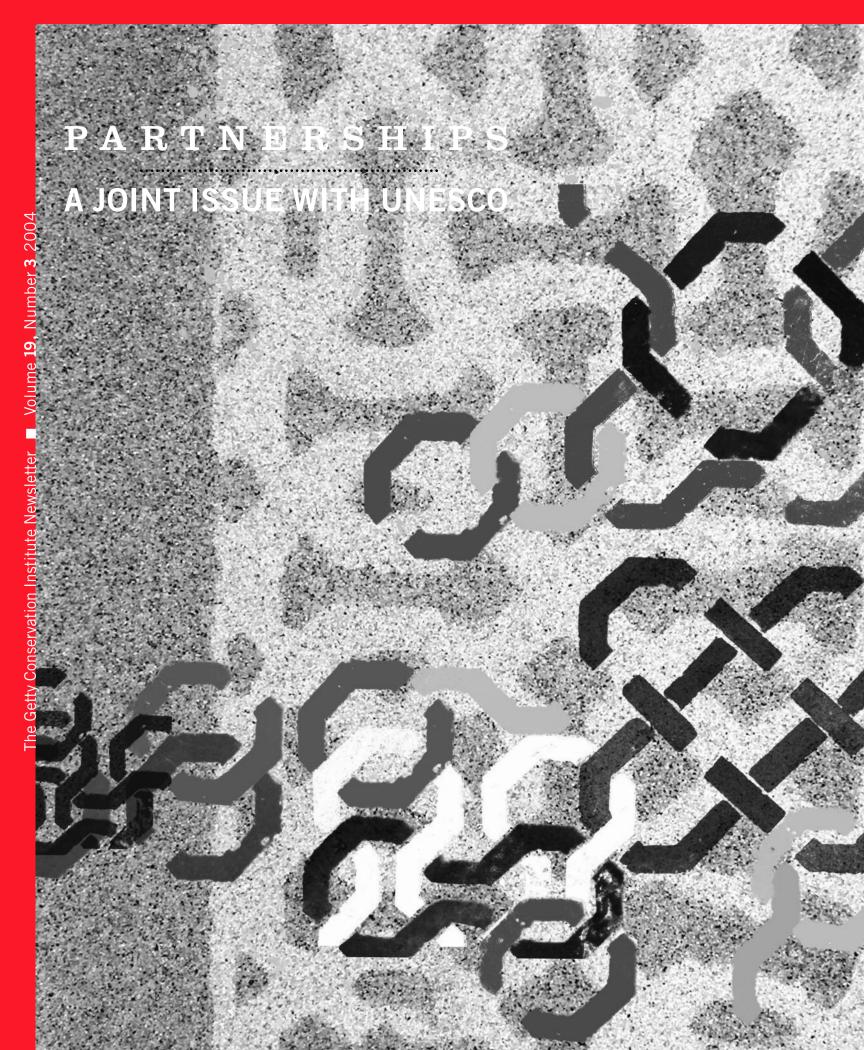
Conservation



The Getty Conservation Institute **Newsletter**

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The J. Paul Getty Trust

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The Getty Conservation Institute (GCI) works internationally to advance conservation and to enhance and encourage the preservation and understanding of the visual arts in all of their dimensions objects, collections, architecture, and sites. The Institute serves the conservation community through scientific research; education and training; field projects; and the dissemination of the results of both its work and the work of others in the field. In all its endeavors, the Institute is committed to addressing unanswered questions and to promoting the highest possible standards of conservation practice.

The GCI is a program of the J. Paul Getty Trust, an international cultural and philanthropic organization devoted to the visual arts and the humanities that includes an art museum as well as programs for education, scholarship, and conservation.

Conservation, The Getty Conservation Institute Newsletter, is distributed free of charge three times per year, to professionals in conservation and related fields and to members of the public concerned about conservation. Back issues of the newsletter, as well as additional information regarding the activities of the GCI, can be found in the Conservation section of the Getty's Web site. www.getty.edu



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Front cover: An illustration inspired by decorative elements of Nasrid art (named for the Islamic dynasty that ruled southern Spain in the 13th through 15th centuries). The link—an essential component of partnership—is the basis for a structured assembly of geometric ornamentation. Image: © Marina Taurus, Courtesy UNESCO.

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Feature	5	Heritage Partnership Exploring the Unknown By Bonnie Burnham Partnerships, which bring together resources from diverse players, can significantly multiply the means available for a task and the benefits that accrue from it. Partnerships involve a shared commitment and a leveraging of capacities beyond what would be possible if each partner were working alone. While the public and private sectors have been reticent to pool their resources, much has been accomplished through unprecedented partnerships. Given the resources that these collaborations have unlocked, one can conclude that in today's complex society, cultural heritage partnerships are hardly a hazard—they may even be a necessity.
Dialogue	11	Mobilizing Resources A Discussion about Partnerships and Conservation Can partnerships enable conservation organizations to tackle existing and future challenges in the conservation of the arts and cultural heritage? Francesco Bandarin of the World Heritage Center, Ismaïl Serageldin of the Bibliotheca Alexandrina, and Nicholas Stanley-Price of ICCROM talk with the GCI's Tim Whalen and Jeffrey Levin about the nature of partnerships in heritage conservation.
News in Conservation	18	Cooperation in Conservation Science By Giacomo Chiari From its earliest days, the GCI Science department has cultivated partnerships in many of its major research undertakings. These partnerships have succeeded not only when there is a shared common goal, but also when the partners have had expertise in similar areas of research and compatible resources—or when they have had different but complementary expertise and resources. Several current GCI Science research projects illustrate the elements of successful partnership; in each, the partnership with external organizations is at the core of the project's work.
	22	Partnership We're in This Boat Together By Neville Agnew The GCI's longest continuing partnership among its field projects has been in China, with the State Administration of Cultural Heritage and the Dunhuang Academy. The partnership, which began with one set of objectives, over time has expanded into new endeavors. A key reason for this longevity is the attention paid to the relationship itself. By emphasizing professional development, sharing, and collegial cooperation—in addition to well-defined and clearly stated objectives and methodology—the GCI and its partners have achieved a long-term and highly productive partnership.
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AN EDITORIAL NOTE

ON THIS SPECIAL ISSUE

THE PRINCIPLE OF COLLECTIVE RESPONSIBILITY for the protection and conservation of cultural heritage forms the basis of international cooperative efforts to preserve that heritage. Partnerships among cultural heritage organizations, which have gained increasing legitimacy from a number of successful projects such as the recent reconstruction of the Mostar bridge in Bosnia, include a wide variety of participants and public-private collaborations.

As heritage conservation becomes more complicated—sometimes involving development issues such as urban expansion and poverty reduction, as well as the preservation of identities, specifically for indigenous peoples—the partnership concept becomes all the more appealing, as well as complex.

It is in this context that partnerships have developed between UNESCO and its affiliated organizations and programs of the J. Paul Getty Trust. One project, Object ID, set up an international standard of information for the documentation and identification of objects in order to facilitate the rapid transfer of information in case of theft. Initiated at the Getty, it was established through the participation of the art trade, law enforcement, the insurance industry, and major heritage organizations, and is now managed by the International Council of Museums (ICOM), which was founded by UNESCO and remains affiliated with it (see icom.museum/objectid). Sharing information worldwide is a form of partnership that goes beyond selective actions and represents a change in the état-d'esprit: it builds a common ethical ground.

A second project is also emblematic of change. The creation of the top-level Internet domain (TLD), ".museum", in November 2000, resulted from the foresight and dedication of ICOM and Getty staff. UNESCO embraces and values the creation of the only sponsored TLD for cultural heritage, in view of its long commitment to place culture at the top of international agendas and its advocacy of initiatives that advance knowledge societies. At the same time, UNESCO encourages the significant participation of conservation research and operational institutes, such as the Getty Conservation Institute (GCI), in partnerships that promote sustainable conservation approaches for cultural heritage.

Partnership is an essential element of project work at the GCI. The leadership of the Getty Trust recognized early on that appropriate partnerships offered an effective way to leverage limited resources, as well as—and equally important—to expand the capacity of the conservation community. In scientific research, no single institution can possibly address the diversity of questions posed by conservation problems. Even investigations of single issues benefit from the variety of perspectives and facilities that are possible in collaborative endeavors. The GCI has valuable partnerships with a variety of public and private institutions, studying questions related to modern paint materials, exhibition lighting of old master drawings, organic materials used in wall paintings, and variations in early photographic processes. In field projects, every GCI project has involved a partnership, usually with the agency or institution that is responsible for the heritage that is the subject of the project. Building a relationship of mutual understanding and trust—and shared objectives and responsibility—requires as much attention as addressing the particular conservation problems afflicting a site. Without such a relationship, a project will not succeed.

By "partnering" our two publications—Museum International and Conservation, The GCI Newsletter—on the subject of partnership, we hope to illuminate the varieties, value, and power of partnership in the museum and conservation fields, to distinguish where partnership is valuable and where it is not, and to emphasize partnership as a critical element of institutional work and policy. Beyond advancing the specific work of preservation and conservation, partnerships, by bringing different parties together for a common objective, contribute to the overarching goal of increased human understanding.

Timothy P. Whalen

Director

The Getty Conservation Institute

Mounir Bouchenaki

Assistant Director General for Culture UNESCO

Feature

HERITAGE PARTNERSHIP

EXPLORING THE UNKNOWN

He does possession keep,

And is too wise to hazard partnership

—Dryden

By Bonnie Burnham

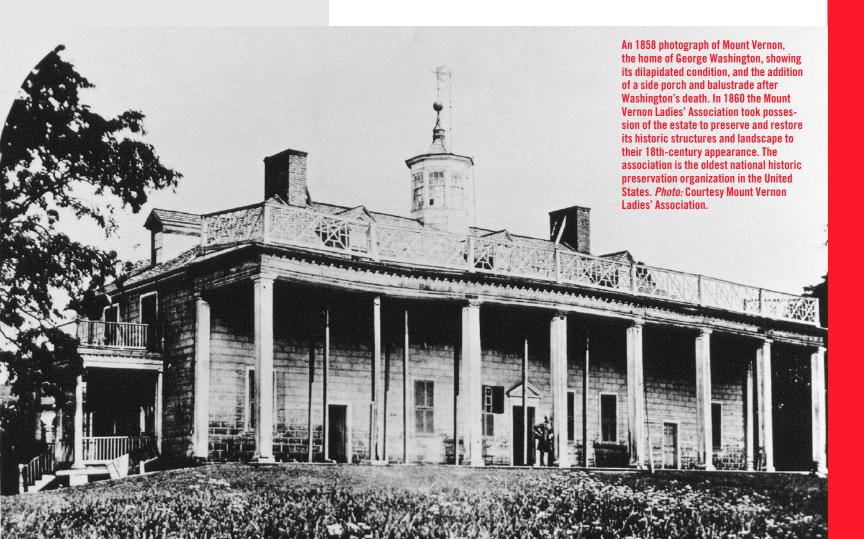
IN 1895 THREE VICTORIAN PHILANTHROPISTS—Octavia Hill, Sir Robert Hunter, and Canon Hardwicke Rawnsley—had an epoch-making discussion. They noted with alarm that uncontrolled development and industrialization were sweeping away the picturesque British countryside and leaving a ruined landscape in its place. They vowed to do something about this, and together they formed the British National Trust. Their choice of name—

National Trust—was visionary in that it foresaw a fundamental collaborative relationship between government and its citizens to protect aspects of the nation's heritage that seemed beyond reach of any specific regulatory authority.

This initiative, while pioneering, was by no means unique. In 1853 a South Carolina socialite, Louise Dalton Bird Cunningham, stood on the deck of a steamer passing by Mt. Vernon, the estate of George Washington, and was horrified to see its state of

dilapidation. When her daughter, Ann Pamela, read a letter from her mother describing Mt. Vernon's sorry condition, she vowed to save it, and she decided to appeal to the women of America for help. In 1860 the Mount Vernon Ladies' Association took possession of the site. The association was the first historic preservation organization in America.

Both of these organizations chose property stewardship as a vehicle through which the public could help government manage and protect historic resources. Other organizations, founded around the same time, would choose public advocacy to make their points. In the mid-19th century, the architect and critic William Morris began a public campaign against the destructive "restoration" of medieval buildings being practiced by a number of Victorian architects in Britain. To stop the process, in 1877 he formed the Society for the Protection of Ancient Buildings. At about the



same time, John Ruskin, Victor Hugo, and other Romanticists began to lament the loss of Europe's distinguished monuments, many of which were in ruin after a century of social turmoil. This debate—conducted in the drawing room, the academy, and the press—planted the seeds of the concept that the heritage was a universal legacy that should be spared from conflict and turmoil and managed by highly trained specialists. It foresaw the creation of public agencies to handle this task.

World Wars I and II tested both the notion that cultural heritage should be protected from pillaging armies and the capacity of governmental agencies to cope with the aftermath. The destruction that occurred during these massive global conflicts gave birth to a new era of norms for wartime conduct in relation to cultural property. The postwar heritage restitution and reconstruction effort following World War II, led by Allied forces and fueled with Marshall Plan funding, can be seen as the first collective international partnership for heritage conservation.

Throughout the 1950s and 1960s, UNESCO began to put in place various conventions and charters to regulate the heritage conservation field. At the same time, many influential nonprofit organizations began to spring up with the goal of engaging civil society in the defense of cultural and natural heritage. The World Wildlife Fund was created in 1961 by Sir Julian Huxley, with the blessing of UNESCO and the World Conservation Union, to stop the devastation of nature, especially African wildlife populations. The year 1965 saw the creation of the International Council for Monuments and Sites (ICOMOS), under the auspices of UNESCO, as an expert resource within the field, and the International Fund for Monuments (now the World Monuments Fund, or WMF) as a private-sector global conservation nongovernmental organization (NGO). In the United States in 1966, the National Trust for Historic Preservation got its legs with the passage of the National Historic Preservation Act. Funded by government and private contributions, it became one of the field's leading "quangos," or quasigovernmental organizations, operating on behalf of the public.

A catastrophe in the same year brought international governments and private-sector organizations together for the benefit of heritage. The flood that struck Venice on the night of November 4, 1966, elicited a worldwide response. Spontaneously, national committees were created around the world, under the banner of UNESCO's coordination, to help Venice restore the dozens of public buildings damaged by the flood. The Italian government passed a special law exempting this work from the value added tax—a unique and critical acknowledgment of the need for resources from all quarters to address this emergency. The Venice appeal set the stage for the ratification of the World Heritage Convention of 1972. This was the first document that not only

Views of the 12th-century sandstone walls and palaces of Jaisalmer Fort in Rajasthan, India. Known as the Golden City, this medieval fort complex is collapsing—the result of recent efforts to bring water into the city without adequate drainage. Today, an international cooperative effort, which includes the British nonprofit Jaisalmer in Jeopardy, the World Monuments Fund, and state and national agencies in India, is working to protect Jaisalmer from future erosion. *Photos:* © World Monuments Fund.

identified the task of preserving heritage as a global concern but also called for international assistance, including participation by private bodies and individuals—a tacit invitation to partnership.

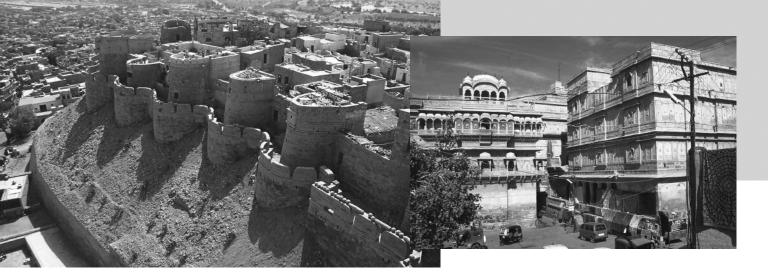
Yet the public and private sectors, even if they share a common ethic, have continued largely to follow separate paths, reticent to pool their resources for a common good. Is this because of a mutual fear of losing control, because of a lack of incentive, or because of the perception that benefits gained through partnership may not justify a loss of independence? Or does a lack of formal cross-sectoral cooperation simply result from a lack of experience in this area? To some degree, probably all of these reasons apply.

Partnership Fundamentals

Partnerships, which bring together material and human resources from diverse players—each expecting to achieve a different but complementary goal—can exponentially multiply the means available for a task and the benefits that accrue to the community. To achieve this level of success, however, careful preparation is required.

By definition, partnerships involve sharing risks, benefits, and the responsibility for collaborative actions. In principle, the value of the resources each partner brings to the relationship should be equal. But since partners may have different kinds of assets, how can they be evaluated? The success of any partnership is dependent on a clear understanding at the outset of the responsibilities of each partner, the benefits expected from the arrangement, and a shared vision of the results. Who speaks for the collaboration? How is money managed? Who approves plans—and at what stage? Who monitors compliance with standards and expectations? Unless each of these questions can be answered in advance, opportunities for misunderstanding, disappointment, and failure are sizable. If they are addressed in the partnership agreement, the chances of a successful collaboration improve.

Partnership does not simply mean securing financing from an outside party. Nor is a partnership the same as a contractual agreement, which obliges the contracting parties to deliver specific



services. Partnership involves a shared commitment and a leveraging of capacities beyond what would be possible if each partner were working unilaterally. The larger the vision, the greater the results. For example, heritage conservation work often includes collateral investments in public infrastructure to guarantee the sustainability of the investment in building fabric. Commitments to pave streets and to provide conduits, lighting, and other public amenities may be critical to the future of the building or site that is being preserved. The inclusion of agencies that can provide contextual improvements in a multiparty partnership brings huge leverage to the stewards of heritage sites. The return on an investment in heritage conservation is often argued in terms of local economic stimulus, job creation, and tourism development. Rarely, however, are these expectations quantified as part of a partnership scheme. The vexing lack of documentation measuring performance of heritage sites as economic generators is probably the main reason why few partnerships develop around these shared objectives.

Whatever the specifics of a partnership, its success depends upon a real sharing between the partners. A few examples illustrate the importance of this essential element.

Sharing Risks and Responsibilities

Jaisalmer, a living walled city in the remote reaches of the Thar Desert of western Rajasthan in India, confronts a challenging future. The entire city—whose building facades are intricately carved from soft golden sandstone—is collapsing because of the introduction of water where, in the past, none was available. Homeowners in the city are unwittingly contributing to the disaster by adding plumbing to their homes in service of a modern standard of living and the city's backpacking tourism business. Water introduced without drainage or sewage conduits is eating away the foundations of the city's historic buildings, leading to collapse. The bastions are pushing outward as the seepage of water produces settlement and lateral movement. If one bastion goes, the toll will be monumental.

Jaisalmer in Jeopardy (JiJ), a foreign NGO founded by the travel writer Sue Carpenter, sounded the alarm. The nomination of Jaisalmer to the World Monuments Watch list in 1996 marked the beginning of a push to overcome the city's anticipated gloomy destiny. Projects began with the restoration of the Queen's Palace as an interpretation center; the emergency stabilization of an active bulge in the wall of the King's Palace (the most important building in the city's center); and a streetscape program, organized by JiJ, to improve urban fabric with historically sympathetic materials and to connect household plumbing to new municipal sewerage facilities. But the challenge remained, with national government agencies and local property owners bickering over who had responsibility in the worst-case scenario.

Challenge funding from WMF was the first step toward a more systemic solution. The funding offered, which required a two-toone match from government, proved to be more than any governmental partner could match unilaterally, forcing a cooperative response. To capture this foreign investment in Jaisalmer's future, the Ministry of Tourism of Rajasthan and the Archaeological Survey of India agreed to share the obligation of local and national financing, but many details remained to be worked out. Eventually a partnership was created for a preliminary, diagnostic, and planning phase of the project to reach consensus on how to protect Jaisalmer's bastions from future erosion, to prepare a group of priority subprojects, and to galvanize civic cooperation and international interest. The National Culture Fund will hold the contributions of all partners, ensuring transparency. The Archaeological Survey is positioned as the orchestrator of the plan, WMF as project manager, and the municipality as convenor. By dividing the burden, the partnership has energized each of the key players to deliver its part and to reach out to a wider constituency of players. Although they are far from solved, the problems are being processed through a framework of cooperative management and mitigated blame.

Sharing Costs, Multiplying Capacities

Olana, the Persian-style house built by the prominent Hudson River School artist Frederic Edwin Church, is more than an artist's residence. The property anchors a viewshed that is among the most picturesque in America, and its central position overlooking the river and mountains makes it the crown jewel of one of the country's most significant heritage areas.

Olana belongs to the State of New York and is operated as a State Historic Site. The property is maintained as it was in the artist's lifetime, but the state has no resources specifically earmarked to support its obligation to the property; both preservation and routine maintenance work are often deferred. State budgets have not been sufficient, either to maintain the estate in optimal condition or to capture its potential as the gateway for cultural tourism in the region.

The Olana Partnership is the nonprofit support arm of the Olana State Historic Site. While the Partnership acknowledges the property's ownership by the State of New York, it brings to the site a dynamic constituency of committed local citizens whose interest in and enthusiasm for the property could not be orchestrated simply through routine cultural resource management. In recent years, The Olana Partnership has raised funds through competitive state and national funding programs and leveraged these with contributions from private benefactors. It has commissioned and is presently orchestrating a preservation plan for the site, and it is supporting restoration work. The Partnership has also conducted planning studies for the construction of a new museum and visitor center to showcase Church, Olana, the Hudson River School of art and other aspects of 19th-century culture. The Olana Partnership supports an active and popular program of events and educational programs at the site, as well as the preservation of the estate.

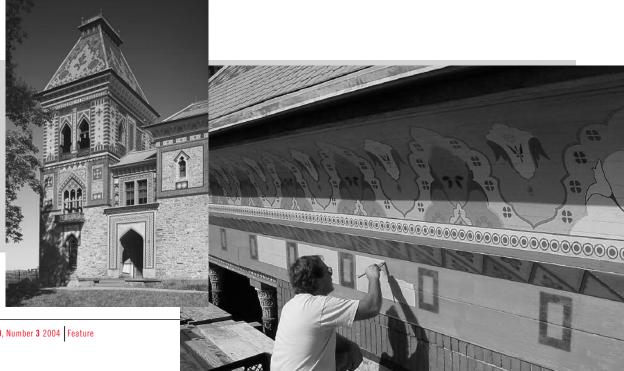
Backed by strong local leadership, The Olana Partnership has also become one of the region's foremost advocates for environmental conservation. A recent controversial proposal by the St. Lawrence Cement Company to build a huge plant only three miles from Olana has prompted strong public debate. The Partnership has taken a stand against the construction and entered legal proceedings together with other local environmental advocacy groups. Independent of political obligations, The Olana Partnership can advocate to preserve the property's pristine values. The state agency responsible for the property—the Office of Parks, Recreation and Historic Preservation—has a specific, limited consulting role with the permitting state and federal agencies and therefore cannot act as an outside advocate for protection of the site.

Sharing Complementary Expertise

When the U.S. government initiated planning for the invasion of Iraq, nonprofit organizations in the United States began making plans to offer assistance for the postinvasion recovery of cultural sites that might be damaged in the conflict. Reaching out to the Coalition Provisional Authority and UNESCO for information as it became available from the field, the WMF and the Getty Conservation Institute soon realized that the work of conservation organizations offering assistance to the Iraqi government should be coordinated.

In March 2004, the GCI and the WMF signed a partnership agreement with the Iraq State Board of Antiquities and Heritage, and in September 2004 they signed an agreement with UNESCO, which will provide the funds for training of and technical assistance for Iraqi heritage specialists. The short-term objective is to provide a system of information management that will allow Iraq to prioritize emergencies as they continue to arise and to direct assistance to where it is most urgently needed. As soon as political conditions

Right: Olana, the Persian-style home of painter Frederic Edwin Church in New York's Hudson River Valley. Far right: A craftsman restoring a stenciled cornice, part of the home's exterior restoration. The preservation and enhancement of Olana and its viewshed is a public-private partnership between the State of New York—which owns this State Historic Site—and The Olana Partnership, a private, nonprofit organization. Photos: Andy Wainwright and Rich Gronck, courtesy The Olana Partnership.



Two examples of archaeological heritage sites under threat in Iraq: Nimrud (right) and Nineveh (far right), which was looted in the war. The GCI and the World Monuments Fund (WMF) in partnership with the Iraq State Board of Antiquities and Heritage have established the GCI-WMF Iraq Heritage Conservation Initiative to address the catastrophic damage sustained by Iraq's cultural heritage during and in the aftermath of the 2003 war. The protective shelter at Nineveh was reinstalled through an emergency grant made by the initiative. Photos: John M. Russell, courtesy World Monuments Fund.



permit, the GCI-WMF partnership will also provide resources to support hands-on conservation work at sites that have sustained damage and support planning for conservation of major monuments that are currently unprotected.

The GCI-WMF initiative is the first time the two American heritage conservation organizations, which share a global mandate and ethic, have worked together. The partnership brings together two institutions with complementary capacities—the WMF's fieldwork, fund-raising, and advocacy, and the GCI's research work, training expertise, and experience with international field projects. The national electronic database being developed for Iraq is based on a model already deployed in Jordan, which gathers information on the location and current status of sites and is able to analyze threats before catastrophes occur. Training in database development is being conducted with cooperation from the Jordanian Department of Antiquities and the American Center for Oriental Research in Amman, where the Jordanian database was initially developed. The extension of this conceptual framework from Jordan into another environment in the Middle East anticipates future expanded opportunities for partnership, as two countries work from the same information platform.

The Getty-WMF partnership envisions a long-term relationship with Iraqi professionals, who urgently need both to reestablish formal training in conservation after the country's long isolation and to devote substantial resources to conservation of monuments and sites. To avoid the confusion and duplication of efforts that would result from competing demands for Iraqi cooperation, the partnership seeks to place international assistance within a coordinated framework.

A Shared Vision of Community

The use of preservation tax incentives, offered by a governmental agency to encourage private investment, provides a final example of a framework through which parties with different but complementary objectives may work together in partnership. Incentives may be offered when other forms of landmark protection, such as designation, are not available. An instance of such a partnership is the saving of the Tree Studios building in downtown Chicago, a artists' residential and studio facility built by the philanthropist Judge Lambert Tree in 1894.

In 2000, the Tree Studios and the adjacent Medinah Temple (one of the nation's finest examples of Middle Eastern—style Shriner architecture) were offered for sale by the Shriners, a fraternal group that had owned the buildings for decades. The high property value of the site—a square block in downtown Chicago—seemed to make it inevitable that the future use of the site would include high-rise construction, destroying the integrity of the turn-of-the-century streetscape. The block is one of the few that has been spared from development through its past nonprofit use. The mayor and the Chicago Planning Commission agreed that the urban qualities that this small area lends to the city should be preserved, and they offered tax incentive funding to finance the commercial development of the buildings in their present form.

A partnership was formed between the City of Chicago and a local developer specializing in the reuse of historic buildings. The partnership permitted the developer to buy the buildings with public funds, paying the market price. In return, he had to demonstrate that the tax revenue collected from commercial use of the buildings would pay back the city's investment over a 20-year period. The State Historic Preservation Office joined the

partnership, proposing the Tree Studios for National Register listing and monitoring the reuse plans.

The Tree Studios will retain their original use as artists' residences, and the building's facade and courtyard will be saved. Shops around the outside of the building will be renovated and offered for rental to high-rent tenants. The Medinah Temple, formerly a theater, will sacrifice its traditional use and become a department store, generating enough tax revenue to preserve the building's exterior, which will be restored to its original configuration. Significant architectural features of the interior will also be saved.

A partnership of this nature, involving public-sector financing of private development, depends on a shared commitment between the two parties to the long-term historic urban quality of the city through preservation-minded investment. In the absence of a strong civic voice to advocate for heritage conservation, the municipal government has initiated its own form of public-private partnership.

Medinah

Identifying Opportunities and Addressing **Priorities**

Many nonprofit conservation groups use the mechanism of a watch list to signal the need for broader public exposure to the issues confronting a heritage site. The National Trust of Australia and the National Trust for Historic Preservation in the United States are just two examples of the many heritage bodies that publish endangered lists to galvanize public interest and force open dialogue about the future of a site. Governments often see these listings as a form of censure designed to embarrass the "powers that be" into taking action. This is often not the goal of advocacy groups, which depend on good relations with governmental players. Rather, the listings are an attempt to bring partners to the table together to benefit the common good.

The World Monuments Watch list of 100 Most Endangered Sites is published biennially; it lists sites globally and advocates the remedy for an urgent situation that is identified by the site's nominator. In the 10 years since the program was initiated, some 400 sites have been included on the list. As of this writing, the urgent conditions for which each site was listed have been addressed at 65 percent of the sites, with an additional 10 percent making steady progress.

Much of this progress was accomplished through unprecedented partnerships, which established common ground between parties that may have previously viewed each other as antagonists. Given the significant resources that these collaborations have unlocked, one is led to conclude that in today's complex society, partnership is hardly a hazard. It may even be a necessity for heritage property owners who have the wisdom to seek to preserve the historic values of their possessions.

Bonnie Burnham is president of the World Monuments Fund.

Tree Studios (left), the oldest-known artist studios in the United States, and the adjacent Medinah Temple (far left), one of the finest U.S. examples of Middle Eastern-style Shriner temples-both located in downtown Chicago. A partnership between the City of Chicago and a local developer involving public-sector financing of private development enabled the preservation and adaptive reuse of these two landmarks. Photos: Tree Studios, Barton Feist, courtesy World Monuments Fund; Medinah Temple © World Monuments Fund.

Can partnerships enable conservation organizations to tackle existing challenges in the conservation of the arts and cultural heritage more effectively? What kinds of partnerships have worked in the past, and what kinds are needed for the future? Conservation asked the directors of three major cultural institutions to provide their perspectives on the nature of partnerships in heritage conservation.

Francesco Bandarin has been director of the UNESCO World Heritage Center (whc.unesco.org/pg.cfm) and secretary of the World Heritage Committee since 2000. In that capacity, he launched the World Heritage Partnership initiative, which is working to increase the participation of the private sector and the public in cultural heritage preservation. Formerly a professor of city planning at the School of Planning of Venice, he has led numerous international missions to endangered sites.

Ismail Serageldin was appointed in 2001 as the first director of the Bibliotheca Alexandrina (www.bibalex.gov.eg/English/index. aspx). He worked for nearly 30 years at the World Bank, where he most recently served as vice president for special programs dealing with poverty, environment, and socioeconomic development. Prior to joining the World Bank, he was a consultant in city and regional planning, and he taught at Cairo University and Harvard University.

Nicholas Stanley-Price has been the directorgeneral of ICCROM (www.iccrom.org/) since 2000. Prior to his appointment, he was on the faculty of the University College London's Institute of Archaeology. Previously he served on the staff of ICCROM and as deputy director of training at the GCI. He also founded the quarterly journal Conservation and Management of Archaeological Sites.

They spoke with Tim Whalen, director of the GCI, and Jeffrey Levin, editor of Conservation, The GCI Newsletter.

MOBILIZING RESOURCES

A DISCUSSION ABOUT PARTNERS HIPS AND CONSERVATION







Tim Whalen: As you all know, the field of conservation is a relatively small one, and resources are indeed limited. There's no one place that has all the expertise and the capacity to care for the heritage. The question is—how can we utilize partnerships and the limited resources we have more effectively in the years to come?

Ismail Serageldin: It seems to me that we have limited our conversations to people who are already concerned about heritage and cultural issues. The reality is that most of the elements that we refer to as our cultural heritage have great value, either for tourism or because they happen to be close to areas desired by developers. It is conceivable that one could work out new types of partnerships with these people, who happen to have considerable sums of money. For example, an archaeological site that is in the midst of a rapidly growing city with lots of sprawl could gradually be taken over by squatter settlements. One way to deal with that is to turn the site over to a developer with an understanding that they would fund the archaeological work and then delineate areas that would be kept from future development in exchange for getting the land. If you're building a \$2- to \$3-billion project, an extra \$100 million for archaeological research in exchange for getting title to the land becomes feasible. On the other hand, trying to raise \$100 million for archaeological digs or research by itself is extremely difficult. Finding new ways in which we can protect the heritage by mobilizing additional resources from unlikely partners seems to me to be the order of the day.



Sometimes we underestimate

the degree of interest

in the content

of what we're doing

by people

we are trying to persuade

to fund our work.



-Nicholas Stanley-Price



Nicholas Stanley-Price: The possible role of developers in funding work on archaeological sites is something with which I whole-heartedly agree. Of course, there are some countries where by law the developer has to meet the cost of archaeological investigation before the project goes ahead. Sometimes this can be a drawback—because of the legal situation, the developer is less inclined to reveal that something of importance has been found. But on the whole, it's a model that works well in those countries where the opportunity has been seized and—either through agreement among the interested parties or through the law—substantial funding is made available.

Francesco Bandarin: The point, of course, is a critical one. Very often we don't have the resources to do the job. We have tried to link with those who have the resources and perhaps are interested for different reasons—political reasons or tourist potential or other things. For example, with the World Bank—which is a powerful actor in this field and where there is a sensitivity for the conservation of cultural and natural heritage—I have worked to join hands in these kinds of activities. Next year we're conducting a joint UNESCO—World Bank workshop to focus on the need to preserve historic Chinese towns. These towns are of great cultural value and already very important for tourism, but if they are not protected effectively, there won't be much to see in a short period of time. There is great potential, but so far the success stories are not many, albeit they already constitute a "corpus" of best practices. On another front, the tourism industry is a very important actor, but except for some small aid to restoration, it has not yet become a partner in larger operations.

Serageldin: In Egypt, a lot of restoration work on monuments is supported by a special legislated fund, which is fed by tourist tickets and is outside of the government's budget. You also have cases in Hafseya in Tunis and in Fez in Morocco where there has been work that has led to funding by the World Bank. Most recently, I think, there was an agreement as well by the World Bank to fund a project in Ethiopia. These agreements are not that frequent yet, but they indicate a way forward. These are the partners that have a lot of money.

Whalen: Often it seems that there's an absence of international conservation organizations at the table when deals with developers are made. Is that because of rigidity within the conservation community or some other kinds of structural challenges that we in the conservation community need to address?

Stanley-Price: Sometimes we underestimate the degree of interest in the content of what we're doing by people we are trying to persuade to fund our work. I'm generalizing, but there are programs that we run at ICCROM where we have a number of partners, and some of them are seen as essentially financial partners in that they help to fund the program. But they also have a strong interest in the content of the program. At the meetings that we organize for the partners, they have very interesting insights into the actual running of the program, the results, and the outcomes. We should never underestimate the interest of those supporters in the technical content of what we're doing. They must be fully engaged in the decisions about what makes a good program. In our experience, the more we involve our financial partners in the technical content, the more they're committed to it and fascinated by it and want to support it. I would also suggest that when we talk about partners, we do so in a very broad way, including expertise partners and

partners who provide access to a site—and who are essential to the project—but who may bring no money whatsoever.

Serageldin: Financiers in projects like to talk mostly with people who are going to put in an equal or significant share of the money. There is a resistance to opening up to a wide number of constituents—local stakeholders, international stakeholders, technical experts, intergovernmental agencies, the national government, the local government, and, of course, the local private sector. It makes a lot of sense if there can be institutional arrangements that facilitate discourse among them while allowing the financiers to also have a smaller group where they work out financial details. Secondly, the financiers are increasingly aware that the involvement of these stakeholders upfront on a project will facilitate implementation. There is nothing that costs as much money as delays in implementation of a project. Thus it makes not only political sense but also financial sense to try to involve these people. But mechanisms for proper involvement need to be more worked out. We haven't had too many examples of those in matters pertaining to cultural heritage. There is one—downtown Beirut after the war, where homeowners and others were given shares in a publicly held corporation that took charge of developing parts of the downtown. This mechanism, where you have cultural heritage embedded in the middle of historic cities or growing cities, may be a way of doing that.

Bandarin: The perception of the private sector needs to be changed. For the moment, the developers and funders of large-scale projects believe the conservation community to be inflexible, capable only of imposing an archaic vision of heritage conservation. They associate conservationists with activists, unwilling to negotiate. We also have to face a degree of skepticism because we appear to be very dispersed. Much would be gained from acting in a more coordinated fashion.

Whalen: In that context, how can the conservation community become better at engaging and securing partners in those kinds of activities?

Serageldin: The conservation community must be seen by investors as people who are coming in with ideas and proposals, not just objections. Take the city of Alexandria, where I now live. There are many buildings that date from the 19th and 20th centuries—villas that were part of the cosmopolitan heritage of Alexandria. When the new investment boom started a few years ago, investors said, "Okay, I own this piece of land, my grandfather had this house. I'm going to tear it down, build an apartment block, and create jobs." The government was sensitive to their appeal for waivers and exceptions. In response, many of the conservationists went to court to block them. Is simply saying no to new investment in a city that needs it a sufficient response—or do we have an alternative? We

need to be saying, "Look, let's develop an area together, and we will show you how some sites can be protected. We can have swaps of land that involve buildings that are not as important to us. We can arrange triangulation deals. We can be flexible with you guys. If you enhance this built heritage, it creates a nicer environment for the whole city, and it doesn't have to be an expensive investment." These are the kinds of things that we have to start thinking more about right now.

Whalen: Francesco, in the work of the World Heritage Center, can you point to an instance where a group of partners have come together and it's made a difference?

Bandarin: A big example of this activity is what we did to protect the ecosystem in the Congo. That involved the conservation of an important natural heritage and of the habitats of endangered species, and it can be considered an interesting model. We had very generous support from the United Nations Foundation, and that allowed us to create partnerships with other international nongovernmental organizations [NGOS]. We federated a large number of institutions, each one playing a different role—some like us, with more of a political interface, and others more involved with field action. This operation was extremely successful. It's still under way, but we're managing to increase the protection of these places in a situation that is still difficult, due to the conflict. In my experience, very few examples like these exist in the cultural heritage world. Perhaps we should reflect on why the world of cultural heritage protection is fragmented into isolated groups that can seldom create the much-needed critical mass.

Serageldin: It is a problem. Whenever the area involves natural heritage, it is easier to get a response and find new ways to solutions. That is not the case for cultural heritage. As a consequence, the projects are much smaller and less effective.

Stanley-Price: To state the obvious, the degree of cultural difference between potential partners and the degree to which it is allowed to emerge have a strong impact on success. One would expect that within science, scientists of whatever background are focused on the research. They're pretty well in agreement about what they're trying to achieve. In field projects, again, the partners are probably pretty well agreed on what they're trying to achieve. But if a partner is away from his or her home and in a different cultural context, there may be some difficulty in adapting to that context. Once you get involved in international initiatives, the potential for cultural differences to emerge is much greater. Although some of the same factors might be there in natural heritage preservation, in cultural heritage we especially have to face these challenges of potential cultural differences.



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—Ismaïl Serageldin



Serageldin: That's true, but it's the clarity of the operation and the objectives that are important. To the extent that cultural heritage initiatives typically involve a wide range of issues that go beyond the access of people to a particular site, they seem to be much more complicated. There are many more actors involved, and as a result, it becomes that much more difficult to put these partnerships together. Natural heritage sites are also protected in many ways by the galvanization of the international environmental movement, which is very powerful. If you recall, we did a lot of work on environmental economics over many years that ultimately led to the creation of the Global Environment Facility [GEF], which helps developing countries fund projects and programs to protect the environment. We have not yet been able to create a cultural facility similar to the GEF because we don't have the support of a global movement behind it.

Whalen: Was there a specific point in time or an event in cultural heritage conservation when partnerships became important and more necessary in a way they hadn't in the past?

Bandarin: I think the beginning was the project to save the monuments in Nubia [moving the Egyptian temples at Abu Simbel]. That was a major international partnership involving UNESCO, several national governments, and many private enterprises.

Serageldin: Nubia is a good example. There was a very clear objective that everyone agreed on at the time.

Bandarin: More recently, Bamiyan, made famous by the destruction of the Buddha statues, has received a lot of international support it was inscribed in the World Heritage List. Afghanistan and Iraq

are also recent cases where we see partnerships between governments and civil society. Whenever you reach the hearts of people, then the reaction is positive. The question is why we don't get the same level of attention as the environmental protection movement.

Whalen: Are you suggesting, then, that we are best at assembling partnerships when crises present themselves?

Serageldin: Well, a crisis does create a sense of urgency, but by and large I think I agree with Francesco—the big challenge is creating a broad agreement. I go back to the GEF as an example. It was an agreement on a concept and then four areas where these funds could be applied that enabled the partnerships around the world to come together. It was not specifically a crisis.

Stanley-Price: When faced with a particular crisis—whether it's Nubia or Angkor Wat or Bamiyan—there are common objectives, and people discover that the best way to achieve these is to work in partnerships. When Tim asked when partnerships became important, I thought back to 1946 and the establishment of UNESCO, a new intergovernmental organization, and in that same year and in the very same city, ICOM, an international NGO. Right from the start, they recognized that they had a lot in common and could benefit from working together. ICOM, of course, played a large role in the international campaign in Nubia. I would suggest that another reason why partnerships develop is that different organizations find that they have a lot in common, and rather than working in parallel, they collaborate.

Jeffrey Levin: What steps can conservation organizations take to encourage substantive partnerships, even when there isn't a crisis to stimulate them? What sort of actions should conservation organizations be considering and taking?

Serageldin: They need to take a page from the environmental movement and make a strong case for the importance of world heritage, saying, "Look, we need to conserve this, we're going to need investments, and we're going to need ways of doing it. Let us agree, as we did with the GEF, that this is the case; second, that we need grant funds to make it work; and third, that we'll limit the scope of application to certain mandated areas and not others." That kind of groundwork doesn't happen overnight. And it doesn't happen during a crisis. It requires a lot of effort and investment in institution building. They should start small, show that they have used the funds wisely and effectively, and then get those funds replenished and increased. A number of mechanisms used in the environmental sphere have fairly obvious applications in the cultural heritage sphere.

Stanley-Price: I would agree that we can develop very strong partnerships—not simply when faced with a crisis but as a result of proactively planning long-term programs in the same way that GEF has been doing. Regarding developing long-term proactive programs, I might mention something we worked on with the World Heritage Center—the Africa 2009 program. This is a 10-year-long program with clear objectives, many partners, and a steering committee that is majority African and that makes the decisions.

Bandarin: Partnership has been an issue for me since I started this job. I thought that being dependent on governmental funds was insufficient, so I tried to move into other areas. This has been relatively successful, but mostly with foundations—especially U.S. foundations, because they are large and have a long grant-giving philanthropic tradition and experience working with public institutions. Even being based in Europe, it's easier for me to have a dialogue with a U.S. foundation than with private institutions on this side of the ocean. To work with private enterprise requires 10 times more resources and energy than working with a foundation, because they have a different profile and there's always some link with the commercial aspect that requires a careful negotiation. The other type of partner that we don't deal with much—but should is the public at large. The concept of extending membership to the general public to generate resources—and not only in financial terms—is important. But organizing a public membership scheme is a big job. There are few examples in the world of this kind of large public participation in conservation efforts, such as the British National Trust or the World Wildlife Fund.

Stanley-Price: So the answer is that, in the end, working with governments is in fact the easiest?

Bandarin: Absolutely. Not to mention the amount of resources they generate. I may be a little biased because I work in an intergovernmental institution, but in conservation, the public sector has been

more inclined to support our activities than the private sector. So emphasis must be placed on efforts aimed at engaging the private sector.

Serageldin: I do believe that the private sector has a role to play. They have become the primary investors almost everywhere. Given the enormous impact of the private sector with open and increasing trade and cross-border investments, it is essential that we find mechanisms that involve them. It's harder because we haven't worked with them as long. We need to find ingenious ways of making the private and public sectors work together. Otherwise we will be locked into a situation that is out of step with forces of change around the world.

Whalen: We started out the conversation by noting that the resources for conservation are small. Do you think that because there are so few resources and so few of us working in this field, we're unable to pursue things in the same way that environmental organizations do?

Stanley-Price: We're few on the ground, but at the same time, there's an extraordinary amount of duplication in the field at the international level and in countries that are going through rapid development and where cultural heritage is at risk. We actually announced in 2001 that one of our strategic directions was to maximize impact by reducing the amount of duplication. The resources put into conservation could be better coordinated and go a little further. I'll tell you an anecdote of a session just before a meeting that took place at ICCROM about three years ago. An international group of people was sitting around the table, and two people discovered just by chatting that they had been working in the same country, in the same city, on the same building doing restoration without being aware of each other. Anyway, we are seizing the bull by the horns, and in two regions of the world, we are developing a database of projects that we know involve an international component. So there will be a consultable database about what is already going on in a country so that people know at least what similar initiatives already exist before proposing their own.

Bandarin: I am sure that one of the reasons the cultural side is weaker than the natural heritage sphere is because we coordinate less.

Levin: Ismaïl, you said that the clarity of objectives is critical.

Is one of the challenges finding objectives that can be shared by conservation organizations with the private sector, so that going into these partnerships, there are not only clear objectives but also ones that both parties can fully embrace?



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—Francesco Bandarin



Serageldin: That is correct. And the way to do that is to recognize that one of the biggest threats we have to whatever we are trying to conserve—either natural or cultural heritage—is development, which is driven largely by the private sector. What we want to do is to rechannel that development in a way that protects the heritage and that convinces the private sector behind development that they have an interest in having the heritage preserved. If you have a beautiful historic site not far from your development, it will enhance the quality of your development. If you maintain well a historic or a natural heritage site, it enhances whatever development you do. If you rip it apart, you may get short-term benefit, but it will be at the expense of long-term gains. This is the kind of dialogue that we need between the public and the private sectors in order to engage them in a more constructive form of investment. The key player in that will be the government, because regulatory mechanisms create the structure within which private decision making is done.

Bandarin: I agree that the governments have to play the central role in establishing the framework within which we should all work together.

Whalen: How do those of us in the cultural heritage conservation sector advance that agenda?

Serageldin: I think the starting point would be for us to convince the governments—which are our natural partners in many of these things—that they must take that step as well, and that we need to bring the private sector to the table.

Stanley-Price: We're talking a lot about advocacy, putting across the idea that heritage is a value—and that can start early in life in education. For instance, when people study archaeology or conservation but don't pursue them as their careers, that's thought to be a loss. But that depends on where those people end up. People who studied conservation years ago and then went on to other work are potentially very valuable allies. We need far more of them. The other thing I'd suggest in order to convince more private sector developers of the value of giving attention to heritage—and perhaps some of this exists already—are documented case studies where heritage protection has indeed added value in terms of a development. There is a need to gather these studies together and to disseminate them much more widely.

Bandarin: We have few private sector partners. However, a significant commitment was made last year by Shell. Shortly after the International Council on Mining and Metals acknowledged the importance of natural World Heritage sites and announced that they considered these "no-go" areas, Shell was the first petroleum company to also recognize the value of these protected zones and the need to keep drilling clear from natural World Heritage properties. While this is something that could not be accepted under the World Heritage Convention—such activity in World Heritage sites can threaten site conservation—it is very positive for the industry itself to have recognized the value of these areas. Other partners from the private sector are perhaps more traditional. But here again, it's difficult to raise cash contributions for large-scale, longterm conservation projects. Most of our partners prefer to contribute in-kind resources. Hewlett-Packard, for instance, has contributed to the establishment and maintenance of our information management system by donating equipment.

Whalen: If you look at a successful partnership that you've had, what elements stand out?

Bandarin: A successful partnership is one where the partners don't become competitive but are complementary. Very often we partner with institutions that have a completely different institutional and operational nature. Because of that difference, we can easily frame the respective roles into a complementary scheme. For instance, we usually take a larger role in dealing with the politics of the situation, while the partner contributes more technical expertise. We provide the visibility factor of the World Heritage Convention at the international scale, while our partners can develop links with the local people.

Whalen: Do you have a specific example of that?

Bandarin: The project in the Congo is a good example. Another case, which has become rather complex, is Angkor. Today this is possibly the largest cultural project in the world, and the oldest. The project works through a coordination committee that UNESCO has established with the other partners, which meets every year and directs the "traffic." This function of directing the operations has been quite successful. We used this model also for Afghanistan and Iraq. Obviously every case is a history in itself. But it's quite essential to find the proper match.

Stanley-Price: I was going to make the comment that finding the proper match with partner organizations is like talking about human relationships. What does one look for in partners? You have respect for your partner, you're going to work transparently, there's mutual benefit in the partnership, you both feel accountable—it has to be on that sort of basis. If one looks for those features in a partnership, it has a good chance of success.

Whalen: Can you think of any specific examples, Nicholas?

Stanley-Price: I'm talking generally from the experience of developing partnerships. But I would hope our own partnership with the GCI is based on that. It sounds idealistic, but those are the sorts of virtues of a partnership that make it work.

Whalen: Maybe the notion is an idealistic one, but it's one that we've all found makes us better.

Stanley-Price: It sounds idealistic because so often we think of partnerships in terms of persuading someone to part with money. That's why I suggested earlier that when we talk about partners, we do so in a broad way, including expertise partners and partners who provide access to a site.

Bandarin: Tim, what is your view? You've asked us many questions, but maybe you have something to say, as you also work with partnerships.

Whalen: Well, as an organization in the United States, we're somewhat anomalous. As a private organization, we lack the government mandate that organizations such as yours have. At the same time, the fact that we are not necessarily thought of as a political organization opens doors for us. Our most successful partnerships are ones where we carefully sort out upfront what our common goals are. One of the best examples of that is the work we've done for many years in China. We were talking about how cultural differences sometimes get in the way of success. Indeed, there are many differences between us here in Los Angeles and our colleagues in China, but that in no way has impeded our success. I would point to China as a place where we've done well sorting out the aims and goals upfront [see p. 22].

Stanley-Price: That's an interesting example, Tim. As you say, despite the obvious cultural differences, this partnership works because it is based on mutual respect and transparency and accountability, and both sides see the benefit.

Bandarin: Tim, what would you do to improve conservation partnerships?

Whalen: In the past, one of the things we've talked about here is how the conservation community can come together to carefully look at how we might share resources and partner in more effective ways. The themes that we've been discussing could form the basis of a formal meeting that tries to get at the heart of what makes partnerships work.

Stanley-Price: Obviously one of the desired outcomes might be making it clear that partnerships should not be looked at solely from the point of view of fund-raising. And another aspect of what we're discussing here is the decline and sometimes consolidation of various conservation organizations. Many international NGOs are feeling the stress nowadays economically and are consolidating, going back to core values, changing their structure. These are interesting trends worth exploring.

Bandarin: I appreciate having this discussion, because we struggle with these issues every day. Each morning I come to the office and try to develop the network of partners—it's my daily struggle. I don't think that we can do the job alone. That is impossible. Maybe there was an exaggerated optimism in our founding fathers. But the job of preserving heritage has grown too big, and we can't do it alone.

OPERATI

IN CONSERVATION SCIENCE

By Giacomo Chiari





Conservation guest scholar Maria Isabel Kanan preparing a lime mortar in the GCI's accelerated aging lab. The Institute's Conservation Guest Scholar program provides opportunities for conservation professionals to pursue interdisciplinary scholarly research among the GCI's staff and laboratories. Photo: Dennis Keeley.

Interdisciplinarity IS ONE OF TODAY'S MOST USED—and possibly misused—words. It suggests that a problem is sufficiently complex that it requires expertise in several disciplines to be solved. When dealing with the conservation of cultural heritage, interdisciplinary approaches are considered essential. Knowledge from such diverse professions as art historian, museum curator, conservator, architect, archaeologist, and scientist all contribute to the work of conservation.

Typically, individuals working in these professions are associated with institutions that do not necessarily collaborate with one another. Excessive specialization and the absence of a common language exacerbate the situation. Even in the very few organizations in the world that are large enough to include a broad range of disciplines devoted to cultural heritage, functions are usually separated into well-defined departments as the most natural way to manage a complex institution. This separation re-creates, on a smaller scale, the separation of disciplines that exists in the field at large. Still, the advantages of cooperation among these fields are so evident that professionals often seek the help of colleagues within their institution or beyond it.

Several disciplines are intrinsically part of scientific work in conservation. Using a variety of instruments, scientists study the material aspect of cultural heritage, revealing the hidden stories that each object, document, building, or site from the past has to tell us. This aspect of the work—referred to as archaeometry (broadly defined by the Oxford English Dictionary as "the application of modern scientific and technical methods to the



Staff from California State University Northridge (CSUN), the J. Paul Getty Museum, and the GCI preparing for a test cleaning as part of the Gels Cleaning Research project. This project—a collaboration between the Getty, CSUN, the Winterthur Museum, Garden & Library, and the Winterthur—University of Delaware Program in Art Conservation—addressed lingering questions regarding the use of solvent-based gels as cleaning systems for surfaces. *Photo:* Valerie Dorge.

interpretation of archaeological remains")—is only one side of the coin. The other very important part of such work is determining the causes and modality of the processes of deterioration of cultural heritage material and, subsequently, the means of mitigating or slowing those processes. In this endeavor, the scientist's natural partner is the conservator. Given this dual activity, scientists working in conservation might be better termed *cultural heritage materials scientists* dealing with archaeometry and/or conservation science.

Because of the intrinsic multidisciplinary nature of cultural heritage materials science, no single scientist can master more than a limited selection of the scientific techniques or analytical methods demanded by conservation. Therefore, it is natural that when investigating a painting, for example, more than one scientist would be involved. One scientist might use techniques for analysis of the inorganic components of the pigments, while another might study the binding media using organic materials analysis. This kind of cooperation is based on each scientist's distinct expertise.

Another type of collaboration may take place among institutions that have scientists with similar expertise. Even if an organization has a large scientific staff and a comprehensive set of instruments, it will still not have the capability to tackle very complex problems. For this reason, from its earliest days, the GCI Science department has sought to cultivate partnerships in many of its major research undertakings. These partnerships have been successful when the partners have expertise in similar areas of research, as well as comparable resources; they can therefore share

operational tasks, each significantly contributing to the common goal with its expertise and tools. Successful partnerships have also been achieved when the partners have very different but nonetheless complementary expertise and/or resources; in these instances, the partners share a common goal—one that can only be attained by cooperative and combined effort.

Another important means of cooperation involves the simple sharing of ideas. One way the GCI pursues this goal is by conducting both resident scholar and graduate intern programs. As part of the scholars program, the GCI hosts scientists who are recognized as leaders in their fields with the objective of exchanging ideas and experiences. Their use of the GCI's laboratories and their interaction with the Institute's staff may contribute to the solution of problems they have proposed. The interns come to work on specific projects with GCI staff, acquiring precious experience while contributing to their own work.

Several GCI Science research projects currently under way illustrate the principles of partnership. In each project, the GCI's partnership with one or more external organizations is not incidental but at the very core of the work.

GCI Scientific Partnerships

The GCI's Organic Materials in Wall Paintings project involves the collaboration of an international group of conservation science laboratories to develop an analytical protocol for the study of organic materials used in wall paintings. The project, in part, grows out of the widespread belief that very few frescoes produced in the past were executed in a pure fresco technique. On the contrary, painters may have added very small amounts of organic substances (i.e., milk, egg, gums, etc.) in order to increase the workability of the material, to extend its working time, or to obtain special effects (the so-called *velature*). To know how to recognize these elusive materials is important both for the history of art and for determining the most appropriate manner to conserve these works by cleaning them in a way that will not remove original and intentional layers. The analytical task is extremely difficult, since one has to find, for example, if perhaps a small drop of milk was added to a pot of paint centuries ago-a length of time that may have substantially altered its composition. The additional challenge is to do this (amid many possible subsequent contaminations) in a reliable, simple, and inexpensive way—without taking samples, if possible.

To come even close to achieving these goals, one should test all the techniques presently available and select those that best meet the analytical requirements. Since no single organization can accomplish this task, more than 10 research groups have joined with the GCI to address this issue, each bringing to the task their own expertise and equipment. Several of the analytical techniques





Top: Utilizing the GCI's organic materials laboratory, Suzanne Quillen Lomax of the National Gallery of Art in Washington, D.C., analyzes a sample from Tate's pigment collection using direct temperature-resolved mass spectrometry. The GCI, Tate, and the National Gallery of Art are working on a collaborative study of the character of modern paint materials. Bottom: A portion of the modern synthetic pigment collection at Tate in London. Photos: Michael Schilling.

being tested were developed by the participants, making them the experts in their use. Since the goal is to compare techniques in order to determine the best possible protocols, the instrumentation needs to be applied by the most experienced users, so that the results are not affected by a less-than-adequate application.

The GCI is also engaged in a collaborative effort to study modern paint. Modern painters often discarded more traditional, well-established painting techniques in favor of more expressive and direct ways of communication, without necessarily being concerned about the durability of the work of art. Among the new materials are common house paints, which often utilize pigments and binding media different from those in traditional paint media. To be able to identify, both for authentication and for conservation purposes, the large number of commercially available artist paints and house paints—and their deterioration products—a collaboration was established between the GCI, Tate in London, and the National Gallery of Art in Washington, D.C. The extensive exchange of expertise on complex analytical procedures and the ability to divide up the enormous amount of work to be done have allowed a project of this scale to be undertaken.

Another area of GCI scientific research being conducted in partnership addresses a series of questions involving museum lighting. How do we balance a museum visitor's desire to view a light-sensitive work of art, such as an old master drawing, with a museum's mandate to protect masterpieces from conditions that might cause damage—such as too much light for too long a period of time? Do we need to develop new light sources for illuminating delicate works, or can existing light sources be modified to make them less damaging? And can we do a better job of monitoring the effects of light on fragile works of art?

The scope of the museum lighting project is broad investigating new lighting sources such as LEDs with intrinsic threeband character; designing filters to emulate the three-band concept on existing lamp architecture; examining the benefits of anoxic environments to reduce photochemical deterioration; and testing risk management methodologies based on more sophisticated monitoring techniques.

Realistically, a project of this ambition could only be undertaken collaboratively. An initial cooperative effort was established with Carnegie Mellon University, which helped the GCI build a "microfading tester," a device that concentrates a strong beam of light on a very small portion of the object, causing it to fade in a controlled manner without causing unnecessary damage to the overall object. The emitted spectrum is recorded at the same time, producing all the relevant data for both regulating the amount of light and filtering the radiation responsible for damage when the object is exhibited. The design and manufacture of proper

filters are being addressed by a collaborative agreement with the University of Texas at El Paso. The university, in turn, has set up a working relationship with a local company to manufacture and test the filters for adaptation in the museum environment. In the future, for each masterpiece, it may be possible to have customized filters that will allow visitors to see the work of art in the best possible light, while significantly limiting damage to a greater extent than we can accomplish today.

Another GCI scientific area where complementary expertise is part of the partnership formula is the Institute's new research on the use of axial tomography—CT scans—on small bronze objects for analytical purposes. While the GCI is periodically required to analyze objects from the J. Paul Getty Museum using X-ray analysis, until recently the Institute did not have the full range of experience and equipment necessary to achieve the higher level of analytical results offered by CT scans. By partnering with the University of Bologna in Italy, with its expertise in executing axial tomography, the GCI was able to adapt its current X-radiography equipment to begin to do full CT scans on medium-size bronzes from the Getty collection. The ultimate goal of this collaboration is to develop a system capable of performing CT scans on large bronze objects. This is a goal that no one has yet achieved at a resolution that would make a significant difference in the study of such objects.

Transforming a "Good Idea"

The Science department at the GCI practices collaboration in a variety of ways: with art historians, museum curators, and conservators on museum objects; with architects, archaeologists, and conservators on site projects; with other institutions, such as museum scientific laboratories and universities where complementary but different experiences and know-how are present; occasionally with very large scientific facilities that possess expertise in the use of synchrotron or neutron radiation but have no conservation experience; and, of course, within the Getty itself.

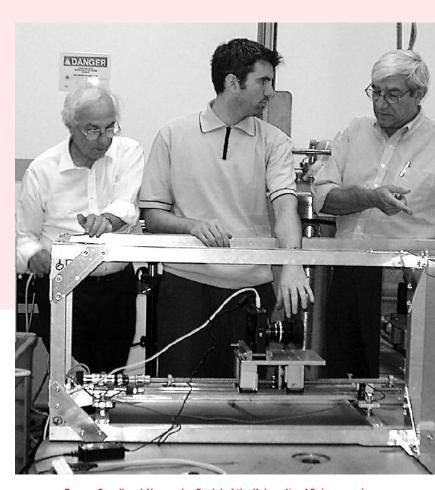
Although at the core of scientific research there is always a good idea, possibly conceived by a single person, the advantages of sharing ideas with colleagues from the beginning of research are enormous. Apart from the sense of community that is created, sharing ideas may result in positive modifications, correlations to other fields, and unforeseen amplification and practical applications.

Furthermore, experiments that can test the hypotheses generated from that idea—and, ultimately, transform the good idea into a law of nature or a new instrument or an analytical procedure—can today be carried out only by a team of well-

trained, collaborating scientists. In the implementation of critical research, the romantic concept of the scientist who works alone in his or her study is no longer valid.

The concessions that the proud, lonely scientist has to make to the complexity of the modern world are more than compensated for by the incredible achievements that modern science and technology have attained in the domain of conservation and archaeometry. We should be both encouraged and challenged by the results, keeping in mind that our ultimate goal is a deeper understanding of works of art and their conservation for future generations.

Giacomo Chiari is chief scientist at the Getty Conservation Institute.



Franco Casali and Alessandro Pasini of the University of Bologna and Giacomo Chiari of the GCI discussing the assembly of an X-ray tomography system in the GCI's Museum Research Lab. The GCI has formed a partnership with University of Bologna experts to develop a X-radiography system capable of performing CT scans on large bronze objects. *Photo:* Gary Mattison.

PARTNERSHIP

WE'RE IN THIS BOAT TOGETHER

By Neville Agnew

Staff from the GCI and Dunhuang Academy participating in a team meeting at the academy as part of the Mogao grottoes Cave 85 wall paintings conservation project. *Photo:* Neville Agnew.





Team members installing salt-absorbing presses after grouting of detaching wall paintings in Cave 85 at the Mogao grottoes. *Photo:* Neville Agnew.

SINCE ITS EARLIEST DAYS, the Getty Conservation Institute has undertaken collaborative conservation field projects in different parts of the world. The first was the Nefertari Wall Paintings project in Egypt, which started in the mid-1980s. Several years later, the Institute began working in China, initially at the two ancient Buddhist grotto sites of Mogao and Yungang. Many other collaborative and diverse undertakings followed: in Ecuador, Tanzania, Benin, Central America, Tunisia, and the Czech Republic, to name but a few. Each field project has meant the building of a relationship with a foreign partner, typically the authority responsible for heritage.

GCI involvement in foreign field projects has made it important for the Institute to devote attention to the essentials of a good collaboration, since this is a sine qua non of success and is the hidden—sometimes even overlooked—aspect of an organization focused primarily on excellence in its conservation work. It is easy to take for granted a partnership in which, to put it in the simplest terms, there is a need (a foreign partner and site), a provider of expertise (the GCI), and a common purpose. Only when things go wrong or stall does the awareness dawn that there is more to a project than the conservation challenge per se—and that a focus on the relationship is at least as important as the attention given to the conservation of the site.

Stakeholders, it is widely acknowledged, are essential for success in the conservation and management of sites. If they are ignored or sidelined, problems inevitably arise. In collaborative projects of the kind conducted by the GCI, the most important stakeholder for the success of the project is the partner. This can be forgotten when a formal agreement with legalistic language is drawn up. The resulting document—of necessity exact in terms

of responsibilities and conflict resolution—may unintentionally convey a rigid, contractual tone that seems antithetical to the spirit of collaboration with foreign partners whose cultural framework is not necessarily attuned to the pitfalls faced in the litigious culture of the United States. The complex formal agreements entered into by the GCI with foreign partners—typically ministries of culture or departments of antiquities—have occasionally been utilized, unfortunately, by internal factions within a government as opportunities for political advantage. From the perspective of the GCI, essentially innocent clauses such as agreeing to binding arbitration in Switzerland in event of dispute, holding the Institute harmless should mishap occur to the heritage or site that is the focus of the project, and laying out photography and copyright positions can, and have been, perceived by some in the partner country as overly advantageous to the GCI. There have been instances when local press has used agreements for political advantage in internal factional conflicts. As a result, the Institute considers it important to mitigate an impression of constraint and negativity in formal agreements and has reexamined the tone and terms of these agreements. By including within agreements clear and positive language emphasizing benefits, enhancement of local conservation capabilities and professional development, sharing, and collegial cooperation, both formal legal needs and professional collaborative objectives are achieved. In any case, after the agreements are filed away, the true test of collaborative success begins.

Sustainability and Credibility

In 2003 the GCI published the proceedings of a conference dealing with sustainable approaches to the conservation of the built environment. Like *values* and *stakeholders*—words that in recent years have become central in the method and implementation of heritage conservation and management—*sustainability* has likewise achieved a high level of importance in the heritage conservation lexicon. It is equally applicable to partnerships.

The GCI's longest continuing partnership among its field projects has been in China, with the State Administration for Cultural Heritage (SACH) and the Dunhuang Academy. The partnership, which began with one set of objectives, over time expanded into new and significant endeavors, including site conservation, wall paintings conservation, and visitor management. Through the China Principles project—carried out with SACH and the Australian Heritage Commission—the GCI has worked with its Chinese partners to produce guidelines for all of those charged with the preservation of China's cultural heritage sites.

When Dunhuang Academy Director Fan Jinshi was asked what has enabled the GCI and the Academy—the Chinese institu-

tion managing the Mogao grottoes—to work successfully together for so long, she enumerated criteria of a common goal, well-defined and clearly stated objectives, a good conservation and management methodology (the China Principles), and sharing of work. Tactfully, she did not elaborate on the rare disagreements in which one partner has critiqued the other for not having met a work deadline or having failed to implement an intervention in an appropriate manner. Had she done so, she would no doubt have emphasized that these issues have always been resolved by cordial, though direct and sometimes even forceful, discussion. It is not coincidental that the sustained presence of the GCI in its partnering and relationship with the Dunhuang Academy has created a comfort level that has allowed these productive exchanges to take place.

It is also interesting to examine dispassionately how professional disagreements can be resolved, allowing the partners to move forward immediately and without a residue of rancor. At one level, the key is trust in the partner and in the common objectives. But trust can only be built by sustained cooperation over time. Over the years of the GCI's collaborative projects in China, mainly at Mogao, relationships have been forged and sustained with the site authorities and, importantly, with SACH, too, and that continuity has allowed a dynamic evolution of not only the relationship but also the scope—from site-focused initiatives to more ambitious ones with national impact, such as the China Principles. The exciting dimension of work in China over this period has been the opportunity both to work on the "artifact"—i.e., at the site level, in conservation work that is challenging conceptually as well as technically and to use the credibility of the Institute and the strength of the relationship as a springboard for a larger endeavor.

This credibility has enabled the GCI to introduce other partnering organizations to China's heritage authority. This has been the case with the China Principles, a threefold undertaking of the GCI, SACH, and the Australian Heritage Commission (replaced in 2004 by the Australian Heritage Council). Subsequently, the Commission itself entered into a memorandum of understanding with SACH to cooperate in a variety of other cultural initiatives. In another development that grows out of the strong Chinese partnership with the GCI, the Dunhuang Academy and nearby Lanzhou University have jointly established a postgraduate wall paintings conservation training program to raise both academic and practical conservation standards; both the GCI and the Courtauld Institute of Art in London (a longtime GCI partner) will provide the program with professional support. These are the kinds of results that relationships of trust and sustained presence make possible.

Critical to the success of any collaborative project are the personnel and personalities involved. In China, the Institute has been extremely fortunate in having solid backing at the highest levels



The China Principles project team touring a restored building in Briarwood, Australia, during the first China Principles workshop in February 1998. At the workshop, team members were introduced to a range of heritage sites in Australia, and to the use of the Burra Charter in the practice of heritage conservation and management. *Photo:* Neville Agnew.



The China Principles team visiting Chengde Imperial Summer Resort, 250 kilometers north of Beijing. The conservation of Shuxiang Temple, seen here, is now part of the application phase of the China Principles project. *Photo:* Jonathan Bell.

within SACH and the Dunhuang Academy. Just as sustainability is important in the relationship, so is stability of partner personnel. A project is unlikely to flourish with frequent leadership and personnel changes.

Sharing the Workload

The GCI, in working collaboratively with partners, seeks a sharing of workloads and expertise and a commitment of resources. The fact that the GCI is essentially a "software" provider, not a "hardware" provider, has sometimes been problematic in the eyes of foreign partners whose political leadership may understand hardware but not necessarily software. The X-ray diffractometer, worth thousands of dollars, and the state-of-the-art environmental monitoring station as contributions to a collaborative project are visible, tangible evidence of commitment. Yet a new methodology or procedure, which has less communicability and glamour, is infinitely more valuable in the long term, especially as the partner may not have trained or experienced personnel to use the diffractometer, and maintenance and spare parts are prohibitively expensive. Fortunately, our Chinese partners have understood our perspective in the work we do together, coining the phrase "software provider" and using it often when referring to the GCI's contribution to the joint endeavors.

Sigmund Freud, it is said (perhaps apocryphally), noted that his patients responded best when they had paid well for their treatment. There is a lesson here. From the beginning, the GCI's partnership in China has always entailed a substantial contribution by the Chinese that has included internal travel and accommodation for GCI personnel. For other activities—such as the two international

conferences on the conservation of Silk Road sites, held at the Dunhuang Academy in 1993 and 2004—there has been an equal sharing of expense. Over the sixteen years of partnership, this cost has been substantial; the Chinese contribution could only have been achieved because of the solidity of the relationship, which in turn has been reinforced by mutual trust and clearly articulated shared objectives.

There are many lessons that can be learned from an examination of both successful and unsuccessful partnerships and collaborations. The most important is that collaborations must be relationship focused, not artifact focused. Building a relationship-focused project has its own requirements. Of the long list that could be drawn up, a few points are key: know and respect the culture and its history, ensure good teamwork, and have on your team someone from the culture who, as a native speaker, can read the nuances and smooth cultural gaffes. Good relations and working practices take time to build and are established at the personal level, not at the signing of the agreement. In other words, a successful partnership is built up, not down. As has been said: the only successful thing made from the top down is a grave.

Partnerships need to be vessels for all partners. Not all ships make the voyage, but the best chance for keeping a project partnership buoyant and on course results as much from attention to the nature of the relationship as from attention to the professional and technical conservation aspects of the project.

Neville Agnew is principal project specialist with GCI Field Projects and project leader of the GCI's China initiative.

Second Directors' Retreat

The Getty Conservation Institute, in partnership with the Center for Cultural Materials Conservation (CCMC) at the University of Melbourne, held its second Directors' Retreat for the Advancement of Conservation Education July 20–22, 2004, at Trinity College on the University of Melbourne campus.

The event, which focused on conservation education in the Asia-Pacific region, was developed by CCMC and the GCI in consultation with the Heritage Conservation Centre of Singapore. Twenty-five participants from Australia, East Timor, Hong Kong, Laos, Macau, Malaysia, New Zealand, Papua New Guinea, the Philippines, Singapore, Taiwan, the United States, and Vanuatu attended the retreat.

The retreat provided a forum for educators and senior-level decision makers to discuss issues they consider important for the Asia-Pacific region and to explore opportunities for advancing conservation education. Through facilitated discussions

and exercises, participants were able to learn from one another's challenges and successes, and to identify priorities for conservation education in the region.

These include increasing governmental recognition, drawing upon local expertise, improving access to resources, fostering collaboration, and working toward achieving sustainability of conservation efforts in the region.

Launched in 2002, the GCI's program of Directors' Retreats for the Advancement of Conservation Education is an ongoing series of meetings for leaders in conservation education. Reflecting the Institute's long-standing commitment to the development of conservation education, the Directors' Retreats program aims to encourage strategic thinking and action among educational institutions, to increase the exchange of ideas and information, and to promote cooperation and collegiality. Further information about the Directors' Retreats can be found on the Getty Web site at www.getty.edu/conservation/education/drsretreat/.

> Participants in the GCI's Directors' Retreat for the Advancement of Conservation Education, organized in partnership with the Center for Cultural Materials Conservation at the University of Melbourne. *Photo:* Katharine Untch.



GCI-ICCROM Collaboration on AATA Online

Second Printing of China Principles

The Getty Conservation Institute and ICCROM (International Centre for the Study of the Preservation and Restoration of Cultural Property) have commenced a two-year collaboration that will considerably strengthen AATA Online, the major bibliographic reference tool produced by the GCI in association with The International Institute for Conservation of Historic and Artistic Works.

Through this initiative, launched in October 2004, a significant selection of the holdings of the ICCROM Library will be abstracted for inclusion in AATA Online.

The library contains the world's most extensive collection of resources on every aspect of heritage conservation in a wide variety of languages. There are currently more than 86,000 references registered in the collection.

The GCI-ICCROM project will focus on conservation literature in geographic and subject areas that are not yet comprehensively covered in AATA Online. Geographic areas that will now receive greater coverage include eastern Europe, Latin America, Africa, the Middle East, and Scandinavia. Among the subject areas that will now get increased attention are ethnographic materials, photographs and film, modern materials, natural history, values and economics, and tourism.

Beyond expanding the international scope of AATA Online's coverage, the GCI–ICCROM collaboration will encourage

increased access and use of the ICCROM
Library. Conservators will be able to search
a substantial portion of ICCROM's collection
within the context of the many thousands
of other bibliographic references and
abstracts already found in AATA Online.
By abstracting materials that are then made
physically available to researchers through
their library, ICCROM is strengthening its
mission to broadly disseminate its expertise
and information resources to conservation
professionals working around the globe.

AATA Online: Abstracts of International Conservation Literature (www.aata.getty.edu) is a free online database of over 100,000 abstracts of literature related to the preservation and conservation of material cultural heritage. The database is updated quarterly with new abstracts of both current and historical literature.

For more information, please contact the GCI at aata@getty.edu or ICCROM at library@iccrom.org .

This fall, a second printing of *The Principles for the Conservation of Heritage Sites in China* was published by the Getty Conservation Institute. The new printing incorporates an important revision—the language order has been reversed to make it more easily accessible to conservation professionals in China. The second printing also includes reversal of the glossary of English-Chinese terms, resulting in clarifications and changes in the literal meaning of terms.

The revised version is available in hard copy free of charge from the GCI and is also posted on the Getty's Web site at www.getty.edu/conservation/publications/pdf_publications/. To obtain a print copy, please contact gciweb@getty.edu.

The China Principles—national guidelines for the conservation and management of cultural heritage sites in China—was first issued by China ICOMOS in 2000 with the approval of China's State Administration of Cultural Heritage. In 2002 the GCI published a bilingual edition (in English and Chinese), which was disseminated widely, including to all national chapters of ICOMOS.

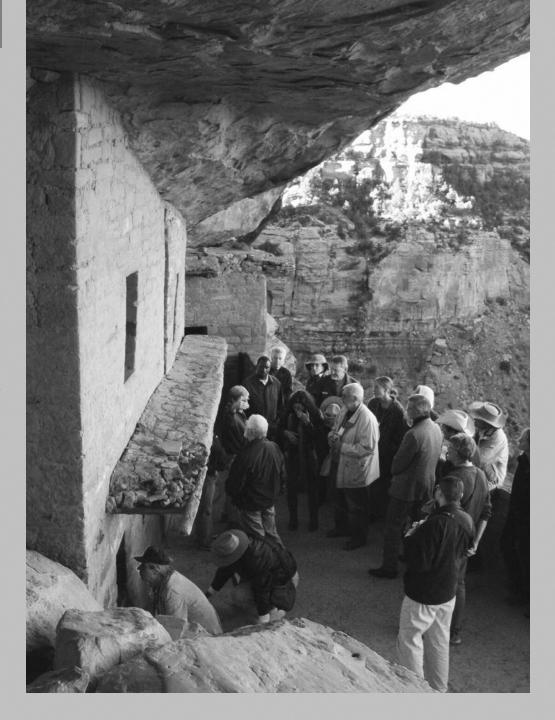
Recent Events

Decorated Surfaces Colloquium

Site visit to Balcony House, a 13th-century cliff dwelling at Mesa Verde National Park. Archaeologist Kathy Fiero describes to colloquium participants the original use and history of the ancient Puebloan site. *Photo:* Angelyn Bass Rivera.

In September 2004, the National Park
Service (NPS), the US/ICOMOS Specialized
Committee for the Study and Conservation
of Earthen Architecture, and the Getty
Conservation Institute, through Project
Terra, organized a colloquium at Mesa
Verde National Park in Colorado on the
conservation of decorated surfaces on
earthen architecture.

The colloquium had its genesis in the work of the Gaia Project (the precursor to Project Terra), which in 1990 identified the need for further research and dissemination of information in the specialized area of decorated surfaces on earthen architecture. These surfaces include decorated earth plasters on a variety of architectural supports and diverse decorated plaster materials on earthen buildings in archaeological sites, historic buildings, living traditions, and museum settings. Among the many significant sites with such decorated surfaces are Chan Chan in Peru, Mesa Verde in the United States, traditional Asante buildings in Ghana, and Çatalhöyük in Turkey.



Throughout the 1990s, conservation issues related to decorated surfaces on earthen architecture remained of concern to the field. At a 2001 US/ICOMOS Specialized Committee meeting in Philadelphia, a colloquium on these issues was proposed, leading to the fall 2004 Decorated Surfaces on Earthen Architecture Colloquium.

The event brought together 60 international professionals specializing in the conservation and care of decorated surfaces on earth, and it provided a forum for the presentation of recent work and for indepth discussion of key issues, challenges, research, and future direction in this specialized area.

The colloquium was organized around five themes: Mesa Verde, archaeological sites, historic sites, living traditions, and museum practice. The presentations on Mesa Verde, which included an introduction to the Ancestral Puebloan architecture and sites at Mesa Verde National Park (and to recent archaeological investigations and conservation work conducted at the site), were used as a point of departure for subsequent presentations and discussions, which addressed a range of research topics and projects worldwide in a variety of contexts, including site management and technical conservation.

Analysis of Modern Paints

By Thomas J. S. Learner

Issues in the Conservation of Paintings

Edited by David Bomford and Mark Leonard

In addition to programming for conservation professionals, the colloquium included a special public lecture for the local community, held at the Anasazi Heritage Center. "Space, Time, and Pictorial Art in the Ancient Pueblo World" was presented by J. J. Brody, professor emeritus of art and art history at the University of New Mexico.

Funding for the colloquium was provided by the GCI, the NPS Challenge Cost Share Program, and US/ICOMOS. Financial support for the public lecture came from the Colorado State Historical Fund. Facilities and access to sites were provided by the Anasazi Heritage Center and Mesa Verde National Park.

A book publication by the GCI of the colloquium's proceedings is currently scheduled for 2006.

Although oil remains an important binding medium in artists' paints, today's synthetic resins are used with increasing frequency. This was true during much of the 20th century, when artists such as David Alfaro Siqueiros, Jackson Pollock, and Pablo Picasso used commercial or industrial paints based on synthetic resins. The growing popularity of synthetic resin materials carries important implications for the conservation, preservation, and treatment of modern art.

This volume outlines the techniques that are currently employed to analyze the synthetic resins used in modern painting materials, such as pyrolysis—gas chromatography—mass spectrometry, Fourier transform infrared spectroscopy, and direct temperature—resolved mass spectrometry. For each technique, results are given for standard samples of the principal classes of synthetic binding media, various pigments and extenders, tube paint formulations, and microscopic paint fragments taken from actual works of art.

This book is primarily intended for conservation scientists, conservators, researchers, students of conservation, and other museum professionals in general.

Thomas J. S. Learner is a senior conservation scientist at Tate, in London.

236 pages, 8 ½ x 11 inches 10 color illustrations, 240 spectra, 37 drawings ISBN 0-89236-779-2, paper, \$40.00 This volume on paintings conservation includes more than 70 texts dating from the 15th century to the present day. Some are classic and highly influential writings; others, although little known when first published, in retrospect reflect important themes and issues in the history of the field. Many appear here in English translation for the first time, including D. Vicente Polero y Toledo's 1855 essay "Arte de la Restauración" (The Art of Restoration) and Victor Bauer-Bolton's treatise from 1914, "Sollen fehlende Stellen bei Gemälden ergänzt werden?" (Should Missing Areas of Paintings Be Made Good?). The book has six sections: An Historical Miscellany, History of the Profession, Study of Artists' Materials and Techniques, Structural Interventions, Philosophical and Practical Approaches to Cleaning and Restoration, and Cleaning Controversies.

This is the second volume in the GCI's Readings in Conservation series, which publishes texts considered fundamental to an understanding of the history, philosophies, and methodologies of conservation.

David Bomford is senior restorer of paintings at the National Gallery, London. Mark Leonard is conservator of paintings at the Getty Museum.

520 pages, 7 x 10 inches 8 color and 5 b/w illustrations ISBN 0-89236-780-6, \$60.00 ISBN 0-89236-781-4, paper, \$40.00

Conservation and Seismic Strengthening of Byzantine Churches in Macedonia

By Predrag Gavrilović, William S. Ginell, Veronika Sendova, and Lazar Śumanov

Conservation of the Last Judgment Mosaic, St. Vitus Cathedral, Prague

Edited by Francesca Piqué and Dusan Stulik



Last Judgment Mosaic Between the 9th and 14th centuries, hundreds of Byzantine churches were built in the area now known as the Republic of Macedonia. The condition of these buildings has been of ongoing concern because of deterioration and destruction from forces both human and natural, including devastating earthquakes.

This book summarizes the results of a four-year study to develop and test seismic retrofitting techniques for the repair and strengthening of ancient Byzantine churches. The volume considers the conservation of historic buildings in seismic zones, surveys the condition of 50 existing Byzantine churches in Macedonia, and details the design, construction, and seismic testing of a half-scale model church. The volume also includes representative experimental and technical data.

Predrag Gavrilović and Veronika Sendova are professor and associate professor, respectively, at the Institute of Earthquake Engineering and Engineering Seismology in Macedonia. Until his retirement in 2003, William S. Ginell was a senior scientist at the GCI. Lazar Śumanov, a conservation architect, is president of Macedonia ICOMOS.

256 pages, 8 ½ x 11 inches 47 b/w photographs, 126 charts and graphs ISBN 0-89236-777-6, paper, \$45.00 Illustrated in color throughout, this volume presents selected papers from an international symposium held in June 2001 marking the completion of a 10-year project to conserve the *Last Judgment* mosaic at St. Vitus Cathedral in Prague. The project was a partnership among the Office of the President of the Czech Republic, the Prague Castle Administration, and the Getty Conservation Institute. The goal of the symposium was to present the methodology, research, and results of the project, which involved conserving one of the finest examples of monumental medieval mosaic art in Europe.

The volume's essays are divided into three parts, which cover the historical and art-historical context, conservation planning and methodology, and project implementation and maintenance. Topics addressed include the history, iconography, and visual documentation of the mosaic, the development and application of surface cleaning and protective coating techniques for the mosaic's glass tesserae, and post-treatment monitoring and maintenance.

Francesca Piqué, a former project specialist with the GCI, is a conservator in private practice. Dusan Stulik is a senior scientist at the GCI.

288 pages, 9 x 11 inches 87 color and 82 b/w illustrations ISBN 0-89236-782-2, paper, \$75.00

Conservation Matters Lectures

The GCI announces the winter/spring schedule for "Conservation Matters:
Lectures at the Getty"—a public series examining a broad range of conservation issues from around the world. Lectures are held at 7:00 p.m in the Harold M. Williams Auditorium at the Getty Center.
Events are free, but reservations are required. To make a reservation, visit the Getty Web site (www.getty.edu/conservation). Reservations can also be made by calling (310) 440-7300.

Venice Can Be Saved from the Waves if . . .

Thursday, January 20, 2005
Anna Somers Cocks, founding editor of *The Art Newspaper* and chairman of the Venice in Peril Fund, will speak about the threats to Venice and some of the proposed solutions for saving this unique World Heritage Site.

Mesopotamia Endangered: Witnessing the Loss of History

Tuesday, February 8, 2005 Joanne Farchakh Bajjaly, journalist and former archaeologist, will speak about the looting and destruction of archaeological sites in Iraq.

Paneled Rooms: Museum Objects or "Lifestyle Environments"?

Thursday, March 17, 2005
Brian Considine, decorative arts
conservator at the J. Paul Getty Museum,
looks at the installation of paneled rooms
in American and European museums and
addresses their authenticity, conservation,
and meaning.

Bazaars in Victorian Arcades: Conserving Bombay's Historic Fort Area

Thursday, April 21, 2005

Rahul Mehrotra, urban designer, will discuss the challenges of conservation in a bewildering urban landscape where modernity and tradition cohabit the same space.

Building Communities through Heritage

Thursday, May 19, 2005
Sir Neil Cossons, chairman of
English Heritage, will discuss how recent
work in England, undertaken as part
of a wide-ranging review of protection and
management of the historic environment,
demonstrates that support for heritage is
widespread and is seen increasingly as a key
to sustainable communities.

Anna Schönemann

Scientist, Science



Born in the eastern German city of Halle, Anna Schönemann grew up in Potsdam, the youngest child of historian parents—her father's field was art and architecture, and her mother's field was early German film. Discussions at home often focused on art, and Anna learned early the value of looking carefully at things and attempting to interpret them. She developed an interest in science in high school and decided to pursue it, in part to do something different from what her parents did. She attended the University of Halle-Wittenberg and in 1990 received her master's degree in chemistry.

Because of the familiarity with art she gained from her family background, Anna, even before completing her degree, contemplated a career in conservation science. She spent three months as an intern in the analytical laboratory of the Foundation for Prussian Palaces and Gardens in Berlin-Brandenburg and, following graduation, was hired full-time by the foundation. Much of her research focused on pigments and binding media used on a variety of 18th- and 19th-century polychrome objects, work that increased her knowledge of historical technologies. During the early 1990s she also consulted on a number of field projects involving architectural polychromes and wall paintings in northern Germany. She enjoyed the variety of materials and historical places involved in her work, as well as the opportunity to meet new colleagues.

In 1995 she was made head of the foundation's analytical laboratory. The following year—while working full-time—she began Ph.D. studies through the University of Vienna, ultimately completing her doctorate in 2001 with a dissertation on spectroscopic and chromatographic investigation of binding media used in art objects.

In March 2002 she attended the Fifth International Infrared and Raman Users Group conference, which was hosted by the GCI. Prior to the conference, a GCI staff member suggested that she apply for the open scientist position in the Institute's Museum Research Laboratory, and while at the Getty, she interviewed for the job. In October 2002 she joined the staff.

Much of Anna's GCI work involves pigment analysis of paintings, research that helps provide greater understanding of painting techniques. She is also studying oil-resin varnishes used on paintings, furniture, and walls in the 18th century. She appreciates working in an environment with such a variety of analytical equipment and with so many colleagues on site—a situation quite different from her work in Germany.

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