Conservation

The Getty Conservation Institute Newsletter ■ Volume **15**, Number **2** 2000

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GCI Web Site Update

The Getty Conservation Institute's Web site now includes detailed information on current Institute projects. Also added to the site are highlights of past projects. Project descriptions include links to newsletter articles, scientific research abstracts, photographs, the Getty Library catalogue, and related non-Getty Web sites. Please visit the GCI Web site at: http://www.getty.edu/gci

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The Getty Conservation Institute works internationally to advance conservation practice in the visual arts—broadly interpreted to include objects, collections, architecture, and sites. The Institute serves the conservation community through scientific research into the nature, decay, and treatment of materials; education and training; model field projects; and the dissemination of information through traditional publications and electronic means. In all its endeavors, the GCI is committed to addressing unanswered questions and promoting the highest possible standards of conservation.

The Institute is a program of the J. Paul Getty Trust, an international cultural and philanthropic institution 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 on the Institute's home page on the World Wide Web: **http://www.getty.edu/gci**

Front cover: Historic Portuguese ceramic tiles on walls at the Museum of Sacred Art in Salvador, Bahia, Brazil. Damage to the tiles is the result of salt coming up from groundwater through the building structure and out between seams in the tiles. Loss to the tile glazing is caused by salt crystallization pressures. At the Museum of Sacred Art, environmental management strategies were developed that integrated the conservation needs of both the historic structure and the collection. *Photo:* James Druzik.

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THE GETTY CONSERVATION INSTITUTE

Contents

Managing the Environment

An Update on Preventive Conservation

Feature

By Kathleen Dardes and James Druzik

Recognition of the importance of preventive conservation is growing in virtually every region of the globe. Defined as the management of the environmental conditions under which collections are housed and used, preventive conservation has advanced in both research and application. The last few years have been a period of progress.

"Managing the environment" now applies to all potential risks to collections, be they ubiquitous environmental parameters like relative humidity or temperature; phenomena that are periodic and rare (such as natural disasters); or simply access, handling, and use by collections staff. Environmental management encompasses both technical and organizational strategies—and ideally involves the entire institution. In her 1995 book *Environmental Management*, May Cassar of Resource: The Council for Museums, Archives, and Libraries (formerly the Museum & Galleries Commission) in the United Kingdom, placed "the environmental needs of museum collections at the forefront of the responsibilities of museum managers."

Interior *(right)* and exterior *(opposite page)* views of the Museum of Sacred Art in Salvador, Bahia, Brazil. Like many other museums in Latin America, Sacred Art resides in a historic building that is in itself significant. Such museums require environmental management strategies that encompass the conservation and use of both the collection and the building. The conservation assessment of the Museum of Sacred Art involved architects, conservators and museum personnel, and it resulted in an improved understanding of the risks to both collection and building, as well as integrated strategies for addressing them. *Photos:* James Druzik.

Cassar considered that the strategic management of the environment was "a vastly superior alternative to the piecemeal approach to environmental monitoring and control still practiced by far too many museums." Indeed, because the concept deals with such a wide range of interrelated issues and conditions, it doesn't fit the older model of conservation training and practice in which the conservator is perceived as the primary, if not the sole, guardian of the collection. Nowadays, effective long-term preventive conservation strategies are the result of collaborative will and effort, and caring for collections is regarded as a responsibility conservators share with others.

Signs of Progress

One area of change has been in the nature and extent of conservators' interactions with other professionals. The trend toward interdisciplinarity and collective action is likely to continue, with a wide range of allied professionals contributing to preventive conservation. Within the museum, the actions of facility managers, curators, exhibition designers and fabricators, and others affect the way collections are cared for and used. Preventive conservation also brings conservators into contact with outside specialists, such as architects, engineers, and building contractors. In the future, preventive conservation activities could expand even further into fund-raising and political advocacy.

There's been significant headway in raising the profile of preventive conservation among directors and other institutional decision makers. To be sure, a good deal more remains to be done to secure preventive conservation's place within institutions. Still, there are a number of interesting efforts that promote preventive conservation as a strategic approach.

ICCROM's Teamwork for Preventive Conservation—an initiative directed at European museums—worked to create links among the staff of the project's participating institutions. The objective was to establish an informal network that supports preventive conservation efforts throughout an institution. Starting with the director and senior staff, Teamwork for Preventive Conservation focused on increasing awareness of the responsibilities of different professionals within the museum for collections care and emphasized the importance of maintaining communication for effective cooperation. As the Musée National des Arts et Tradition Populaires—one institution participating in the initiative—reported:

> At our museum we were always in crisis about conservation. At first we wanted a training course for our top staff, but then we realized we needed that and more. We needed a new tradition of talking to one another. There needed to be a change of habit and mentality.

ICCROM's recently launched project for a European Preventive Conservation Strategy moves beyond individual institutions to include ministries of culture and museums and conservation services in a pan-European planning and action initiative.

In North America, the efforts of allied professionals are increasingly valued. Over the past decade, work by architects and engineers—as well as by entomologists, biologists, and chemists—has resulted in significant developments in research and application. The leadership in preventive conservation research long exercised by the Canadian Conservation Institute (CCI), the National Center for Preservation Technology and Training (NCPTT), the Smithsonian Center for Materials Research and Edu-

Foliage close to a museum building can cause a host of problems, fostering the growth of microorganisms and the ingress of insects. Here the shade of large trees slows the evaporation of moisture. Buildings in very humid climates are particularly susceptible to this problem. *Photo:* James Druzik.

cation (SCMRE), the Carnegie Mellon Institute, and the Image Permanence Institute of the Rochester Institute of Technology (IPI) continues and grows.

For example, the IPI has developed environmental hardware and software for collecting and interpreting data collections. Eighty different cultural institutions will collaborate with the IPI in field tests of this promising environmental management technology. The results of the field trials, which are expected to last up to two years, will be reflected in the final version of this environmental management hardware and software package.

Cooperation and Collaboration

An excellent example of interdisciplinary cooperation is the effort by the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) to support the creation of a chapter in its handbook, *ASHRAE Fundamentals,* dedicated to museums, libraries, and archives. This handbook—a major resource for mechanical engineers, who are responsible for the design of heating, cooling, and ventilation systems—is published annually with individual chapter revisions undertaken when considered necessary. The committee responsible for current revisions to the chapter for collection-holding institutions is composed of mechanical engineers, research architects, conservation scientists (including two from the GCI), and conservators whose collective experience and international reputations in museum environmental design and collections requirements are well recognized. ASHRAE's influence and the use of its publications extend beyond North America, and the revised chapter for museums, libraries, and archives will likely have significant impact on building design worldwide.

In the Pacific Rim and Asia, important initiatives promoting preventive conservation have radiated from the Tokyo National Research Institute for Cultural Property and the Nara National Institute for Cultural Property in Japan, and from the National Centre for Cultural Preservation in Australia. In Latin America, research centers that are providing environmental leadership for the collections of the region include the Centro de Conservação e Restauração de Bens Culturais Móveis (CECOR) at the University of Minas Gerais, Brazil, and the Centro Nacional de Conservación, Restauración y Museología (CENCREM) in Cuba. Working with ICCROM as well as with national and regional institutions, CECOR and CENCREM have advanced the understanding of preventive conservation through an approach that is mindful of the variable conditions that affect collection-holding institutions in Latin America. Their research activities reflect the particular concerns of climate and typologies of buildings and collections, while incorporating relevant new thinking and research from beyond the region.

A book riddled with termite damage. Termite infestation is one of the most serious threats to collection-holding institutions in tropical areas. Because termites can cause extensive damage to both buildings and collections, preventing infestations is a priority for caretakers of cultural property in areas prone to such attack. *Photo:* James Druzik.

In Europe preventive conservation research continues either at or under the auspices of a number of major institutions, including the Centre de recherche sur la conservation des documents graphiques, the British Museum, and Resource: The Council for Museums, Archives, and Libraries—to name only a few. By providing advice, commissioning research, and publishing, the Council is an important catalyst for raising standards for the environmental management of collections. Its contribution to conservation is helping guide the development of the field well beyond the borders of Great Britain.

One noteworthy example of collaboration among a number of regional institutions can be found in Brazil in the project Preventive Conservation in Libraries and Archives (Conservação Preventiva em Bibliotecas e Arquivos). Among other things, the project, with the support of the Andrew W. Mellon Foundation, arranged for the translation into Portuguese of a series of technical reports originally sponsored by the U.S. Commission on Preservation and Access. As a result, current cutting-edge insights in conservation research are available in their full, unedited versions, in Portuguese, to libraries and archives throughout Brazil.

Environmental Work

At the GCI, several research and education projects presently under way reflect the increased emphasis on interdisciplinarity and cooperation. Specifically on the scientific front, environmental research is expected to yield important practical results for the field.

At two locations—the Historical Museum and Archives of the City of San Cristóbal de la Laguna on the island of Tenerife in the Canary Islands, and at Hollybourne Cottage, part of the Jekyll Island historic district in Georgia in the southeastern United States—GCI scientists Shin Maekawa and Franciza Toledo are conducting research on the efficacy of sustainable climate control strategies for improving collection environments in historic buildings in hot and humid regions of the world.

The research aims to eliminate intrusive modifications to the fabric of historic buildings which are typically needed for heating, ventilating, and air-conditioning installation. One of the largest benefits of the work is the development of methods that offer effective control of microbiological growth within these buildings. Design and investigation of these strategies employ the collaboration of microbiologists, engineers, and facilities managers.

Two other GCI scientists, Jim Druzik and Cecily Grzywacz, are developing a set of practical guidelines for controlling indoor-generated air pollution in display case and storage microenvironments. This work will focus on determining the capacity and life span of a host of new adsorbent materials recently introduced into the conservation field, for which there is currently little or no reliable information.

"When gaseous pollutants are trapped inside cases, objects can be seriously damaged, so selecting the right sorbent is critical in minimizing risks," says Grzywacz. "Our planned systematic studies should provide comprehensive information to help museums choose appropriate—instead of untested—materials."

Old lead beggars' tokens—issued by English cities as licenses for the poor to request money—damaged by organic carbonyl pollutants. These contaminants can come from sources such as adhesives, woods, or paints. In a display case or storage cabinet, contaminant concentrations can quickly build up to levels dangerous for susceptible objects. GCI scientists are developing practical guidelines for controlling indoor-generated air pollution in microenvironments. *Photo:* Cecily Grzywacz.

Conservation Assessments

One outcome of the GCI's recent work in preventive conservation is the development of a methodology for a conservation assessment—a comprehensive examination and analysis of the environmental factors that can adversely affect collections. Recent research and experience in preventive conservation have underscored the symbiotic relationship between museum collections and the buildings that house them. It is clear that an assessment of environmental conditions must also reflect this relationship by promoting a vigorous collaboration between professionals concerned with architectural issues and those occupied with collection conservation and management. Such assessments should also include museum staff whose jobs directly involve care of the collection or of the building—conservation, curatorial, building maintenance—or staff whose work may affect these areas indirectly, such as security or housekeeping personnel.

The assessment methodology developed by the GCI had its genesis in a collaboration with the U.S. National Institute for Conservation (now Heritage Preservation) which resulted in a set of guidelines for conservation assessments. Seeking to develop an approach that would give greater emphasis to the architectural issues related to environmental management—and that could ultimately be used in its educational and field projects—the GCI formulated an expanded set of guidelines, *The Conservation Assessment: A Proposed Model for Evaluating Museum Environmental Management Needs.* These guidelines focus the expertise of architects, conservators, and museum staff on an interdisciplinary and collaborative examination of a building and its collection. This methodology, which reflects the important role of the building in providing an environment for a collection, has been field-tested at two museums—the Bardo Museum in Tunis, Tunisia, and the Museum of Sacred Art in Bahia, Brazil—and it can be adapted for cultural institutions everywhere. (The guidelines, in English and Spanish, are available on the GCI Web site, under "Publications," in the "Other Materials" section.)

Dissemination through Education

One of the most effective ways to implement preventive conservation over the long term is through education and training. While research illuminates the effects of environmental conditions on collections—and shows how, through appropriate actions, deleterious effects can be mitigated or even eliminated—timely access to this information is critical. Unfortunately, institutions responsible for training in conservation often face the dual challenge of not only keeping current on advances but also of integrating them into curricula and training.

Through one of its projects—the Latin American Consortium for Training in Preventive Conservation—the GCI is working with conservation professionals and architects in the region to develop opportunities to incorporate environmental management into preventive conservation training. The Consortium is composed of teaching institutions that, along with the GCI, have come together to share information and resources in preventive conservation. It promotes access to information and teaching materials, greater interdisciplinarity within the field, and an efficient and reliable support system for educators. The Consortium has an interactive Web site to communicate, to store, and to share its didactic resources.

Hollybourne Cottage, in the historic district of Jekyll Island, Georgia. The structure has a severe wood rotting problem, the result both of the capillary rise of the shallow groundwater through the brick foundation and of the hot and humid environment, which creates a high relative humidity in the basement. The GCI is testing a humidistatically controlled mechanical ventilation and electrical heating system (not traditional dehumidifiers or air-conditioning approaches) for its efficacy in controlling the environmental problem in the building's basement. *Photo:* Shin Maekawa.

Over the next several years, Consortium members will offer a series of workshops focused on teaching preventive conservation. The first workshop—for preparing future instructors of emergency preparedness for museums—took place at the Universidad Pontificia Católica in Santiago, Chile, in late spring of this year (see p. 24). A workshop for conservators and architects dealing with the building-related aspects of preventive conservation for museum collections will be held during the first half of 2001 in Belo Horizonte, Brazil.

Participants in Consortium workshops are expected to apply the experience gained from the workshops (and other collaborative activities of the Consortium) to preventive conservation training projects within their own institutions. In all of the activities associated with the Consortium, members will draw upon teaching resources both within and outside of Latin America, and links are being established with allied professionals in university departments of architecture, engineering, and education.

An Evolving Concept

The core philosophy of preventive conservation has been around for a long time, but this philosophy has evolved in several dimensions since its inception.

Preventive conservation as an approach has expanded to include decision makers, such as directors and other high-level staff, as well as curatorial, collections management, conservation, preparation, facilities management, and grounds-keeping personnel. In some instances, it even impacts laws, public policy, and the museum visitor.

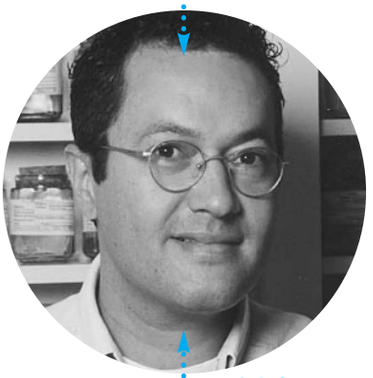
Where once the conservator was a self-contained generalist, he or she is now more likely to be a member of a highly differentiated team of specialists meeting the needs of very complex museum "ecosystems." To be sure, the conservator still treats objects much of the time and may be the sole voice for conservation in the majority of cultural institutions. Nevertheless, the trend has been set. Preventive conservation is becoming everyone's business.

Kathleen Dardes is a GCI project specialist, and James Druzik is a GCI senior scientist.

Preventive Conservation
A Discussion

This spring we asked several members of the profession long associated with efforts to promote preventive conservation to sit down together to discuss the subject. They included Luiz Souza, director of the Centro de Conservação e Restauração de Bens Culturais Móveis (CECOR) at the Universidade Federal de Minas Gerais in Brazil; Colin Pearson, codirector of the Cultural Heritage Research Center at the University of Canberra in Australia; and Catherine Antomarchi, director of the Collections Program at the International Center for the Study of the Preservation and Restoration of Cultural Property (ICCROM) in Rome.

They spoke with Kathleen Dardes, a GCI project specialist, and Jeffrey Levin, editor of **Conservation, The GCI Newsletter.**



Luiz Souza

Colin Pearson

Catherine Antomarchi

Kathleen Dardes: *Have you seen acceptance of preventive conservation increase much over the past 10 years in the regions of the world where you work?*

Luiz Souza: Ten years ago the question was "What is preventive conservation?" Today most conservators, museum personnel, and even some museum directors have some understanding of it. Today there is an interest in the field because we have been directing people's attention to some very specific topics and to broader concerns as well. Now we have a responsibility to respond to questions that have been raised during these past 10 years, so that people won't be frustrated.

Jeffrey Levin: *What are some of those questions?*

Luiz Souza: Technical questions, like planning building renovations, finishing off walls. You can't just say to people, "You have to think about what kind of paint you are going to use," because then they say, "I need to know what kind of paint."

Also, 10 years ago preventive conservation was looking at the object. Then we widened our borders to see objects in their physical context, the room, the climate, the building. This was the first political jump. Now I see—and this is very recent—that the next jump is its context in society. What's the role of that building in that community?

Kathleen Dardes: *Do you mean how is it valued?*

Luiz Souza: Yes, how is it valued. How important it is for the mayor, for example, if he has to choose between dealing with sewage plants or museums? The context now is the social environment. If the museum is in a city, what is its relationship to urban planning and to the problems of urban life? This is the next important idea to get across.

Kathleen Dardes: *This suggests we should be thinking of new collaborations.*

Luiz Souza: Definitely. Today we have not just conservators dealing with conservation, but engineers, architects, scientists—all these people together, open to each others' contributions.

Jeffrey Levin: *This underscores preventive conservation's multidisciplinary nature.*

Luiz Souza: Yes, but really practicing it. Not just discourse, not just talk, but really facing it. It's not easy.

Colin Pearson: In Australia, there are often funds to implement recommendations relating to preventive conservation. In the last few years, we've had some new museums and galleries built where, at the design stage, conservation has been involved with regard to climate and to light levels. However, it doesn't always flow through to the final product. But it's definitely there at the design level. I was talking with one institution recently in connection with a new cultural center that has been designed completely using passive climate control. We've been involved from the beginning, looking at plans, and we're going to be monitoring the development of the museum over the next few years to see if it has achieved its objectives. This could become an exemplar project for other museums.

A major development in the Pacific region is the Pacific Islands Museums Association, which was established with significant input from ICCROM and which is now taking over the development of conservation, museum studies, and museum management and training in the Pacific area. They have been concentrating on collections care and basic preventive conservation.

Catherine Antomarchi: One of the regions where I have been particularly involved is sub-Saharan Africa. There, 10 years ago, the concept of preventive conservation really did not exist. Collections were literally disappearing, and professionals were left to themselves with no training opportunities, no resources. The situation was such as to require a major effort, and ICCROM responded with the PREMA 1990–2000 program. Today preventive conservation is largely diffused within most museums of the area. Another very positive result is that Benin and Kenya took the initiative to create two structures that will continue regional training and awareness programs in this field. This has created hope for future development.

Another region where larger acceptance of preventive conservation can be seen is Europe. In the last 10 years, we saw the development of national programs such as the Delta Plan in the Netherlands, and the increase in training opportunities with, for example, the creation of a special postgraduate diploma on preventive conservation in France. More generally, we saw the creation of new structures and new professional profiles linked to preventive conservation.

Perhaps the next most important challenge is to get involved with the public.

Jeffrey Levin: *How would you define "getting involved with the public?"*

Catherine Antomarchi: It is important that the public be aware of the fragility of heritage—not only of its value but also that it can deteriorate and disappear. Professionals cannot do miracles if the public, which should also feel responsible for taking care of the heritage, does not help them. Public awareness was recently made a new mandate for ICCROM by its member states. Today, in line with other institutions, we are exploring various ways to build close and fruitful relationships between heritage professionals and the public. We also work to involve the media.

Kathleen Dardes: *ICCROM had a project on teamwork for preventive conservation that included museum directors as part of the process. That must have been interesting.*

Catherine Antomarchi: The idea of the project was that instead of having individuals, we had museums as participants. Museum directors were invited to identify the ways in which preventive conservation was ignored in their institutions. What were the weaknesses in the system? Was it a problem of climate? Was it a lack of public awareness? Was it a problem of training or of assigning responsibility within the staff?

Those directors, back in their museums, had to establish a team—guards, educators, conservators, administrators—to work out a plan of action together. What was very interesting is that each museum developed its own objectives and strategy. The project resulted in a great variety of products: one museum created a preventive conservation advisory service, others developed education programs for schools or videos for museum visitors, or they published basic manuals.

In this continuing project, the challenge is, first, to get the team to last—which is difficult sometimes—and, second, to increase the number and variety of museums involved. It is great that the museums in Belgium, Northern Ireland, Portugal, and France that participated in the first project are now advisors to the second set of museums from other countries in the Teamwork 2 project.

Jeffrey Levin: *In the regions where you work, do you generally see museums accepting institutional responsibility for preventive conservation? Do you see conservators gaining more authority in various aspects of the museum environment?*

Colin Pearson: Now it's actually much more common to have a position within the museum as a preventive conservator, or somebody responsible for preventive conservation—which, of course, includes climate monitoring, storage, transport, exhibition, light levels, and so on. In the last year, two or three positions have been created that weren't there before. Of course, preventive conservation is everybody's responsibility—but to make sure that it is promoted, you actually employ a person to take on that responsibility.

Because if it's everybody's responsibility, sometimes nothing happens.

Luiz Souza: One thing that we have to focus on is temporary exhibitions. With globalization, cultural objects are moving much more than in the past. Preventive conservation will be key in preserving these objects. Think about a painting or a polychrome sculpture, for example, that has never left its original church or museum, and now there are demands for it to go to Paris or to another city. In some places—Canada or the United States or Europe—this is more traditional. But this is becoming more common in our countries. And preventive conservation awareness is not enough. You really need to have hands-on, practical work done, because the objects are moving a lot. This is one aspect that 10 years ago was completely different.

Catherine Antomarchi: I'd like to make a point about the increasing movement of objects. If we consider preventive conservation not as a fix but as real anticipation, then our action goes beyond preparing staff to pack objects appropriately and to organize their transport and their unpacking.

Our preventive conservation action should also focus on changing the attitude of the public—and of decision makers—who are becoming used to considering cultural heritage as a consumer product.

A role of preventive conservation, perhaps, is to help the public revalue the heritage that is locally available. Not just the big, publicized international exhibitions, but perhaps the collections that have always been here.

Kathleen Dardes: *What would you like to see for preventive conservation 10 years from now?*

Luis Souza: I'd like to see different professionals working together. Because sometimes we preventive conservation professionals have to play the role of building bridges. Last week, I was working in one situation where I was the bridge between the engineer and the architect—a chemist working to make both happy. So I would be pleased when I am no longer necessary, when people like conservators, engineers, and architects are really able to talk to one another without an interpreter.

Kathleen Dardes: *What would make that happen?*

Luis Souza: Education. Education is something that goes far beyond training. To say someone is well educated in conservation—this means that he is able to understand the multidisciplinary aspects of the problems that we face. This is education. To be trained—I can train a dog to do something. But I can't educate a dog.

I am already working in this multidisciplinary way. The team I have includes one civil engineer and electrical engineer, one mechanical engineer, two architects, one conservator, one scientist, a museum curator—working together and working for the market. We want other people to do this. So I would be very happy when people could talk without the need of interpreters.

Kathleen Dardes: *Luiz, you and Colin are directors of major conservation education programs. Do any of your students see preventive conservation as a primary career path?*

Colin Pearson: What's new is that these positions are being advertised. Some students who would normally train as conservators—and then have a specialization within conservation, for example, in paintings, works on paper, or objects—have decided at some stage that they prefer to go down the path of being a preventive conservator. And that is fine. The opportunities aren't as big, and it is a relatively new approach. And they are not being trained differently at the moment, because it's such a new development; however, preventive conservation is given significant coverage in their training program.

Kathleen Dardes: *In Brazil there seems to be a lot of interest in some schools of museology in preventive conservation. How do you see this contributing to better care and management for collections in Brazil?*

Luiz Souza: There is a problem with some museology courses in Brazil. I don't know if this is the rule in other countries, but I am particularly concerned that the students may leave the course thinking that they don't need conservators. The museologists claim they have the necessary training—plus they have the conceptual approach to the object, which they claim the conservators don't have. This is not true—and it creates an unnecessary conflict. The same happens sometimes with architects. Architects are the ones who are going to manage interventions in a building, because by law they have the right to do so. Conservators are just seen as complementary workers or something like that—like the plumber or the roofer. So for both architecture courses and museology courses, we have to overcome these professional disputes.

Catherine Antomarchi: You asked, where do we want to see preventive conservation in 10 years' time? I would be happy if the public were more aware and actively involved. In Rome this year, hundreds of thousands of people are going to the same places to look at the same monuments. So provisions have been made to put barriers around monuments and isolate them, just like objects in showcases. Is it a fashion? I don't know. Too often, heritage is protected by cutting it off from people. But does this make people more responsible? Respectful? There is nothing new here, but hopefully in 10 years' time, cutting off will not be the safest solution.

"... where do we want to see preventive conservation in 10 years' time? I would be happy if the public were more aware and actively involved."

—Catherine Antomarchi

I also hope that conservators are given the recognition they deserve and that work on historic buildings and heritage is regulated. Also, we need to work with institutions like churches and temples. How prepared are they to protect the heritage they steward? We need to pay attention not only to the heritage that is in public domain but also to that of smaller communities—*Vive la diversité!*

Colin Pearson: I hope for more involvement by the community, in particular by indigenous people, in looking after their own heritage. In the Pacific, people have always looked after their own heritage. They don't think about museums as a way of preserving heritage. They've looked after their own personal collections and the things that they treasure as a community. They've always done it, and I would hope that they would be encouraged to keep on doing it, rather than suddenly putting things into museums—which means that things have to be looked after in a different way, and often not nearly as well as they have always been.

Something I would like to see well established 10 years down the track is passive climate control—to really look at creating stable environments in museums of all shapes and sizes without using air-conditioning. Stable environments can be achieved with the right building materials, the right architecture, and the right design.

Luiz Souza: And the right architect!

Colin Pearson: I agree. But it also has to do with the design schedules from the client and what the client is insisting on. I've seen museum designs in which the first line is "all efforts must be made to use a passive climate control approach." But the architect takes the easy way out and air-conditions the museum. So now somebody has to provide the money for air-conditioning and then, in fact, to pay the high cost of maintaining and running it. For the architects, it's no longer their problem.

There are so many materials available these days to help stabilize relative humidity and temperature in a building, and a whole range of approaches can be taken to provide a reasonably stable climate. These should be encouraged. Now you might say that we need one room, one storage area, one gallery that is air-conditioned, because traveling exhibitions often demand it. Okay, you accommodate that. You've got one major air-conditioned gallery for traveling exhibitions. Everything else uses passive climate control.

Jeffrey Levin: *It does seem as though a lot has changed in the practice of preventive conservation in the last 10 years—which is a relatively short period of time.*

Catherine Antomarchi: There really have been big changes. Heritage has become more and more numerous and encompasses a larger variety of elements, some of which have only a very tiny part that is tangible. This increased number and diversity create new challenges in documentation, storage, care, and intervention choices.

The deterioration factors and risks have multiplied, requiring a change of approach—more surveying and more management skills. Also, the conservation field has changed, involving a larger number of professional profiles and players. Here, the need is to communicate better, to mediate solutions.

Kathleen Dardes: *It seems that although we've recognized that the definition of heritage is expanding to include tangible and intangible heritage, we haven't yet assessed what this means for conservation professionals—and whether we in the profession are all going in the same direction.*

Colin Pearson: At a recent meeting I attended in Nara, Japan, the whole question of tangible and intangible cultural heritage came up, and we all agreed that we should not separate them. You can't start talking about preservation of one without the other. It is really understanding and accepting the cultural context of objects and sites and places—and taking them all into account when you start doing the conservation work.

Funding Conservation

The Getty Grant Program at Work

By Laura Cogburn

In Georgia's remote Upper Svaneti region, a team of specialists is working with local communities to document the 14th- to 16th-century fortified villages of Murkmeli, Chazhashi, Chvibiani, and Zhibiani. Situated high in the Caucasus Mountains, these medieval villages are composed of hundreds of tower houses, which were used as both dwellings and defense posts against invaders who plagued the region for centuries. Since being added to UNESCO's prestigious World Heritage List in 1996, these living villages have become tourist destinations. Economic benefits, as well as conservation challenges, have resulted. Consequently, the Georgia National Committee of the International Council on Monuments and Sites (ICOMOS) and the municipalities themselves are seizing the opportunity to develop a long-range plan for preservation and site management that will accommodate the growing tourism while protecting these rare places.

This comprehensive and interdisciplinary approach to site conservation and management caught the attention of the Getty Grant Program. Like its sister program—the Getty Conservation Institute—the Grant Program is part of the J. Paul Getty Trust. Both programs share the goal of developing new methods and innovative strategies for conserving the world's artistic and cultural heritage, and they both are committed to conservation efforts that can serve as catalysts to advance conservation worldwide. However, while the two programs have similar objectives, they operate very differently. In its field projects, the GCI collaborates with other organizations, using its own staff, expertise, and state-of-the-art facilities to conduct those projects. The Grant Program, in contrast, funds projects organized by institutions not affiliated with the Getty. It is exclusively a grant-making organization, and it provides no technical advice, only financial assistance.

Two views of the village of Chazashi, located in the Caucasus Mountains of Georgia. With funding from the Getty Grant Program, a multidisciplinary project team is working to document this and other villages within the Upper Svaneti World Heritage site, and to develop a conservation plan for preservation and site management to accommodate growing interest in the region while protecting the medieval architecture. *Photos:* Eteri Makhatelashvili and Merab Bochoidze, courtesy the ICOMOS/Georgia National Committee.

The Grant Program, as the philanthropic arm of the Getty Trust, provides crucial financial support for projects in conservation, art history, museum practices, and related fields. While conservation grants may be awarded in support of different types of conservation activities—buildings, works of art, archaeological sites, and training programs—a unifying element is the inclusion of educational opportunities and the potential for the work to make significant contributions to the field.

As in the work of the GCI, field projects supported by the Getty Grant Program incorporate research, documentation, and training, and they are intended to serve as models for future efforts. In Georgia, for example, the preservation efforts extend far beyond the physical stabilization of the structures, to include the conservation of significant works of art and even age-old community traditions. The goal is to understand the multiple values of the heritage to be preserved—historical, spiritual, cultural, and economic—in order to develop an effective and realistic long-range conservation plan.

To approach the complex issues of the Georgian site, ICOMOS Georgia has assembled an interdisciplinary team of Georgian professionals and international specialists with expertise in art history, architectural conservation, materials conservation, engineering, archaeology, and heritage tourism. In close collaboration with local officials and based on the research and documentation gathered during the process, the team will create a long-term strategy to preserve the area and to manage tourism. To ensure that the community has the skills and resources to address current as well as future preservation efforts, the project team developed a series of on-site training components, ranging from student involvement in daily fieldwork to interactive seminars with the local community on the challenges of daily maintenance, repair, and preventive measures.

An equally complex project with local and national training elements is under way in Ghana. In Navrongo—an isolated, arid inland community near the border of Burkina Faso—a project preparation grant from the Getty Grant Program is supporting research and documentation at Our Lady of the Seven Sorrows Cathedral. The project is led by the International Centre for Earth Construction–School of Architecture of Grenoble (CRATerre-EAG), an international organization dedicated to the preservation of this particular building type. CRATerre-EAG is working with the cathedral's bishop and the National Monuments and Museums Board of Ghana to assess the structure's condition and to develop a comprehensive conservation plan.

The church—the last remaining cathedral in Ghana made of earthen materials—is still used for worship. Constructed in 1920 following the arrival of French Canadian missionaries, the cathedral is a fascinating example of the relationship between two cultures: Roman Catholic and the Nankani and Kassena peoples. While the cathedral is European in design, local construction techniques were employed. The walls were built with sun-dried earthen bricks and mud mortar. Beginning in 1973, the cathedral was decorated by women in the Navrongo community, who utilized traditional techniques and mixed Nankani-Kassena motifs and symbolism with Catholic ones.

Unfortunately, the method of applying this traditional decoration is dying out, as the younger generation has fewer opportunities to pursue the craft. Since 1973, the technique has changed drastically as a result of the introduction of commercial paints and the disappearance of the craft of making bas-reliefs. In this instance, the most critical conservation issue is the preservation of knowledge and tradition. This project presents a rare opportunity for elder artisans to share their expertise with younger women.

Exterior and interior views of Our Lady of the Seven Sorrows Cathedral, Navrongo, Ghana. Getty funding is supporting comprehensive conservation planning for this last remaining cathedral in Ghana constructed with earthen materials. ***Photo (exterior):*** **© CRATerre-EAG.** ***Photo (interior):*** **© CRATerre-EAG/T. Joffroy.**

Currently, as part of an overall assessment of the entire structure—supported by the project preparation grant—a plan is under development for the conservation treatment of the cathedral's painted surfaces. There are various causes for the deterioration of the decoration, ranging from bee infestation to chewing gum stuck to the surfaces. To evaluate the damage and develop the most appropriate treatment proposals, testing and assessment of local repair techniques were conducted with the help of the Sirigu artisans who originally created the decoration and the younger Navrongo women who now maintain the church. Traditional plaster and paint mixtures were prepared and applied to sample blocks and selected sections of the wall decoration. The paint mixtures were prepared with materials purchased in local stores or in the countryside. They include cow dung, soft white earth, soro (gluey leaves), locust bean pods, and tree bark.

To sustain these efforts, CRATerre-EAG and the parish are considering the possibility of extending the decoration on surfaces that, according to the original plan of 1973, were left unfinished in the cathedral. The team is also exploring what might be done at local, regional, and national levels to support the transfer of these traditional skills.

Key to the success of this project is the close relationship among the conservation team, decision makers at the parish and diocesan levels, and the National Monuments and Museums Board of Ghana. By providing valuable information to the various stakeholders, the project has promoted a greater recognition of the cathedral's significance and provoked a strong desire to preserve the site. It is particularly critical in projects such as this, where the work will ultimately be completed and the project team disbanded, that all the stakeholders are involved from the outset, since they will ultimately be responsible for the long-term care of a site. Moreover, the involvement of Navrongo government representatives will ensure that techniques, documentation, and lessons learned at the site will be applied to similar structures throughout Ghana and West Africa.

A commitment to sharing conservation knowledge and techniques is also crucial within the museum environment, where conservation practice is often dependent on competing institutional demands for funds, staff, and equipment. In 1997 the Grant Program and the Lampadia Foundation (which works in Argentina, Brazil, and Chile) began exploring opportunities to coordinate their efforts to strengthen conservation practices in Latin America. Visits to museums in the region revealed that in addition to such challenges as outdated equipment and underequipped laboratories, conservators were rarely able to update their skills with midcareer training and had few connections to the broader conservation community.

Discussions between Grant Program and Lampadia staff led to a partnership and grants from both organizations to two Los Angeles–area institutions, the Huntington Library, Art Collections, and Botanical Gardens, and the Los Angeles County Museum of Art (LACMA), which have historically emphasized education and

Karen Barbosa, from Brazil, cleaning a painting by William Sonntag at the Los Angeles County Museum of Art (LACMA). Soledad Abarca, from Chile, working on a volume of Plutarch at the Huntington Library. Both are participants in a Getty-funded training exchange in which professionals from Brazil, Argentina, and Chile work in the conservation laboratories of LACMA and the Huntington. *Photo (Barbosa):* Adam Avila, courtesy the Los Angeles County Museum of Art. *Photo (Abarca):* Courtesy Huntington Library Preservation.

Conservation architects and engineers are shoring the concrete cantilevers of Frank Lloyd Wright's Fallingwater in Mill Run, Pennsylvania. The Western Pennsylvania Conservancy, the steward of the property, received Grant Program funding to conduct extensive research and assessment and to implement recommendations made in the Fallingwater conservation master plan. *Photo (left):* Robert P. Ruschak, courtesy the Western Pennsylvania Conservancy. *Photo (right):* Courtesy the Western Pennsylvania Conservancy.

outreach in their programs for collections care. Two senior conservation professionals—the Huntington Library's chief preservation officer at the time, Mark Roosa, and Joe Fronek, senior paintings conservator at LACMA—then visited South America to explore possibilities for a training exchange. Working with the Getty and Lampadia, they developed a proposal that fell within the educational goals of all four institutions.

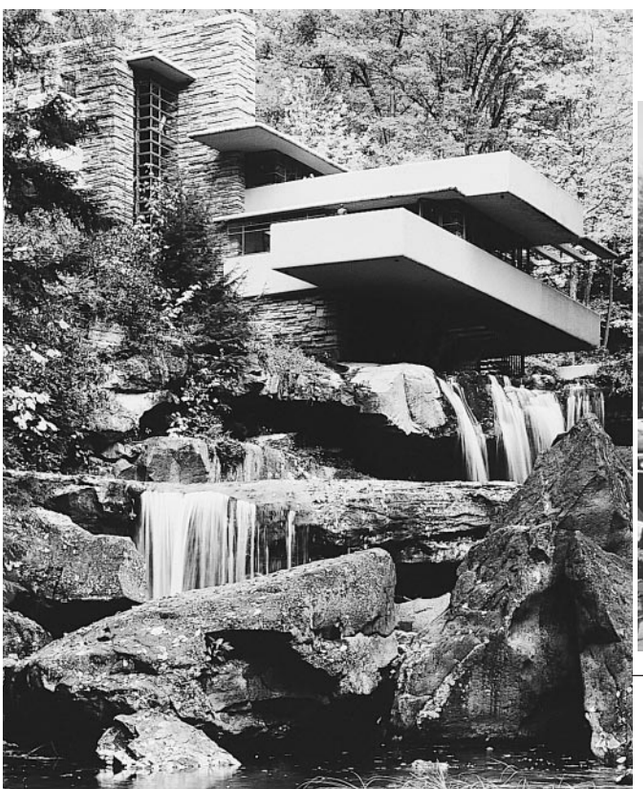
Strengthening the skills of individual conservators who work in institutions, the program serves as an essential step in building a strong infrastructure for collections care. Through visits to and conversations with conservators and collections managers in three target countries—Argentina, Brazil, and Chile—the Huntington/LACMA team identified many of the problems that pose challenges to collections, such as high humidity and environmental pollution. As a result, a training program was tailored to focus on these issues. Over the past three years, Getty and Lampadia funding has enabled seven interns to travel to either LACMA or the Huntington, each spending 10 months working side by side with conservators in the laboratories.

At the Huntington, the two first-year interns were from Brazil, representing the National Archives and the Assoiação Brasileira de Encadernação e Restauro (ABER) training program. Both interns brought particular skills and approaches to conservation that reflected the types of materials conservators are working with and their knowledge of local circumstances. The program sought to expose these conservators to preventive and remedial techniques that the Huntington applies to its rare book, manuscript, and photograph collections, with the idea that these techniques may be adapted to fit conservation needs in Brazil. Built into the internship program is substantial opportunity for the visiting conservators to travel to conferences and workshops and to engage in critical networking that will provide them with valuable contacts and ongoing resources once they return to South America. The host-intern relationship is proving to be particularly valuable as they share their successes and challenges.

Throughout its history, the Getty Grant Program has provided funding support for a myriad of conservation projects—training programs, conservation scholarships, postgraduate intern programs, survey and treatment grants, conservation libraries, and national and international conservation conferences. All proposals are evaluated on their overall merits and the quality of educational opportunities that are integrated into the project. When presented with a proposal, the Grant Program evaluates the educational components to determine whether the opportunities are appropriate within the context of a particular project and its resources; it further examines whether full advantage is being taken to convey experiences and findings to others facing similar challenges.

The goal is to multiply the impact of a particular project and to extend its educational reach beyond the life of that project. This reach might be regional, as in Ghana, or national, as in Georgia. The reach can also be international, as it is with the conservation of architect Frank Lloyd Wright's iconic Fallingwater, for example, a project that takes a different approach to meeting these criteria.

Designed in 1935 as a vacation home for Pittsburgh department store magnate Edgar Kaufmann, Fallingwater is regarded as one of Wright's greatest achievements, with its striking cantilevered terraces, which rise dramatically over the waterfall that inspired the design. Fallingwater, however, suffers from what has been termed "the curse of the innovator"—the lack of durability of Wright's creations. The modern materials and experimental techniques that Wright employed have contributed to the deterioration of the structure. The cantilevered terraces and balconies were inadequate,



and the reinforced concrete used in the structure began to fail almost immediately. The river over which the house was built creates severe moisture problems. When experimental techniques and, in particular, modern materials (for which there is insufficient research) are used, finding solutions to such problems can be difficult.

The Western Pennsylvania Conservancy, which manages the Fallingwater property, received Grant Program funding for planning and implementation of its conservation program. After drafting a conservation plan, the Conservancy, recognizing the complexity of the project and its responsibility as steward of a site of international significance, sought advice from the broader conservation community. Five experts from around the world were invited to a review forum to evaluate the treatment proposals produced as part of the research and documentation phase. Through this rigorous peer review process, the Conservancy produced a balanced and well-researched final document that reflects the input of the international conservation community and that will serve as a guide for the treatment of modern architecture.

Perhaps more than any other building, Fallingwater represents both the design and the technological aspirations of the 20th century. But it is also subject to inevitable deterioration. Realizing that Fallingwater could serve as a laboratory for the study of modern architecture and materials, the Conservancy developed an educational program that spans the length of the three-year project. Training will focus on equipping Fallingwater's maintenance staff with the necessary tools and knowledge to conserve modern architectural materials. This ongoing training will be extended to other historic-house museum maintenance staff and to college interns studying architectural conservation.

Given the ever-increasing competition for limited resources, the Grant Program will continue to identify creative and interdisciplinary efforts that address conservation practice worldwide and the future of the field. Key to this endeavor will be the program's continuing recognition of the many ways in which issues of scholarship, conservation, education, and economics overlap and intersect in the conservation of the world's cultural heritage. The Grant Program's ultimate goal is to support the leaders who are at the forefront of the development of interdisciplinary and sustainable tools to manage and preserve our cultural and living heritage in the complex global society of the 21st century.

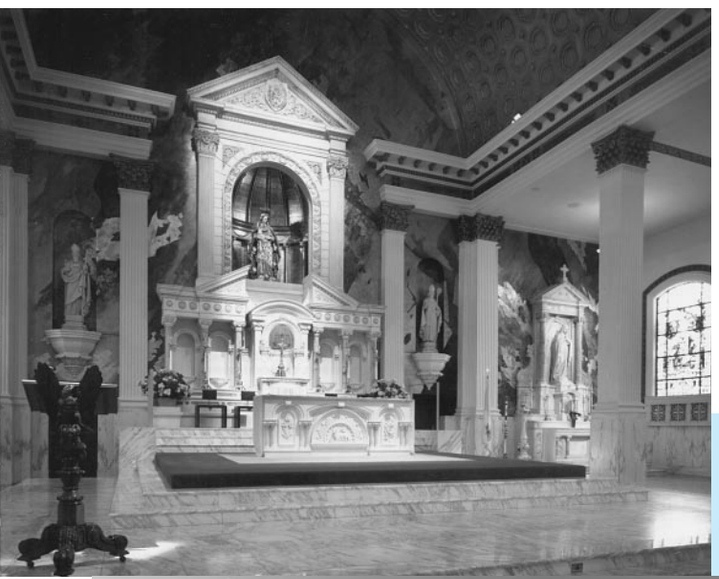
Laura Cogburn is a program associate with the Getty Grant Program.

Conservation and the Getty Trust

The conservation of cultural heritage is supported by research, practice, and financial support throughout the J. Paul Getty Trust, most directly through three programs: the Getty Conservation Institute, through scientific research, education and training, model field projects, and the dissemination of information; the J. Paul Getty Museum, which assists other institutions in the conservation of their collections and hosts visiting conservators; and the Getty Grant Program, which provides financial support for conservation activities, as well as for projects in art history, museum practice, and other related fields. Since its inception in 1984, the Grant Program has given more than $89 million to support over 2,200 projects in more than 150 countries. Of that total support, nearly $30 million has been directed toward the conservation of cultural heritage of the highest significance.

Values and Heritage Conservation

By Erica Avrami

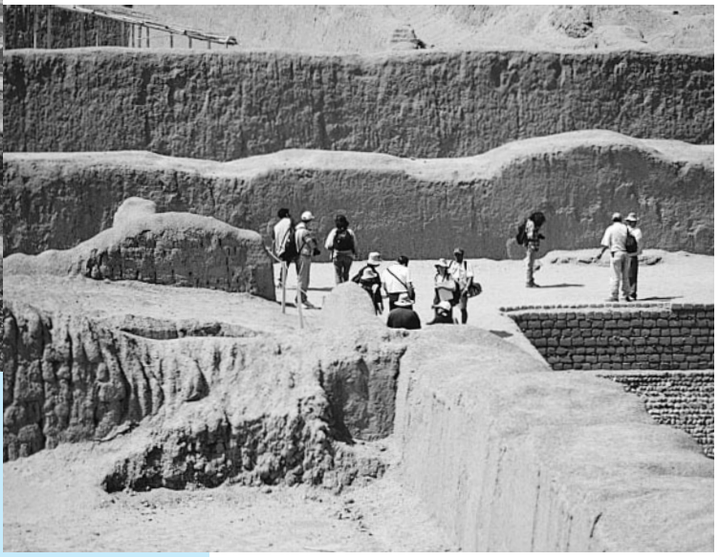


The 1876 Cathedral of St. Vibiana, one of the oldest buildings in Los Angeles. After the structure was severely damaged in the 1994 Northridge earthquake, controversy ensued over its fate. The Archdiocese of Los Angeles maintained that repair of the cathedral was too costly and argued for its demolition and replacement with a new cathedral and community center. Preservationists fought demolition, holding that there were viable options for saving the landmark. Successful negotiation of the many historic, economic, religious, and other values of St. Vibiana's was not achieved. The archdiocese broke ground for a new cathedral at a different location, selling the St. Vibiana site to a developer who plans to integrate the cathedral into a mixed-use project of housing, a restaurant, a school, and a performing arts facility. *Photo (interior):* Carlos von Frankenberg, Julius Shulman Associates, courtesy the Los Angeles Conservancy. *Photo (exterior):* Bruce Boehner, courtesy the Los Angeles Conservancy.

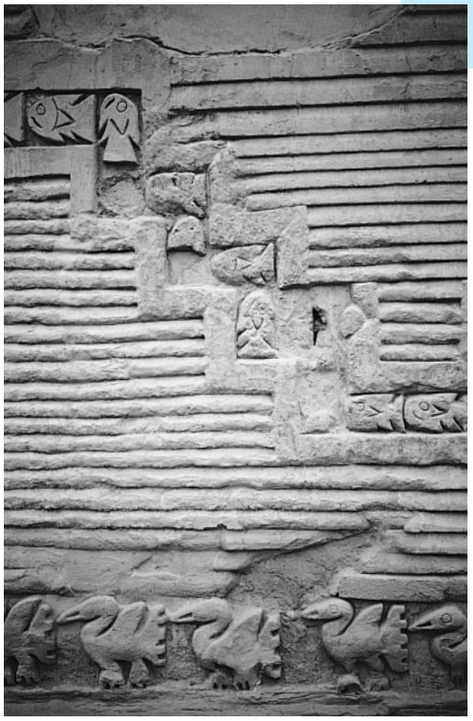
The protected cultural heritage is vast and diverse—archaeological relics and sites, cultural and vernacular landscapes, historic urban districts, industrial and technological artifacts, war battlefields, individual monuments and structures, works of art, and more. These sites, objects, and buildings have acquired significance as cultural heritage because of the values ascribed to them by disciplines or professional fields, ethnic or religious groups, local communities, or other individuals and groups.

In the cultural heritage field, we speak of historical value, aesthetic value, and social value—values that contribute to the meaning of these material remains. These values exemplify why we, as individuals and societies, believe that these remains should be stewarded for future generations. They are the driving force behind the very definition of these things as "heritage," influencing their interpretation and physical conservation. Though material heritage is imbued with certain universal, enduring qualities because of its potential to tell us something about the past, the values ascribed to it may change as physical elements age, as meanings accumulate, and as uses evolve.

To ensure that conservation interventions are attentive to social as well as physical conditions, values need to be understood as part of any conservation planning process and revisited as conditions change. Analyzing values through a participatory process—one that involves the various interest groups with a stake in a place or object—promotes the sustainability of conservation efforts by engaging communities in the care and preservation of their heritage. If the conservation field is to be successful in securing already limited resources for the arts and cultural heritage, our work must be recognized as an important social function. The greater the relevance and sustainability of conservation efforts and the more they serve to foster community building and civic dialogue, the more cultural heritage conservation is embraced by society as a "public good."



The development of a conservation management plan for the archaeological site of Chan Chan in Peru involved extensive consultations with community members, local farmers, tourism operators, developers, politicians, and other interest groups with a stake in the site. As part of the assessment of cultural significance, the values of these various stakeholders were identified and negotiated. This cooperation led to a conservation policy that provides for continued farming, tourism, and other compatible uses, as well as long-term protection and preservation of the archaeological vestiges. ***Photos:*** Erica Avrami, Leslie Rainer.



For printed copies of the *Values and Heritage Conservation* and *Economics and Heritage Conservation* reports, please send an e-mail to: gcivalues@getty.edu or a fax to (310) 440-7712. These reports are also available electronically on the GCI's Web site (http://www.getty.edu/gci), under "Publications," in the "Reports and Articles" section.

Developments in the conservation field over the past 20 years have produced a growing awareness of the need to undertake an assessment of values—often referred to as a "cultural significance assessment"—as an integral part of conservation projects and as a significant means of advancing the field. These efforts aim to ensure that interventions are responsive to a broad context of perceived meanings, issues, and communities and that they do not rely solely on art historical canons and technical traditions. Policy documents such as Australia's Burra Charter and the Nara Document on Authenticity, as well as organizations such as Parks Canada, English Heritage, and the U.S. National Park Service, have advocated a more inclusive, multidisciplinary approach to heritage conservation and have promoted the integration of cultural significance assessments into conservation planning for historic sites, buildings, and landscapes.

These advances in thinking and policy certainly have influenced the work of conservation. Most notably, consultation among conservation professionals, community members, developers, politicians, and others is becoming a more common practice. However, the methods for assessing the values ascribed by these various interest groups remain rather experimental and are not well documented, making it difficult to evaluate their success and to promote the further integration of such assessments in conservation projects. With little information available as to the options for and efficacy of assessment approaches, cultural significance is all too often deliberated by a small group of specialists, such as historians or archaeologists, rather than elucidated through transdisciplinary analysis and community consultation as part of conservation planning.

Since the late 1980s, the Getty Conservation Institute has been promoting integrated planning for the conservation of archaeological sites and other heritage resources. Through conferences, courses, and field projects, the GCI has advocated value-driven

In 1993 plans for an exhibition by the National Air and Space Museum of the *Enola Gay*—the B-29 that dropped the first atomic bomb on Hiroshima—prompted heated debate among veterans, the museum community, historians, politicians, and others. The values and associated meanings bound up in this historic object produced a controversy over its preservation and presentation. Critics argued that the planned exhibition lacked balance in its portrayal of historical events, while supporters countered that the exhibition's message was well grounded in historic evidence. In January 1995, the planned exhibition was canceled. Five months later, the museum mounted a simpler display of the forward fuselage of the *Enola Gay,* along with a videotape about the crew. *Photo (above):* Courtesy the National Archives and Records Administration. *Photo (right):* Carolyn Russo, Courtesy the National Air and Space Museum, Smithsonian Institution.

methodologies for conservation. The challenge in organizing many of these activities has been the lack of theoretical texts and reference cases that illustrate integrated planning processes and, in particular, demonstrate the role cultural significance assessments play in these processes and explain the methods for undertaking them. Though a substantive body of literature has developed in conservation with regard to recording, understanding, and evaluating material conditions, a commensurate body of knowledge has yet to evolve with respect to analyzing values and related contextual factors.

In response to this situation, in late 1997 the GCI initiated a program of research to explore the role of values in cultural heritage conservation, with the long-term aim of identifying, developing, and disseminating methods for and information about assessing cultural significance as part of conservation planning. A 1998 meeting of professionals from the conservation field and allied disciplines launched an ongoing dialogue about the ways in which values are ascribed to heritage, the universal and contextual nature of heritage values, and the influential role conservation professionals play in changing, as well as in preserving, values. The outcomes of this dialogue and associated research have been compiled in a recent GCI report, *Values and Heritage Conservation,* which also includes a series of commissioned essays and an annotated bibliography.

Parallel to the values research, the GCI initiated an economics project to explore the tools and methods of valuing that are developed and employed by the economics field—in particular by cultural and environmental economists—and their potential for adaptation and application to heritage. The GCI report, *Economics and Heritage Conservation,* summarizes initial research in the area, as well as the results of a meeting of economists, anthropologists, conservators, historians, and related specialists held in December 1998. A subsequent meeting held at the Getty in March 2000 continued this effort by exploring ways in which economic valuation methods and assessment tools of the cultural fields could be integrated to meet the specific needs of conservation (see page 22). The results of this meeting will be disseminated later this year.

As connected and complementary efforts, the values and economics research, along with GCI field and training activities, have brought to light a number of common issues that have a significant impact on conservation planning and outcomes. Particular issues include the level of participation—by different disciplines, community groups, governmental agencies, and others—in the assessment of values and in planning generally; the power relationships that exist between these various stakeholders; and the role played by conservation professionals in the planning process. These factors, combined with the types of tools and methods employed for assessing cultural significance, strongly influence the effectiveness and responsiveness of heritage conservation work.

As part of the next phase of GCI efforts in this area, the findings of the values and economics projects will be applied to more empirical research that involves the integration of these ideas and issues in actual conservation projects. The goals will be to test and document methods for identifying interest groups, for assessing cultural significance, and for integrating assessment results with other factors—such as physical conditions, administrative concerns, and so on—in decision-making processes about conservation policies and interventions. The outcomes of these empirical case studies will also be disseminated.

In the long term, this type of information will help build a body of knowledge about assessing cultural significance in the context of conservation. In addition, it will serve to expand and improve the options of tools and methods that exist for conservation professionals, helping them readily integrate values issues into conservation work.

Erica Avrami is a project specialist with the Getty Conservation Institute.

Workshop on Valuing Cultural Heritage

In March 2000 at the Getty Center, the GCI Economics project gathered a small group of scholars and conservation professionals to consider methodological approaches for assessing the values of cultural heritage in the context of conservation planning. Such approaches can strengthen the conservation field's ability to deal constructively with the many, diverse, and often conflicting kinds of values ascribed to heritage—values that strongly shape conservation decision making.

The March workshop was part of the Values and Economics projects that have been under way at the GCI over the last few years. The conceptual discussions of previous phases of work were brought to bear directly on practical and strategic problems in conservation. Topics discussed included values as a central factor in the heritage-creation and conservation processes; the varied nature of heritage values; the need for a variety of assessment methods to appraise these values; the correspondence of values to particular stakeholders in the conservation process; the need to balance economic and cultural values; the need to cultivate broad participation in planning; and practical challenges to using new means of value assessment in conservation planning and management. A report on the workshop, including background papers, will soon be available on the GCI Web site.

With the results of this workshop, the Institute intends to develop a generalized framework for assessing the values of heritage as part of conservation planning, and to begin testing and applying it, with partners, in a few specific projects. This research will be joined with the GCI's ongoing work—through field projects and educational activities—on conservation planning and management.

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China Principles Team Visits U.S. Sites

Neville Agnew

As part of the Getty Conservation Institute's China Principles project—designed to develop nationally applicable principles to guide the conservation and management of cultural heritage sites in China—the GCI hosted a delegation from China and Australia for a study tour of heritage sites in the United States. The April 24–May 10 study tour began with a one-week visit hosted by the U.S. State Department to the Washington, D.C., area, followed by a week in New Mexico and three days in Los Angeles. The project is a collaboration of the GCI with China's State Administration for Cultural Heritage (SACH) and the Australian Heritage Commission.

Site visits in Washington, D.C., New Mexico, and Los Angeles included discussions with site managers, interpreters, park rangers, park superintendents, state preservation officers, archaeologists, private practitioners, and others charged with the care and management of the sites.

The Washington, D.C., segment of the tour included meetings with the U.S. Advisory Council on Historic Preservation, the National Park Service, and US/ICOMOS, as well as a number of site visits. In New Mexico, the delegation toured national monuments, state monuments, and privately owned cultural heritage sites. The delegation also met with tribal leaders at Acoma Pueblo, one of the oldest continually inhabited sites in the United States. In addition, they met with leaders of Cornerstones Community Partnership, which works with communities to revitalize and restore their historic/traditional buildings.

In Los Angeles, the delegation's visit included a tour of El Pueblo de los Angeles Historic Monument. At the Getty Center, the delegation met with GCI director Tim Whalen and toured the Museum, the gardens, and the conservation and scientific labs. GCI staff participated in a presentation by members of the Chinese delegation, followed by a roundtable on impressions of the sites visited, special challenges facing sites in China, and the application of the China Principles.

Cynthia Godlewski

"While in the U.S., we were impressed by the commitment to conservation of cultural heritage on all levels, especially on the community level," said Zhang Bai, deputy director of SACH and leader of the Chinese delegation. "We were also very pleased with the great variety of the sites we visited—from Colonial Williamsburg and Chaco Canyon to the Gamble House. Our visits and our honest and open discussions with the people charged with the preservation of these treasures will be very helpful in refining and finalizing the China Principles document."

In the fall, the Principles will be released under the auspices of China ICOMOS, with the endorsement of SACH. At that time, the sites to be used by the Chinese Principles team for application of the Principles will be selected. Publication in English of the Principles and an illustrated version, which will include case studies, is also planned.

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Principal Project Specialist

Martha Demas
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Workshop for Instructors in Emergency Preparedness

This workshop—held in Santiago, Chile, May 29 through June 3—was the first training activity of the Latin American Consortium, which consists of Latin American institutions committed to strengthening preventive conservation training in the region, and the GCI. The workshop was organized by the Escuela de Arte, Pontificia Universidad Católica de Chile, and the GCI—as coordinators of Consortium activities related to emergency preparedness—and a working group that includes three other Chilean institutions responsible for cultural patrimony: Centro Nacional de Conservación y Restauración (a Consortium member), Consejo de Monumentos Nacionales, and Subdirección de Museos (Dirección de Bibliotecas, Archivos y Museos). Significant funding was provided by Fundación Andes, which supports educational, scientific, and cultural programs in Chile.

The goal of the workshop was to establish a network of people in Latin America who will develop and implement training activities in emergency preparedness, a crucial aspect of preventive conservation. The anticipated long-term result is increased protection of cultural patrimony in emergency and disaster situations. Some workshop sessions were devoted to demonstrating how the Internet can support communication and the sharing of didactic materials. Other sessions addressed teaching methodologies and tools, and included

case studies and interactive exercises such as disaster simulations.

The 16 Chilean participants—selected from 7 of the nation's 13 regions—included archaeologists, architects, conservators, curators, museum directors, and regional directors of the Consejo de Monumentos Nacionales. This group will develop emergency preparedness and training on a regional basis. Eight other participants represented teams from Consortium institutions in Argentina, Brazil, Colombia, and Cuba. These teams will be responsible for initiating a similar training process in their respective countries.

Workshop instructors included Wilbur Faulk and Valerie Dorge of the GCI and Flavia Muzio and Cecilia Beas of the Escuela de Arte, as well as Barbara Roberts and Jane Hutchins, U.S. conservators with considerable experience in emergency preparedness activities and training. In addition, speakers from key Chilean institutions responsible for civil protection and for cultural property were invited to provide participants with a view of emergency response at a national level. An exciting outcome of their participation was the strengthening of the initial collaborative steps undertaken between cultural institutions and civil defense groups.

The GCI will continue to collaborate with network members as they initiate the emergency planning process and training in their institutions, regions and countries.

Terra Research Meeting

A meeting to explore research needs in the field of earthen architecture conservation was hosted by the GCI, CRATerre-EAG, and ICCROM, on May 14, 2000, in Torquay, England. In cooperation with English Heritage, the meeting was organized as a postconference activity of Terra2000, the Eighth International Conference on the Study and Conservation of Earthen Architecture.

This research meeting was one of the activities of Project Terra, a multiyear collaborative effort of the GCI, ICCROM, and CRATerre-EAG, aimed at developing the conservation of earthen architectural heritage—as a science, a field of study, a professional practice, and a social endeavor—through institutional cooperation in the areas of education, research, planning and implementation, and advocacy.

The aim of the meeting was to discuss and prioritize research needs in the field of earthen architecture conservation so as to:

- encourage individuals and institutions (both from within the field and in allied disciplines) to undertake needed research;
- promote and facilitate cooperation among individuals and institutions in the research;
- explore possibilities for research collaboration among the Terra partners and colleagues in the field.

Erica Avrami

The meeting was preceded by a six-week online discussion with colleagues in the field at large to brainstorm about research questions and issues regarding the conservation of earthen architecture. The questions raised during the discussion and ancillary activities were clustered in themes and served as the basis for the meeting's agenda. Eighteen practitioners and researchers from a range of conservation backgrounds participated in the meeting, allowing for an exploration of earthen architecture research needs and questions within the broader context of conservation. The results of the meeting are being compiled, and a report will be available later this year.

Research Meeting Participants

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Architect/Researcher, CRATerre-EAG
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GCI Participants

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Alberto de Tagle
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Jeanne Marie Teutonico
Special Advisor to the Director

Workshop on Archaeological Site Management

On May 19–22, 2000, an international group of architects, archaeologists, tourism experts, and governmental authorities met in Loutraki, Greece, near the ancient site of Corinth, for a workshop on archaeological site management planning that was jointly organized by the GCI and Loyola Marymount University.

The workshop addressed conservation challenges facing site managers, conservation professionals, and other stewards of heritage who confront physical, environmental, economic, and social threats to sites. To provide for the long-term preservation of sites in their care, conservation organizations and agencies have experimented with different approaches to planning, utilizing documents such as the Burra Charter as the basis for the development of site management philosophies and methods.

In recent years, the GCI has worked to advance site planning and management by advocating, teaching, and implementing values-driven planning and by undertaking and publishing research regarding values and economics in conservation. In 1995, as part of these efforts, the GCI and the Getty Museum organized an international conference advocating site management planning as a way to conserve and protect the archaeological heritage of the Mediterranean basin.

Gaetano Palumbo

Building on this experience, the Corinth workshop was held to disseminate management planning concepts, discuss cases from different parts of the world, explore their applicability in the countries of the eastern Mediterranean, and, in so doing, to foster cross-cultural dialogue. The workshop gathered professionals from Albania, Egypt, Greece, Israel, Jordan, Lebanon, Macedonia, Palestine, and Saudi Arabia—as well as GCI staff and planners presenting work from other parts of the world—to discuss current problems of archaeological sites and methods for addressing these problems.

Workshop attendees heard presentations on general concepts and a planning model by the GCI, followed by reports on the development and implementation of site management plans at Chan Chan in Peru and at Hadrian's Wall in the United Kingdom (both plans involved the participation of stakeholders and an assessment of the site's cultural significance as central elements of the process). Succeeding days included presentations on major archaeological sites in the eastern Mediterranean and structured small group discussions in which participants could debate and expand on issues emerging from the case studies. Workshop participants also visited the archaeological site at Corinth—guided by Guy Sanders of the American School of Classical Studies—and used the visit as a focus for discussions about the implementation of values-based planning.

The workshop provided an opportunity for GCI staff to contrast a theoretical model with the practical needs of a diverse group of professionals from different countries and disciplines, and for these professionals to compare experiences and advance their thinking regarding the management planning process.

A generous grant received from Yad'Hanadiv—the Rothschild Foundation—helped support the workshop. In addition, the Corinth prefecture, the IV Ephoria of Prehistoric and Classical Antiquities, and the American School of Classical Studies at Athens generously assisted in the organization of the workshop.

A report on the workshop is being prepared. Information will be available on the GCI Web site.

Meeting on Conservation Education

The GCI has a long-standing commitment to conservation education, reflected in a history of postprofessional courses and seminars. Changes in the conservation field—and the Getty Trust's renewed commitment to education—have prompted the Institute to reevaluate and strengthen its educational program.

Recognizing that this task requires both internal and external consultation, the GCI organized a meeting in Los Angeles from April 25 to 26, 2000, to discuss present and future needs in conservation education, the nature of the constituencies requiring training, and the methods most suitable to meet the identified needs. In addition to GCI and other Getty staff, participants included 15 conservation professionals of diverse background and experience who engaged in two days of discussion and debate with the aim of developing recommendations for future directions in conservation education.

The first day dealt with current conservation practice and trends—and the implications that these might have for education and training. The second day considered developments in education generally, also with an eye to identifying how these might influence the delivery and effectiveness of conservation education.

To frame the discussions on the first day, two participants presented short background papers, one dealing with the conservation of movable heritage, the other with the conservation of the built environment. Each paper looked at the structure of the profession (i.e., how work is accomplished), including the role of the conservation professional, societal and other trends influencing practice, and changing needs and their impact on practice.

On day two, emerging trends in the educational field were addressed in a third background paper, followed by a discussion of their relevance to and adoption by the conservation field. The afternoon of this day was devoted to the development of practical recommendations regarding education needs and priorities.

The event provided a forum for a dynamic and creative exchange of ideas and experiences. Although they are rarely seated around the same table, professionals from the worlds of movable heritage and the built environment discovered many shared concerns, while clarifying areas where needs differ.

A more complete report of the meeting's proceedings and recommendations will be published in a subsequent issue of this newsletter.

Meeting Participants

Catherine Antomarchi
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Secretario Ejecutivo
Consejo de Monumentos Nacionales
Santiago, Chile

Christina Cameron
Director General
National Historic Sites
Parks Canada
Quebec

Debbie Hess Norris
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Frank Matero
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University of Pennsylvania
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Sonya Milly
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Ottawa

Colin Pearson
Codirector
Cultural Heritage Research Centre
University of Canberra
Australia

Eduard Sekler
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Osgood Hooker Professor of Visual Art, Emeritus
Graduate School of Design
Harvard University
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Will Shank
Former Chief Conservator
San Francisco Museum of Modern Art
San Francisco

Luiz Souza
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Giorgio Torraca
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Jill Murphy
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J. Paul Getty Trust

Jerry Podany
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J. Paul Getty Museum

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Marta de la Torre
Group Director, Information & Communications
Getty Conservation Institute

Tim Whalen
Director
Getty Conservation Institute

Mellon Foundation Meeting

The third meeting organized by the Andrew W. Mellon Foundation in a series exploring the state of conservation science in the United States was held March 30, 2000, at the Getty Center.

The first meeting took place in February 1999 in Washington, D.C.; the second was at the Getty Center in August 1999. Both earlier meetings addressed the challenges to growth and development of conservation science in museums, but from different perspectives.

The third meeting included participants drawn from the previous meetings, among them Getty staff members from the Museum, the Conservation Institute, and the Grant Program. Participants reviewed the dual roles of science in museums—technical analysis of objects and conservation research—and the importance different institutions give to these activities. They also identified problem areas associated with educating scientists from within university programs and recruiting talented young scientists from allied fields. These problems restrict the profession's ability to provide a smooth succession of scientists, and they limit growth.

The value of conservation science in nearly every aspect of a museum's intellectual and educational life is demonstrated by the growing number of collaborative projects that combine the expertise of curators, conservators, and scientists. Participants cited numerous examples but felt that the intimidating costs of scientific laboratories were often not counterbalanced by compelling examples of how these capabilities permit the museum to carry out its mandate better and more effectively.

The meeting—chaired by Angelica Rudenstine, senior advisor, Museums and Conservation, the Andrew W. Mellon Foundation, and Alberto de Tagle, group director of science at the GCI—concluded with the expression of a keen interest in seeing the dialogue continued, and in the eventual production of a set of concrete action items.

Meeting Participants

Meg Abraham
Los Angeles County Museum of Art

Pieter Meyers
Los Angeles County Museum of Art

Paul Whitmore
Carnegie Mellon Research Institute
Pittsburgh

René de la Rie
National Gallery of Art
Washington, D.C.

James Reilly
Image Permanence Institute
Rochester, New York

Chris McGlinchey
Museum of Modern Art
New York

Angelica Rudenstine
Museums and Conservation
Andrew W. Mellon Foundation
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Getty Participants

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J. Paul Getty Museum

Kathleen Dardes
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Getty Conservation Institute

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Narayan Khandekar
Associate Scientist
Getty Conservation Institute

Mark Leonard
Conservator of Paintings
J. Paul Getty Museum

Gary Mattison
Project Administrator
Getty Conservation Institute

John Oddy
Program Officer
Getty Grant Program

David Scott
Senior Scientist
Getty Conservation Institute

Dusan Stulik
Senior Scientist
Getty Conservation Institute

Alberto de Tagle
Group Director, Science
Getty Conservation Institute

Conservation Guest Scholars Program

The Getty Conservation Institute has launched a new residential program that serves to encourage new ideas and perspectives in the field of conservation, with an emphasis on the visual arts—namely sites, buildings, objects—and the theoretical underpinnings of the field. The program provides an opportunity for distinguished scholars and professionals to pursue scholarly research and innovative thinking in an interdisciplinary manner across traditional boundaries in areas of wide general interest to the international conservation community.

Conservation Guest Scholars are in residence for three to nine months. They receive a stipend, housing, a workstation at the GCI, and access to the GCI's resources. Grants are awarded on a competitive basis.

Please address inquiries to the Getty Grant Program:

Attn: Conservation Guest Scholars
The Getty Grant Program
1200 Getty Center Drive, Suite 800
Los Angeles, CA 90049-1685
U.S.A.
310 440-7374 (phone)
310 440-7703 (fax)
researchgrants@getty.edu

http: //www.getty.edu/gci

The following individuals will be at the GCI during 2000–2001 as part of the GCI Conservation Guest Scholars Program:

Raquel Carreras
Laboratorio de Investigaciones
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Leonardo Barci Castriota
Chair of the Department of Architectural History and Theory, and Professor of Architecture
Minas Gerais Federal University
Brazil

Sharon Cather
Deputy Director
Conservation of Wall Paintings Department
Courtauld Institute of Art
United Kingdom

Giacomo Chiari
Associate Professor
Dipartimento di scienze mineralogiche e petrologiche
Università di Torino
Italy

Thomas Learner
Conservation Scientist and Conservator of 20th Century Paintings
Tate Gallery
United Kingdom

Blanca E. Niño Norton
Architect
UNDP Voluntarios and University Francisco Maoruduin
Guatemala

Olga Pizano
Architect
Consultant in cultural heritage
Colombia

Sharon Sullivan
Former Executive Director
Australian Heritage Commission
Australia

Eugenio Yunis
Head of Sustainable Development of Tourism
World Tourism Organization
Spain

Carol Cressler

Project Management Assistant, Information & Communications

Dennis Keeley

Françoise Descamps

Senior Project Specialist, Field Projects

Dennis Keeley

Born and raised in Phoenix, Carol Cressler grew up the youngest child of four. Her father worked as a draftsman in the aircraft and aerospace industry; her mother was a public school librarian. Coincidentally—or not—aircraft manufacturing and libraries would figure into Carol's working life.

Attending the University of Arizona in Tucson, Carol started as an art major but switched her focus early on, and she earned a bachelor of science degree in textiles. After working in the restaurant business, she moved to Los Angeles at the suggestion of one of her sisters. Following a year with Continental Airlines in the technical publications department, she was hired by Rockwell International, where she ultimately worked as a supply management analyst in the B-1B aircraft program.

While still at Rockwell, Carol used vacation time to work as a wardrobe assistant on a feature film. Intrigued by the entertainment industry, she left Rockwell, after eight years, for a series of production jobs. Later, she took employment with a small advertising agency.

In 1993 the advertising agency closed its office, and Carol was hired on a temporary basis to work in the GCI's library. After two months, she was made a member of the staff, starting out as a library assistant. Her responsibilities included working at the circulation desk, helping patrons, processing library invoices, and supervising student assistants. She was promoted to senior library assistant in 1995; her new responsibilities included database searching, book ordering, and reference work. She became involved with Web production the following year, and as a result of increased Web responsibilities, she was promoted to project management assistant in 1998.

Today her work at the GCI is focused on Web production. In addition to producing and maintaining the online version of the GCI newsletter, she coordinates various aspects of the creation of new content for the site, including preparing digital images, tracking production of Web material, and maintaining the Web site files. She enjoys the creative and challenging quality of working in this new medium and she appreciates the scholarly aspect of the Institute's activities. Working at the GCI remains for her an opportunity for learning. ■

A native of Belgium, Françoise Descamps grew up in the small village of Tertre near the city of Mons. For many generations her father's family had been builders, and at the age of seven, she decided to become an architect. She retained this interest into college and received a degree in architecture from the Institut Supérieur d'Architecture St. Luc in Belgium, where she also studied art history and developed a special fascination for architectural art nouveau.

During her fourth year of college, she met Professor Raymond Lemaire—a meeting that sparked in Françoise an abiding interest in conservation and urbanism. While pursuing a postgraduate degree in monuments and sites conservation at what is now the Catholic University of Leuven, she worked for Lemaire on several projects. Even later in her career, after becoming a conservation consultant, she periodically collaborated with him on projects, including one in the late 1980s involving the historic center of Quito, Ecuador.

In the early 1980s, Françoise was on staff at UNESCO, working on the conservation of the World Heritage site of Gorée Island in Senegal. In the mid-1980s, as an architectural consultant, she worked on conservation assignments in the Republic of the Congo, the Republic of Benin, and Haiti. During the early and mid-1990s, her projects for GCI, UNESCO, ICOMOS, and the government of Ecuador involved architecture, conservation, and planning. A multiyear project for the Fondation Roi Baudoiun in Belgium was of particular interest to her—a public awareness and conservation effort focused on the preservation of wall paintings in the Brussels region.

As coordinator of a proposal for the master plan for Angkor, Françoise got a taste for archaeological site conservation. In 1997 she accepted a staff position at the GCI , because of the opportunity to manage the Institute's Maya Initiative (her long interest in the region dated to a storybook on the Maya she read in childhood). Her field projects at the GCI have also included the retablo of the Santo Domingo Church in Yanhuitlán, Mexico, and mosaics in situ. Her interests today reside primarily in site and regional management. She likes grappling with balancing conservation and development and seeking a better understanding of the impact of conservation on the social environment. ■