by removing the top layer of paint to reveal the “authentic” portraits beneath, were actually wiping away priceless insights into the changing appearance of Britain’s greatest playwright.

The Art Newspaper claims that the images which had been painted on top of both portraits had actually been painted in Shakespeare’s own lifetime and provided valuable information about how he looked as he aged.

In the Cobbe portrait, believed to have been painted for the Earl of Southampton, the sitter was given a bouffant hairstyle. It is possible the Earl may have wanted a more flattering image. The Folger portrait, in which Shakespeare’s hair was replaced by a bald forehead, may have been altered to reflect his appearance at the time of his death, six years after the original painting. The conservation work was undertaken by Mr. Cobbe, who is a professional restorer.

“Visitors can Watch Precious Painting being Repaired at DAI,” *Dayton Daily News*, 04/24/2009

Per Knutas, a Danish-trained painting conservator, will clean a Frank Stella canvas that hangs in the Dayton Art Institute’s Dicke Wing of American Art. Knutas will clean the Stella art as a gift to the DAI.

At the moment, he’s busy working on “Madonna and Child,” the colorful abstract painting by Alfred Jensen that’s one of the museum’s special treasures. What’s cool is that the museum has decided to let the members of the public see the painstaking restoration process for themselves.

Knutas will be working in Gallery 220 for the next three weeks and is happy to take questions as he cleans and restores the painting. The DAI’s chief curator hopes the interaction will prove educational for visitors.