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, education and training, model field projects, and the dissemination of the results of both its own work and the work of others in the field. In all its endeavors, the GCI focuses on the creation and delivery of knowledge that will benefit the professionals and organizations responsible for the conservation of the world’s cultural heritage.

The GCI is a program of the J. Paul Getty Trust, an international cultural and philanthropic institution that focuses on the visual arts in all their dimensions, recognizing their capacity to inspire and strengthen humanistic values. The Getty serves both the general public and a wide range of professional communities in Los Angeles and throughout the world. Through the work of the four Getty programs—the Museum, Research Institute, Conservation Institute, and Foundation—the Getty aims to further knowledge and nurture critical seeing through the growth and presentation of its collections and by advancing the understanding and preservation of the world’s artistic heritage. The Getty pursues this mission with the conviction that cultural awareness, creativity, and aesthetic enjoyment are essential to a vital and civil society.

Conservation, The Getty Conservation Institute Newsletter, is distributed free of charge three times per year, to professionals in conservation and related fields and to members of the public concerned about conservation. Back issues of the newsletter, as well as additional information regarding the activities of the GCI, can be found in the Conservation section of the Getty’s Web site: www.getty.edu
4 **Cultural Property at War** Protecting Heritage during Armed Conflict

*By Corine Wegener and Marjan Otter*

Looking to the past, we can learn much from the ways in which cultural heritage professionals have helped save cultural property at risk in war zones. Looking ahead, cultural heritage organizations and professionals should combine their efforts under the banner of the International Committee of the Blue Shield and its affiliated organizations—the most effective mechanism for the protection of cultural property during armed conflict.

10 **Putting Heritage on the Map** A Discussion about Disaster Management and Cultural Heritage

Rohit Jigyasu, a conservation architect and risk management consultant based in India; Jane Long, vice president for emergency programs at Heritage Preservation in Washington DC; and Ben Wisner, a researcher associated with Oberlin College, the London School of Economics, and University College London, talk with Jeffrey Levin, editor of *Conservation, The GCI Newsletter*.

16 **Rethinking Crescent City Culture** New Orleans Two and a Half Years Later

*By Kristin Kelly and Joan Weinstein*

In New Orleans, a number of cultural institutions were severely damaged by the flooding and high winds of Hurricane Katrina. After the hurricane, all cultural institutions, physically damaged or not, were faced with a New Orleans that had a different demographic and far less tourism than the pre-Katrina city. The survival of the city’s cultural and historic institutions will depend upon their ability to adapt.

20 **“Where’s the Fire?”** Teamwork for Integrated Emergency Management

*By Foeke Boersma*

The GCI has long worked to develop practical solutions to the technical problems faced in protecting collections and buildings in emergency situations. Since 2004 the Institute has collaborated with ICOM and ICOMOS on an education initiative focused on safeguarding museums from the effects of natural and human-caused emergencies.

24 **Projects, Events, and Publications**

Updates on Getty Conservation Institute projects, events, publications, and staff.

**Survey of Conservation Readers** see page 30
At the end of 1943, as war raged in Europe, General Dwight D. Eisenhower wrote to his commanders in Italy, clearly expressing his intent to spare cultural property from damage whenever possible:

"Today we are fighting in a country which has contributed a great deal to our cultural inheritance, a country rich in monuments which by their creation helped and now in their old age illustrate the growth of the civilization which is ours. We are bound to respect those monuments so far as war allows."

This statement and other protective measures for cultural property were a direct result of concerted efforts by governments, the military, and cultural heritage professionals of many of the Allied nations to protect Europe’s cultural heritage during World War II. Nonetheless, countless icons of our shared cultural heritage were damaged, looted, or destroyed during the conflict. In response, the nations of the world gathered in the Netherlands to draft the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, in an attempt to ensure that such losses of cultural heritage during war would never again occur.

However, recent conflicts in Bosnia, Afghanistan, and Iraq demonstrate that cultural heritage remains vulnerable during armed conflict. In recent years, in Sarajevo the national library was burned, and the facade of the National Museum of Bosnia and Herzegovina was pockmarked by snipers; in Afghanistan, objects in the Kabul Museum were defaced, destroyed, or looted and sold abroad, and the great Buddhas at Bamiyan were obliterated; and in April 2003, the Iraq National Museum was looted, and the ongoing lack of security elsewhere in the country allows the continued looting and destruction of thousands of archaeological sites.

There is much we can learn from those instances in the past in which some collecting institutions—through careful planning—successfully protected all or most of their collections during armed conflict. We can also learn from the ways in which cultural professionals have helped save cultural property at risk in war zones. Looking to the future, cultural heritage organizations and professionals should combine their efforts under the banner of the International Committee of the Blue Shield and its affiliated organizations—inspired by the 1954 Hague Convention—as the most effective mechanism for the protection of cultural property during armed conflict.

Lessons Learned from WWII

Observers of history know that cultural property usually suffers during armed conflict. “To the victor go the spoils” was the attitude up until the end of the Napoleonic Wars. By World War II, there were internationally accepted norms prohibiting the looting of cultural property during war.1 However, under Hitler, the Nazis devised the most organized art looting operation ever, stealing cultural treasures from museums, churches, and private individuals in every country they occupied. While both sides in this war were responsible for the destruction of countless historic buildings, monuments, and cultural heritage sites during military operations, many Allied nations also mounted some of the most comprehensive efforts ever attempted for the protection of cultural heritage during war.

In the mid-1930s, many European museums and cultural institutions began long-range planning for war by making lists of important objects, coordinating transportation via truck or rail, and scouting appropriate offsite storage locations. Museums stockpiled construction materials for crates and for reinforcing their buildings against bombing.

When war finally arrived, many museum staff evacuated their institutions, sending their most precious objects away for safekeep-

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1. During World War II, the Hague Conventions on the Laws and Customs of War on Land, 1899 (Hague II) and 1907 (Hague IV) governed the conduct of the war. Seizure of cultural property was clearly forbidden.
ing. At the Louvre in Paris, the galleries were emptied. In Amsterdam, Rembrandt’s famous *Night Watch* was rolled up and hidden. In Italy, Michelangelo’s *David* was bricked up in its own tower, and workmen built a protective structure in situ around the Arch of Constantine. Da Vinci’s *The Last Supper* fresco received a wooden wall reinforced with sandbags, saving it from a stray bomb that later destroyed much of the church. While museums in the United States remained open, many institutions, including the Metropolitan Museum of Art and the National Gallery, moved their most important objects to remote sites.

From the beginning of the war, cultural heritage professionals and organizations in several Allied countries lobbied for comprehensive programs to protect cultural property, both at home and abroad. One such U.S. committee helped create the Monuments, Fine Arts, and Archives (MFAA) teams within the U.S. Army Civil Affairs Division. The MFAA teams—mostly composed of museum professionals, art historians, and other cultural heritage experts already serving in the military in another capacity—were responsible for identifying important cultural sites on military maps so that pilots and artillery could avoid them. MFAA officers followed the battle, entering liberated towns just behind the combat forces in order to protect and salvage cultural sites. Several Allied nations also organized a small number of MFAA-type troops who worked alongside those from the United States. Toward the end of the war, when Allied forces discovered repositories of thousands of objects looted by the Nazis, the MFAA teams were given a new and monumental task: removal of these objects to various collecting points for cataloguing and restitution to their countries of origin. The MFAA teams (recently recognized by the U.S. Congress for saving thousands of works of cultural heritage) were part of the most effective effort ever undertaken by the military to protect cultural property during wartime.

These extraordinary examples of how, in the past, cultural heritage professionals prepared for war and lobbied their governments to protect cultural property during war can serve as guides for today’s professionals on ways to protect collections during and after conflict in the future.

**Cultural Property in a Twenty-First-Century War**

While World War II provides multiple instances of museums preparing for major armed conflict, more recent examples of actions by other courageous colleagues in areas of conflict are also instructive. The looting of the Iraq National Museum is a case in point. The press initially reported that more than one hundred seventy thousand objects, the entire contents of the museum, had been looted; it was later learned that there were actually closer to half
a million objects in the collection, many of which had not been catalogued or were deposited there from other regional museums for protection. In fact, only about fifteen thousand objects were taken. Key staff members removed and hid most of the collection in the weeks prior to the U.S. invasion. While the losses were tragic, they were a fraction of what they might have been had the staff not carefully planned and executed an evacuation of the galleries. In addition, staff used cement blocks to close up several entrances and storage areas to hinder looters, surrounded dozens of immovable sculptures and friezes with foam to protect against bomb damage, and sandbagged the floor of the Assyrian Gallery to protect the large stone friezes in case they fell during bombing. Finally, well in advance of the invasion, the staff painted the international symbol for the protection of cultural property, the blue shield, on the roof of the museum.

While these precautions were instrumental in saving much of the collection, small oversights proved disastrous. For example, the lack of a key control system allowed keys for secure storage to fall into the hands of the looters, giving them access to areas they might not otherwise have reached. More than four thousand ancient cylinder seals were lost from one storage area alone. Comprehensive emergency planning on the part of museum staff can prevent such oversights.

The Coalition Forces in Iraq did not have the kind of MFAA units that were present during World War II. While most countries still have Civil Affairs units, few cultural heritage personnel serve in today’s military, leaving most military commanders without this expert advice. Furthermore, units receive little training on cultural property protection beyond instructions to avoid damage during military operations. Some European nations maintain Civil-Military Cooperation units, including a small force of reservists who are cultural heritage professionals; however, their deployment is often hindered by their nation’s rules regarding entry into combat areas. One result of these limitations was that in the spring and
summer of 2003, the team of cultural heritage professionals working with the staff of the Iraq National Museum was very small, including a few government civilians and military personnel (none of whom were conservators) from the United States, the United Kingdom, Italy, and the Netherlands.

After the looting, Iraq National Museum staff had to deal with damaged objects left behind. What looters could not carry away, they often smashed, either out of malice or to obtain salable fragments. The museum conservation staff had little or no advanced conservation knowledge (United Nations sanctions had long prevented staff from receiving training), and broken objects languished in the conservation lab. Many cultural heritage professionals—including conservators, archaeologists, and curators—volunteered to assist but were denied entry because they were not part of their country’s ministry of state team or part of a nongovernmental aid organization, which could enter the country with ease and set up operations. The few cultural professionals who entered Iraq did so using temporary press passes, or they were brought in by their governments to make assessments—not to perform conservation. (It would be nearly a year before the Italian government sent conservators to provide training for the Iraqi museum staff.)

To avoid these problems in the future, cultural heritage professionals need to work collaboratively. The obvious and best way to do this is to work within a nongovernmental organization modeled on humanitarian aid organizations like Doctors Without Borders or the International Committee of the Red Cross—in other words, the International Committee of the Blue Shield (ICBS) and its constituent organizations.

**The Blue Shield Committees**

The ICBS was inspired by the 1954 Hague Convention, which was the first international treaty focused exclusively on the protection of cultural heritage in the event of armed conflict. States Parties to the Hague Convention are a network of more than one hundred nations that have agreed to mitigate the consequences of armed conflict and to take preventive measures during peacetime, rather than during hostilities, when it is usually too late. (While neither the United States nor the United Kingdom has ratified the Convention, in 2004 the United Kingdom stated its intention to do so, and there is a movement under way to promote U.S. Senate ratification.)

The ICBS was founded in 1996 to work for the protection of cultural heritage by coordinating preparations to meet and respond to emergency situations; however, the ICBS essentially consists of only the directors of its constituent bodies: the Coordinating Council of Audio Visual Archives Associations, the International Council on Archives, the International Council of Museums, the International Council on Monuments and Sites, and the International Federation of Libraries and Archives.

The Second Protocol of the Hague Convention, drafted in 1999, gave the ICBS a specific function under the Convention. Among other things, it asks parties to the Convention to consider registering a limited number of refuges, monumental centers, and other immovable cultural property in the International List of Cultural Property under Enhanced Protection (maintained by UNESCO); to consider marking certain important buildings and monuments with a special protective emblem of the Convention (the blue shield); to establish a system of protection for cultural heritage of the greatest importance for humanity; and to establish special units within the military responsible for protecting cultural property. The Second Protocol names ICBS as a nongovernmental organization with the relevant expertise to recommend specific cultural property for inclusion on the International List. ICBS and its constituent bodies are also named as eminent professional organizations with formal relations with UNESCO that can advise and assist the Committee of States Parties to the Hague Convention.

**Blue Shield National Committees**

A country need not be a States Party to the Hague Convention in order to establish a Blue Shield national committee. Established national committees include those in Australia, Belgium, Benin, Chile, Cuba, Czech Republic, France, Israel, Italy, Macedonia, Madagascar, the Netherlands, Norway, Poland, Senegal, United Kingdom and Ireland, and the United States.
A number of countries have established national committees of the Blue Shield, which can play a crucial role in the execution of actions required by the Hague Convention. Currently there are seventeen established Blue Shield national committees and twenty committees under formation (see sidebar). Organizations representing museums, libraries, archives, and archaeological sites make up the membership of these national committees. National Blue Shield committees may focus on domestic or international needs and natural disasters, armed conflict, or both. Blue Shield committees can also help raise awareness about cultural property at risk from armed conflict and sometimes act in an advisory capacity to train cultural professionals or provide them with necessary expertise. Two national committees—one in the Netherlands and one in the United States—illustrate activities that committees might undertake to promote protection of cultural property.

During flooding in the Czech Republic in August 2002, the Dutch Ministries of Culture and Foreign Affairs financially aided Blue Shield Nederland (founded in 2000) to buy equipment to preserve paper objects in several Czech museums. Blue Shield Nederland also organized the transport of the equipment and the assistance of senior officers of the Dutch National Archive, who offered their expertise to begin the monumental task of paper conservation. The initiative began slowly, due to coordination and logistical problems; however, two thousand cubic meters of paper were frozen to preserve these materials in advance of treatment. (The experience acquired during this project enabled Blue Shield Nederland to provide similar assistance after the 2004 fire that destroyed the Anna Amalia Library in Germany.)

Blue Shield Nederland could act in this instance because there was no immediate threat to life, because the authorities cooperated fully, and because the usefulness of the project was unquestioned. It was also important that the request for help came from the National Committee of the Blue Shield of the Czech Republic itself. This Blue Shield project was executed within the regular cultural channels and therefore was quite effective. It was relatively easy to realize and could be replicated in other natural disasters.

The U.S. Committee of the Blue Shield (usCBS) was founded in 2006 in response to the looting and subsequent problems in providing international assistance to the Iraq National Museum. usCBS, a charitable nonprofit organization (as are all national committees), focuses on the following: offering cultural property protection training to U.S. military units deploying to Iraq, Afghanistan, and other parts of the world; promoting U.S. ratification of the 1954 Hague Convention; and coordinating with domestic cultural heritage organizations and other national Blue Shield committees to provide a worldwide deployable force of cultural heritage professionals to advise and assist in the protection of cultural property damaged or threatened by armed conflict.

The military training program is the most active, providing instruction for Civil Affairs units. usCBS, the Archaeological Institute of America, and the American Institute for Conservation of Historic and Artistic Works (aic) each provide cultural heritage experts in their respective fields to present a daylong course on the identification and protection of cultural property in all media. This in turn gives Civil Affairs soldiers the basic knowledge to advise the commanders of the combat units they support on how to deal with cultural property protection issues. The training, funded by the organizations offering the training, is provided at no cost to the military. The response has been very positive, and a number of future sessions are scheduled.
Association of National Committees

Since ICBS consists only of the directors of its constituent bodies, it lacks the ability to deploy personnel to assist in a cultural heritage emergency. For this reason, the ICBS and various Blue Shield national committees initiated the development of an Association of National Committees of the Blue Shield (ANCBS) in September 2006. ANCBS will serve as the central contact for requests for help to preserve endangered cultural heritage and provide administrative coordination of relief operations among other organizations. ANCBS will promote the Blue Shield organization, both in the heritage sector and among other relief organizations. Finally, it will maintain an international list of available specialists in the area of disaster prevention and containment in each member country, along with a central information and expertise center and Web site.

The city of The Hague has offered financial and logistical support for ANCBS to house its headquarters in that city. In the past year, the ANCBS working group has drafted organizational statutes, has begun developing a Web site, and has continued to assess its role alongside that of the ICBS. In 2008 ANCBS plans to incorporate in the Netherlands and begin fund-raising to finance future operations with three goals in mind. First, it wants to provide expertise to cultural heritage organizations seeking advice on preventive measures, preservation, and restoration of cultural heritage through the self-help database on the Blue Shield Web site (in cooperation with expert organizations in this field). Second, it plans to develop teams of cultural heritage experts who will provide direct assistance to cultural heritage organizations affected by natural disasters or armed conflict, and it plans to provide the logistical means to deploy these experts where they are most needed (in a manner similar to that of organizations like Doctors Without Borders). And third, Blue Shield national committees will stimulate preventive measures by raising awareness and improving coordination with their respective governments and military organizations.

The success of these plans depends greatly on the level of participation and commitment of cultural heritage communities in each nation to their national Blue Shield committees—and on the development of national committees where they do not exist. As is the case with institutional emergency plans, this type of coordination cannot be done on an ad hoc basis in the midst of a disaster, nor can it be done amid turf battles among the various interested parties. It must be a long-term, coordinated, mutually beneficial process involving cultural heritage organizations from all sectors.

In the past, one of the most important measures to protect cultural property during armed conflict was the preventive planning done by institutions. During World War II, museums that succeeded in saving their collections began planning years in advance, using the same emergency planning techniques as always, but extending their worst-case scenario to the possibility of war. Emergency planning is even more important today, given the willful destruction and looting witnessed during recent conflicts and the possibility in many places of terrorist attacks. Cultural heritage organizations should recognize that government and military resources often do not have the expertise or available personnel to provide assistance, particularly if they are concerned with saving lives. Therefore, cultural heritage organizations must themselves assume responsibility for protecting collections and planning for the worst.

Cultural heritage professionals also have a responsibility to colleagues around the world to work together to protect heritage during armed conflict. The International Committee of the Blue Shield is the most logical umbrella organization under which this effort can be carried out. Blue Shield national committees, by uniting the many cultural heritage organizations and individual professionals within a nation, can better influence lawmakers, increase public awareness, and improve coordination with their respective militaries—which, as the situation in Iraq demonstrates, is crucial for protecting and preserving cultural heritage in war zones. The various national committees of the Blue Shield are also stronger when they band together as the Association of National Committees of the Blue Shield, providing a central clearinghouse for requests and supporting an international network of cultural heritage professionals eager to help by putting their skills to use.

The choice is ours. If we, as cultural heritage professionals, continue to act as individuals and function within a variety of discrete organizations, we will almost certainly fail the next time colleagues in a war-torn country need us. However, if we unite in support of the Blue Shield organizations created to protect cultural heritage during armed conflict, we can make our voices heard and perhaps even be influential enough to prevent the “next time.”

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For further information, visit the following Web sites:

Blue Shield Nederland www.blueshield.nl/index.en.html
U.S. Committee of the Blue Shield www.uscbs.org
Jeffrey Levin: Let’s start with what may be the biggest question. In the post-disaster environment, how do we appropriately balance the preservation of heritage, whether it’s movable or immovable, with the profound human needs that inevitably arise in these circumstances?

Ben Wisner: The answer is interdependent with other issues we want to address—such as the possible positive roles of heritage and heritage collections in social, psychological, and economic recovery. Broadly speaking, this goes to the question of who’s making decisions. You could rephrase the question to ask, “Where does heritage preservation, including movable and immovable heritage, actually fit within the discussions that are currently going on in this very broad and international discussion?” Between 1990 and 1999, there was an international decade for natural disaster reduction, which started off in a narrow way but broadened out to include a strong commitment to community participation. At present, there is a worldwide initiative headquartered in Geneva in the United Nations International Strategy for Disaster Reduction that attempts to bridge decision making and responsibilities between nations and government agencies and the local level, including academia, NGOs, nonprofits, and other parts of the private sector. Also at the moment, there’s the Hyogo Framework of Action, an action document that came out of the World Conference on Disaster Reduction that took place in January 2005 in Kobe, Japan, and that is supposed to be a framework that pulls different actors together and encourages them to do things at the local, national, and international level. If you look at all these things that have been going on, broadly speaking, the question of cultural heritage really hasn’t come up—which I find interesting and troubling.
Jane Long: That’s been true in the United States, too. The business community, for example, is thinking about how to build disaster-resistant communities and trying to create coalitions broader than ones they’ve considered in the past. I went to a U.S. Chamber of Commerce meeting last year and was the only representative from the cultural heritage community. They’re thinking about schools and businesses and infrastructure, but they overlook the resources that we have to offer. It’s not that they’re hostile to us—they’re just not thinking about it. It’s only recently that the Department of Homeland Security’s National Response Framework, which has annexes for emergency response functions, incorporated cultural heritage into a function for protecting agriculture and natural resources. It’s a long process to get our profile raised.

Rohit Jigyasu: You are very right to say that heritage is not on the agenda of overall disaster reduction. As you suggested, Ben, disaster reduction is considered a much more humanistic discipline than in the past. There is a growing realization that disasters are not merely natural events to be resisted through technology but are inherently linked to social, developmental, and cultural aspects. Still, cultural heritage as a specific element in a disaster situation is not really addressed. Some initiatives have been taken in the recent past, but the participation of the wider disaster management community is very limited. We, the heritage professionals, are very happy to talk to one another, but the wider world of disaster management—which is huge—either is not interested or not aware that heritage has to be looked at in a specific manner.

Coming back to the question that was posed as we started—there is a problem of perception, as heritage is still looked at in a very elitist manner. The question is often raised: “When people’s lives are at stake, why are we talking about elitist things—monuments or some remains from the past—that have no relevance today?” The point here is that the whole definition of heritage is really different from the popular perception, no? We in the heritage professions are indeed stressing that the past has relevance in the present—that it is part of community resilience mechanisms and traditional knowledge systems. Therefore, heritage is not passive. Rather, it has an active role to play in reducing disasters. We have to disseminate this broader understanding of heritage to the wider disaster management community.

Long: One thing that Heritage Preservation has tried to do is to develop practical approaches that involve bringing emergency managers into our world and getting to know them better. They’re very busy people, obviously, but we’ve found that it’s not a problem to convince them that heritage and historic resources are important in their communities. It’s just getting on their radar. If there’s a fire or a flood threatening an institution that’s a keeper of local history, the first responders and emergency managers really want to do the right thing and help.

Wisner: I’ve been meeting with some Tanzanians and some Kenyans to discuss climate change, but we’ve also talked about the terrible post-election violence in Kenya and the eventual recovery of Kisumu, the second largest city in Kenya, which has had extensive damage—a lot of burning and looting. My colleagues said that in the course of rebuilding, attention should be paid to the churches and the mosques, which are important symbols of continuity, hope, and psychological well-being for the inhabitants. That’s true here. In New Orleans, there are maybe one hundred thousand structures,
many of them in the Ninth Ward, that are not yet repaired, and the responsibility for condemning and demolishing them has been turned over from the Federal Emergency Management Agency [FEMA] to the City of New Orleans. A Baptist church in the Ninth Ward that had been, with great toil and sweat equity, repaired to a large extent by the parishioners and by the pastor at their own expense was suddenly demolished. It got on the wrong list. The interviews I heard on National Public Radio with people affected were just heart wrenching. This wasn’t Chartres Cathedral, but it had a very important role in people’s lives. We need to explain this to our colleagues in emergency management, and to sell heritage preservation as a whole package that runs from a world-class museum or collection to a small working-class mosque in Kisumu or a Baptist church in New Orleans. I think people can understand that.

Jigyasu: One reason why these churches and other important structures are not being protected is because there is no documentation or legislation existing for their protection. There might be an agency for disaster management that is in charge of reconstruction or rehabilitation—there might be rescue agencies, there might be volunteers—but they are not aware of important structures existing in the city. Therefore, prior documentation and protection and their accessibility to these agencies are very important to save heritage during post-disaster rehabilitation.

Wisner: Now you’re talking my language. My PhD is in geography, and I immediately think of hazard and vulnerability maps that could easily be generated from the bottom up. FEMA under the Clinton administration was very committed to mitigation and to this kind of partnership of ordinary citizens and the private sector and local government. They had something called Project Impact, where they worked with local steering committees to make local risk assessments and plans. And those local plans could easily include such maps. At the moment, when you do a contingency plan, you obviously mark all the hospitals, fire stations, and schools. Why shouldn’t there also be a category of heritage structures and collections on these maps? And it should include, I would think, things like zoological collections and botanical gardens.

Levin: I’d like to explore further the positive role that the preservation of movable and immovable heritage can play for a community, and why it’s important that these things get some attention prior to and post-disaster.

Long: We were reminded after Hurricane Katrina that some of the small institutions, such as historical societies and public libraries, are often the keepers of community history. Getting that message across has to be accomplished on two levels. One is at a policy level. In most places there is an emergency operations committee with representatives from various segments of the community—business, hospitals, and other sectors. On a policy level, we’re encouraging that there be a seat for the cultural heritage community at this emergency operations center where discussions take place about planning and mitigation. On the institutional level, we in the heritage community have to take the initiative to approach local emergency management agencies, as well as the first responders—the firefighters and police who are likely to be on site in the event of an emergency. It’s not always a hard sell. For example, in the state of Florida, public libraries are officially designated as institutions that provide an essential service after disasters. They get electricity restored more quickly because they’re recognized as a resource for citizens, who can use the computers to find relatives and learn about FEMA grants and other assistance.

Wisner: In many ways, Florida and also North Carolina are ahead of the curve because of the experience of Hurricane Andrew, and later Hurricane Floyd, which affected North Carolina so terribly. In both these states, public libraries are included in disaster planning. I’d like to suggest that in the future, libraries have even more of a proactive role in terms of information. Some of them, together with historical societies, may very well have information that the county or city planners don’t have about prior disasters. That’s really important for the local planners to know.

There is an international data center at the Centre for Research in the Epidemiology of Disasters at Université Catholique de Louvain in Belgium that is kind of the gold standard in terms of databases of disasters worldwide (www.emdat.be/). It’s the one used by the International Federation of Red Cross and Red Cres-
cent Societies in their annual report. But its main limitation is that it only includes major events reported by national governments or major aid organizations. To remedy this, some researchers in Latin America developed a database, which is available online in English and Spanish, called DesInventar, that uses local and regional newspapers and picks up small and medium events that are significant locally but never make it into their national press, let alone international awareness (www.desinventar.org/). In post-tsunami Asia, DesInventar has been implemented, in, I believe, four Indian states, Indonesia, and Sri Lanka, and it has also inspired an urban disaster database in South Africa.

Jigyasu: To add to what Ben has said about linking local to global, it is very important that the heritage field, which has its own international network, link up to the international disaster management network. An organization like the International Committee of the Blue Shield (ics)—which is a very important international platform trying to help countries save heritage in disaster situations—has to interact with whatever disaster management initiatives are going on at the international level. [See p. 4.]

Levin: How does cultural heritage get a seat at the table in those discussions? How do you achieve greater integration of heritage concerns with the wider concerns of those involved in disaster management?

Jigyasu: One place where this integration can happen is at the heritage management level. A site manager or a director of a museum can develop a well-thought-out coordination plan with the local municipality, the local fire office, and other key players in disaster management. At present, such collaboration is missing in most cases. A fire officer will happily come to a museum and train the staff on how to use fire extinguishers, for example. Such little initiatives, which can happen between the actors within the heritage field and the ones in the disaster management area, can develop this kind of close cooperation before an event.

The other thing, which is very important, is that both the heritage and the disaster management sides should be able to understand one another’s terminology. There is little understanding of cultural heritage vocabulary within the disaster management field. Similarly, within the heritage field, there is little understanding of the key words used by those in disaster management. We can’t communicate if we in the heritage community use terms the disaster field doesn’t understand, and the disaster field uses terms that have different meanings for us.

Wisner: Site managers and collection managers have to be proactive at the local level. The planners and the first responders aren’t going to take the initiative. It would also help if at the international policy level, there were more visibility to the topic. The Pan American Health Organization, the World Health Organization, and the International Federation of Red Cross and Red Crescent Societies are quite aware of the role of psychosocial trauma and post-trauma in recovery. There’s a hook there that could be used to get more attention for the importance of various kinds of cultural heritage that provide identity anchors for people in their community, spatially and socially. I’ve been in this business over forty years, and for quite a while, the perception was that social psychological issues in disaster recovery were a luxury of industrial countries and affluent people. Fortunately, over the last twenty years, there’s been a lot of advocacy from civil society—in South Asia in particular, but elsewhere too—that says, “Look, these are human beings and they suffer just as much as anybody else from grief and loss.”

There is also an organization called the International Council for Local Environmental Initiatives, the icli, that has been implementing something called Local Agenda 21. It’s a network of about seven hundred cities of different sizes around the world doing various environmental sustainability projects. Last year they started a network initiative in disaster risk reduction—and given that a lot of cultural heritage is in towns and cities, this would be the sort of thing that they may well want to take on board. If they did, seven hundred cities would be getting information about this. So, at the same time that the local heritage managers are being proactive, this kind of legitimating information could be coming from the top down.

Long: In 2003 Heritage Preservation launched a project called Alliance for Response, in which we’ve had meetings in cities to bring cultural heritage leaders and emergency responders together. A couple of strategies for approaching emergency responders come to mind. One has to do with safety. Museums may store flammable or toxic substances, and historic buildings, which may not be quite up to code, can also pose hazards. Emergency responders want to know about these issues for their own safety and also so that they can do their jobs better. Another approach is to make the personal connection. We know that once people are safe and they have food and shelter, they start thinking about the irreplaceable treasures from their own lives—family photos, the heirloom wedding dress. We can provide a community service because we have the knowledge to help them salvage those pieces of family history. That’s a link between the personal and the societal. There were conservators after Katrina who organized clinics for people, which was a great effort. That’s one of the ways you build awareness for preservation.

Jigyasu: One such initiative aimed at building awareness was undertaken in Kobe, Japan, following the 1993 Great Hanshin-Awaji earthquake. Objects salvaged after the earthquake have been exhibited in a specially designed museum, which serves as an important source of memory for such disasters.
Wisner: The earthquake museum in Kobe is a stunning building with a wonderful collection. I think around three or four hundred thousand school students go through there every year. It’s amazing. Headquartered in that building is the Disaster Reduction and Human Renovation Institution. This Japanese institution has partnerships to develop museums around the world in jurisdictions that have had disasters. Another example is the tsunami museum in Hilo, Hawaii, which I visited some years ago. It’s a modest collection, more like a science museum, but it’s a community educational resource—and this ties back to heritage. In some ways, disasters themselves can become heritage. That’s an important point, because the memory of these things is very short. This comes up again and again in the literature of hazard perception. It’s one of the reasons many people, including myself, argue that developing tsunami early warning systems and community drills in potentially tsunami-affected countries have to be tied to systems and community exercises in response to events that are much more frequent. The next tsunami could come tomorrow, or it could be in five hundred years. However, all of those countries are annually affected by typhoons and cyclones. If you tie the two together, you build on memory that is fresher.

Levin: Are there positive roles, such as providing shelter, that built heritage can play during emergencies?

Wisner: A lot of people seek shelter in churches, and to the extent that people do spontaneously go to churches and temples, the pastors or the imams—or whoever is maintaining these—have to be aware that they need to prepare and have the resources, as well as have these buildings looked at and assessed for their structural soundness. This is something, I believe, that the Church World Service is promoting with a whole network of Protestant denominations, sending out publicity to thousands of ministers, saying preparedness starts with your church. Is your church seismically sound? Is it in a flood plain? What is your water supply? How many toilets do you have? And so on.

Jigyasu: The notion of life safety buildings or life services is really important. In India, an important initiative is under consideration by the national agency responsible for disaster management, which is considering including monuments in its official list of lifeline buildings besides hospitals and schools. They have realized that these landmark structures are important not only for their significance to the community but also because they are visited by thousands of tourists. As a result, there is a likelihood of a big concentration of people in and around these, when a disaster happens.

Long: Absolutely. When reaching out to emergency managers, we need to remind them that museums and other cultural institutions often have school groups visiting who are not familiar with the building and are accompanied by only one or two adults. Many museums are not prepared to handle these groups in an emergency.

Levin: What about the role that heritage can play in the economic recovery? If important heritage exists within a community, the survival of that heritage may be a significant factor in the survival of the community as a whole.

Jigyasu: Absolutely. I’ll give the example of the World Heritage Site of Prambanan temple complex in Indonesia. After the 2006 earthquake, one of the big problems was loss of income from tourists. This adversely affected the resources available for site maintenance and management. The issue was whether to stop the visitors from coming—which would mean a big loss in economic terms—or to allow them, in which case there was the challenge of managing their movement so that they were not exposed to danger from the damaged structures. Eventually the authorities came up with the very interesting idea of erecting visitor viewing platforms so that the visitors could view the temples from different vantage positions. It was thus realized that making a business continuity plan was useful for running a site or a museum after a disaster. One cannot just shut down the whole place for six months or a year.

Long: Museums, libraries, and archives think about disaster plans, and they’re doing better thinking about protecting collections. But we have not thought much about contingency planning. After September 11, for example, one of the biggest problems that cultural institutions faced in Lower Manhattan was the fact that they couldn’t return to their institutions and get them up and running. The economic factor was huge. So not only do we need to convince policy makers that the cultural heritage is important to the economy, we also need to make members of the cultural community more aware of the ways in which disasters can threaten economic survival. They should think about how they can resume operations more quickly after disasters.

Wisner: Part of contingency planning could, in some cases, include the temporary employment of unemployed people in restoration and reconstruction work. After the Mexico City earthquake in 1985, there was a major program to employ, I think, around fifty thousand people who had been affected. Most of the damage occurred in the central, older and historic part of the city, and many of the people were small artisans who had tools and workshops in the same buildings where they lived. A whole lot of these people were thrown out of employment, and many were hired in the cleanup and recovery process by the authorities. It’s a major success story.
Levin: Another question we wanted to address relates to built heritage following a disaster. How often is it the case that in the immediate aftermath of a disaster, a good amount of damaged built heritage is demolished, when in fact it is salvageable?

Jigyasu: This is something that we often find. I can give you an example from the historic city of Bhuj in Gujarat, India, with significant heritage components such as fortifications, historic structures, temples, and open spaces. After the 2001 earthquake, many of these got damaged—but not really to the point that they had to be completely demolished. In the immediate aftermath of the earthquake, when the relief and rescue agencies came in, they didn’t know what should be kept and what should be done away with, so they completely wiped away everything. A lot of important structures were lost that should have been kept as a source of memory from the past. As a result, we have ended up with a new town, which is completely devoid of identity. Such situations quite ironically turn natural disasters into cultural disasters.

Wisner: The best-known example is Japanese residential light frame construction. There is a lot of work going on in the world strengthening schools at low cost using local materials and training local craftspeople—building on their existing skill knowledge but then adding some elements or trying, in some cases, to recover certain cultural elements. Pakistan is an example of how knowledge has been lost. A few decades ago, there was much more knowledge of using wood frame bracing in stone structures. Now two things have happened. The builders who knew how to do this began to migrate, sometimes as far as Saudi Arabia, to make money. Second, deforestation meant that there was less wood and that it was more expensive, so over the last few decades, people built very dangerous, unbraced heavy masonry residences that cost many lives in the October 2005 earthquake. Not all lost local knowledge is necessarily lost in the dim past. A lot of local knowledge is still around and can be reclaimed.

Jigyasu: One has to look at it in a nonconservative manner, in the sense that if wood, which is an important housing material, is expensive and unavailable, then we might have to look for alternatives by combining traditional and modern knowledge.

Wisner: Well, absolutely. That’s what colleagues whom both you and I know in Kyoto are doing. There are temples there that are full of accelerometers and other instruments, and they’re basically monitoring the behavior of these structures in the small earthquakes that are common in Japan. Likewise, colleagues of ours in Istanbul have all sorts of measuring devices inside of the Hagia Sophia and the Blue Mosque, because these things have withstood major earthquakes. It isn’t just a matter of how massive they are but also a matter of how they’re built. So we’re learning all the time. I refer to this as hybrid knowledge. You have various forms of local knowledge, and you also have external specialists’ knowledge. If you have a relationship of trust and a good institutional framework, you can actually marry the two.
O N S U N D A Y, A U G U S T 2 8, 2 0 0 5 , a s Hurricane Katrina moved north across the Gulf of Mexico with New Orleans squarely in its path, Orleans Parish issued its first-ever mandatory evacuation order. Early Monday, August 29, Katrina made landfall to the east of New Orleans, devastating the historic cities and towns of the Mississippi Gulf Coast. New Orleans was spared the worst of the winds and rain, but by midmorning on August 29, the levees holding back the waters of the city’s numerous canals had been breached, and water poured in. By August 31, 80 percent of New Orleans lay under water.

A r g u a b l y t h e m o s t d e b i l i t a t i n g d i s a s t e r e v e r t o b e f a l l a m a j o r American city, Katrina brought with it an incomprehensible loss of life and major devastation to the urban fabric of New Orleans, often called the most unique city in the United States. The cities of the U.S. Gulf Coast—Bay St. Louis, Pass Christian, Gulfport, and Biloxi among them—were similarly affected.

In New Orleans itself, a number of cultural institutions were severely damaged by flooding and high winds, though many located on the city’s higher ground survived physically. But all cultural institutions, whether physically damaged or not, were faced with the..
fact that post-Katrina New Orleans would be a very different place—one with a different demographic and with reduced tourism, and a place where previous methods of operation were no longer viable. The survival of the museums and cultural and historic institutions of New Orleans would depend on their ability to adapt.

**Disaster Planning on the Gulf Coast**

Cultural institutions situated on the U.S. Gulf Coast live with the constant threat of disaster during the hurricane season. When Hurricane Katrina struck, many of these were in the midst of strategic planning processes, several of which highlighted the need for a disaster preparedness plan. Post-Katrina, these planning processes were rethought, and in many cases, they have become the outline for the survival of the institutions.

In August 2005, the Ohr-O’Keefe Museum of Art in Biloxi, Mississippi, was in the middle of a major expansion. Devoted to the presentation of the cultural heritage of the Gulf Coast and inspired by the innovative work of George Ohr, “The Mad Potter of Biloxi,” the museum had commissioned architect Frank Gehry to design a new six-building complex—the opening of which would have focused national and international attention on Biloxi and the cultural community of the Gulf Coast. By the end of the day on August 29, the framing for the new structures had been crushed by a casino barge that was lifted from the waters just offshore and deposited on the construction site. Other structures on the site were completely destroyed.

The Ohr-O’Keefe Museum of Art, however, had an excellent disaster plan in place. The staff was able to secure the pottery collection in situ on the second floor of the museum building. No part of the collection was harmed, despite the fact that approximately three feet of water entered the first floor. But there was one aspect the disaster plan never addressed—the aftermath. While the collections were unharmed, security guards hired to protect them left to be with their families. Staff and board members obtained permission to store the collections at the Mobile Museum of Art in Alabama. Almost a year after Katrina, the Ohr-O’Keefe museum’s physical plant was still uninhabitable, and the collections were moved again to a secure vault at Mississippi State University, where they remain. The museum is currently working to update its disaster plan, including comprehensive plans for action during and after a disaster and the establishment of a written chain of command. The staff is also searching for long-term storage sites well north of the Mississippi Gulf Coast that can be shared with other cultural institutions in the region.

The National Historic Landmark Longue Vue House and Gardens in New Orleans is the former home of Edgar and Edith Stern, liberal philanthropists who supported causes from the United Negro College Fund to the Emergency Committee of Atomic Scientists. The historic property survived Katrina but not the breach of the Seventeenth Street Canal less than a mile away, an event the disaster plan did not anticipate. The basement flooded to a depth of ten feet, and all mechanical, electrical, and original HVAC equipment was destroyed. Polluted waters also heavily damaged the site’s historic gardens, designed in the 1930s by Ellen Biddle Shipman. When Executive Director Bonnie Goldblum gained limited access to the site two weeks later, she found temperatures from 89°F to 90°F in the building—and humidity levels to match.

Temporary climate control and dehumidification began in late September 2005, followed by emergency repairs to the heavily damaged HVAC and electrical systems. Two years after Katrina, Longue Vue staff and board members are now completing a long-
range conservation management plan that will guide the future use and interpretation of the eight-acre site. The plan seeks to highlight the inspirational beauty of Longue Vue’s superb design and the outstanding philanthropy of its donors. With the legacy of the Sterns in mind, the goal is to make Longue Vue a key educational and cultural resource in the rebuilding of the city. These efforts have been supported by a grant from the Getty Foundation. “Getty support, following Hurricane Katrina, has given Longue Vue House and Gardens—and many of the other cultural organizations of the city—the opportunity to re-envision our mission, goals, capacity, and relevancy, which is vital to our growth and sustainability, as well as to the revitalization of the city,” says Goldblum.

When the levees broke, the African artifact collection from the Center for African and African American Studies at the Southern University at New Orleans (SUNO) was submerged in salt water for over four weeks before staff could reach it. The high levels of heat and humidity in the building and the lack of electricity resulted in extensive mold growth—even for objects stored on the highest shelves. Following their emergency plan, staff eventually moved the entire salvageable collection, more than seven hundred objects, to a storage facility forty miles away, where it was placed in containment using anoxic fumigation to arrest mold growth. Conservation treatment on the SUNO collection, begun just recently, will take several years. In the interim, the university will plan for the future storage and display of the collection, keeping in mind the difficult lessons learned from Katrina.

Museum collections that were subjected to less flooding generally fared much better, as staff were able either to move objects to safekeeping or to maintain them in situ. The larger issues for all these institutions were protecting their collections in the general chaos that reigned after the hurricane, as well as figuring out if they could survive in a city where their audiences had disappeared overnight.

A New Model of Cultural Collaboration

Cultural tourism—whether for the internationally famous music, the distinctive food, or the city’s historic landmarks—has always been an important part of the economy of New Orleans. After Katrina, with no audiences remaining, traditional revenue streams for cultural institutions all but vanished, necessitating massive staff layoffs—more than two-thirds of the personnel at most institutions. Cultural leaders in the city quickly realized that past operating methods would not work for the foreseeable future—and that any future they might have would depend upon collaboration.
They were encouraged in this belief when local audiences responded enthusiastically to the first post-Katrina cultural offerings, which included concerts and other collaborative events by the museums and cultural organizations in the city’s Warehouse Arts District. This response signaled a renewed and expanded role for cultural institutions in rebuilding the city, and the cultural community was asked to prepare a report as part of Mayor Ray Nagin’s Bring New Orleans Back Commission. This report detailed the situation in New Orleans at the beginning of 2006 and made recommendations in five broad areas—rebuilding New Orleans’s talent pool; supporting community-based cultural traditions and repairing and developing cultural facilities; marketing New Orleans as a cultural capital; teaching cultural traditions to the next generation; and attracting new investments and building information resources. Each of these areas had specific, targeted recommendations. The full text of the report can be found online at www.bringneworleansback.org.

Led by the Contemporary Arts Center and its executive director Jay Weigel, eight organizations are engaged in ongoing strategic planning that will benefit each of the institutions individually. More importantly, however, this planning will bring the organizations together to work across institutional boundaries to benefit the whole of New Orleans. They began with a study of their past and current audiences and of the major demographic shifts in the city that will impact the role of the arts in the community. They are also exploring strategies for collaboration, from joint programming to merging organizations. Weigel states, “Since Katrina, our arts community has been at the center of the New Orleans recovery, due in large part to the collaborative spirit that has emerged between art institutions, artists, and funders dedicated to Gulf Coast recovery.” Their efforts have been aided by a grant from the Getty Foundation’s Fund for New Orleans, which has provided $2 million to arts organizations for historic preservation and transition planning in the wake of Hurricane Katrina.

The future of New Orleans as an animated cultural capital is by no means assured. But the leaders of the cultural community are creating a new model of collaboration and are developing common goals to attempt to bring New Orleans back.

Kristin Kelly is a principal project specialist with the GCI. Joan Weinstein is associate director for grants programming at the Getty Foundation.

For a list of Getty Foundation grants supporting the ongoing recovery of New Orleans visual arts organizations, see: www.getty.edu/grants/fund_for_new_orleans/index.html
“WHERE’S THE FIRE?”
TEAMWORK FOR INTEGRATED EMERGENCY MANAGEMENT

By Foekje Boersma

No matter where we live in the world, we face the potential of natural disasters: hurricanes, earthquakes, tsunamis, volcanic eruptions, flooding, and wildfires, to name but a few. Each region has its particular risks. In Southern California, the main natural disaster threats are earthquakes and wildfires; in northwestern Europe, they are primarily flooding from rivers and rising sea levels. With climate change, the frequency and magnitude of these natural threats will be affected, requiring communities to adjust. Furthermore, due to the shifting of climate zones, some regions are now facing threats that they did not previously confront.

Human activity can create or exacerbate the risk of disaster. One immediately thinks of war and terrorism, but other actions can, without intention, increase the likelihood and the magnitude of a natural disaster—for example, deforestation enhancing erosion and amplifying the potential for landslides.

As world population increases, more people are affected by disasters. For this reason, many countries, both individually and collectively, are placing greater emphasis on disaster management and preparedness. To save lives, these countries are focusing on mitigation strategies to help reduce the impact of a disaster, putting disaster response plans in place, and educating the public.

The protection of cultural heritage and its recovery after a disaster are often not considered as part of existing disaster policies and planning. In response to this gap, some members of the cultural sector are developing strategies collaboratively to protect heritage from disasters. An example is the recently established Association of National Committees of the Blue Shield, which supports the new International Committee for the Protection of Cultural Property in the Event of Armed Conflict, established under the Second Protocol of the 1954 Hague Convention (see p. 4).

Despite such notable efforts, in general there remains an inadequate understanding among cultural heritage stewards of the major threats that can affect heritage, along with a limited knowledge of possible approaches to manage these risks.

This situation is exacerbated by the fact that the cultural heritage sector is under-resourced.

Cultural institutions such as museums can and must prepare themselves for disasters and emergencies by being aware of the risks and by putting mitigation strategies in place to help reduce the damage caused by an event. Damage caused after an event—such as collapsed buildings, fungal outbreaks, and loss of documentation—can be greatly reduced and possibly avoided with proper preparedness strategies.

Teamwork for Integrated Emergency Management

The Getty Conservation Institute (GCI) has long advocated the protection of cultural property and has helped develop practical solutions to the technical problems faced in protecting collections and buildings in emergency situations. Since 2004 the GCI has collaborated with the International Council of Museums (ICOM) and the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) in an education initiative focused on safeguarding museums from the effects of natural and human-caused emergencies. This collaboration is carried out within the broader framework of ICOM’s Museums Emergency Program (MEP), which is a strategic, multiyear project that aims to assist museum and other heritage professionals with the task of assessing, preparing for, and responding to natural and human-made threats (ICOM.museum/mep.html).

1. A disaster is a serious disruption of the functioning of a community or a society causing widespread human, material, economic, or environmental losses which exceeds the ability of the affected community or society to cope using its own resources (International Strategy for Disaster Reduction). An emergency is an event, actual or imminent, which endangers or threatens to endanger life, property, or the environment and which requires a significant and coordinated response (Emergency Risk Management Applications Guide, Australian Emergency Manuals Series).
As a major component of this collaboration, the partners developed an education model that enables museum professionals, over an extended time period, to gain experience in integrated emergency management. The term integrated refers to the holistic approach, which encompasses the necessary interdependent skills, knowledge, and experience and deals with all aspects of a museum: the people (staff and visitors), the building, the collections, and the documentation. Understanding integrated emergency management is a long-term process that cannot be effectively acquired through short courses or workshops. It is a process that museums can undertake on their own, but the overall impact is much greater if several institutions in a specific region collaborate, helping and supporting one another—not only in disaster response but also in the process of becoming and staying prepared. This approach also assures that local contexts, traditions, and existing methods will be considered.

With this in mind, the course Teamwork for Integrated Emergency Management (TiEM), designed for museums, was developed. The course runs over a period of several months and aims at building a sustainable capacity in both risk assessment and emergency preparedness within a region. It combines training workshops with on-the-job learning and practical experience, and it takes into account the fact that institutions differ in types of collections, resources, size, culture, and traditions. In this way, the course emphasizes the ways museums can adapt approaches to integrated emergency management to their particular situations.

The TiEM course begins with a workshop (phase one) that introduces the concepts of integrated emergency preparedness and discusses how these can be implemented within the participating institutions. Following the workshop, participants return to their own institutions, where they work together with their director and other colleagues to implement TiEM concepts in their museums. During a period of seven or eight months (phase two), they remain in contact with the course instructors and fellow participants. The instructors of the workshop serve as mentors and provide guidance as required.
At the end of this distance mentoring phase, the participants are brought together again for a final meeting (phase three) in which their experiences are shared. This meeting also allows participants to address specific topics that may have emerged.

Participants for TIEM are drawn from up to ten museums from a group of countries in a specified region. By signing up for this course, museum directors commit their institutions to participate actively in all phases of the course. Each museum can delegate two of its staff members to attend the face-to-face components (phases one and three), while management personnel and a larger portion of the museum staff will be involved during the second phase. In the long term, it is expected that the participating museums will disseminate their knowledge and experience in this field to other museums in their region, refining and expanding the regional network.

In addition to the personnel from museums, faculty from academic programs in conservation or museum studies can also participate in the course. Their involvement helps ensure that the principles of integrated emergency management will be passed on to the next generation of museum personnel in the region.

Successful museum emergency management requires interdisciplinary teamwork on the part of museum personnel, emergency professionals, and the community. This fact is reflected in the diverse team of course instructors and mentors who have been drawn from different backgrounds, such as conservation, architecture, security, and risk management. The teaching team works within a collaborative interdisciplinary framework when adapting the specific teaching and learning goals, content, and methodology of the TIEM curriculum to the targeted region. The team-teaching approach is used in both the classroom-based teaching and the distance mentoring elements of the course.

To support TIEM, extensive use is made of a special project Web site, which includes the workshop materials, monthly progress reports of the participating museums, discussion forums, and useful links. The site has restricted access—only participants, instructors/mentors, and the MEP partners can gain access.

The organizing partners have also compiled a bibliography of literature and didactic resources related to integrated emergency management, which identifies key texts and other relevant materials. This resource is publicly available online; it can be found at the GCI Web site (gcibibs.getty.edu/asp/).

**TIEM Course History**

TIEM started with a pilot course in Asia, which took place between August 2005 and June 2006. Teams from eight national museums and two graduate museum studies programs (see sidebar) participated in the course. During the course, the museums established emergency planning committees within their institutions, con-
ducted risk assessments and fire drills, created evacuation plans, and took other preparedness measures. Many of the museums also organized seminars, lectures, and symposia for their region.

Given the results of this pilot effort, the partners embarked on a second TIEM course, this time in southeast Europe. The GCI, ICCROM, and ICOM were joined by a new partner, UNESCO, in this second course, which was undertaken with the additional collaboration of ICOM South-East Europe (SEE) and the National Archives of the Netherlands. The region of southeast Europe was targeted because of its important cultural heritage, which suffered greatly during the civil wars of the 1990s. Many museums are still recovering from these wars, in a process that is slow because of a lack of resources. In addition, this geographic region faces natural disasters, such as earthquakes, wildfires, and floods. Nine southeastern European countries, represented by museums and educational institutions, are currently participating in the TIEM course (see sidebar).

In November 2007, the participants were introduced to the TIEM concepts during a two-week workshop held in the historic town of Ohrid (a World Heritage Site), in the Former Yugoslav Republic of Macedonia. The Institute for Protection of Cultural Monuments and the National Museum in Ohrid (one of the participating institutions) offered the course participants and instructors the use of its institution for practical exercises during the workshop. The workshop covered the topics of disaster risk assessment, mitigation of disasters, emergency preparedness and response, recovery and rehabilitation, and emergency plans. The participants engaged in several exercises, which included a simulation of an emergency—a fire at the local museum. The museum, the local school, and the official emergency response units (the fire brigade, the police, the medical response team, and the Red Cross) were all involved in this exercise. The participants had to cope with the situation in a manner that reflected the TIEM approach.

The organizing partners of the MEP–TIEM–SEE course hope that the participants will come away from the experience able to:
• use common and specific terms related to integrated emergency management;
• recognize the risks for their museums, and define and communicate priorities;
• identify and mobilize necessary resources, including the financial resources, as well as governmental assistance;
• identify relevant people and partners inside and outside, and build effective teams and regional networks;
• prepare and implement a plan for risk mitigation;
• disseminate information to colleagues and the public;
• respond and recover effectively in the event of emergency;
• formulate plans for long-term recovery.

Currently the participating institutions are working on the practical implementation of the concepts of integrated emergency management as part of the distance mentoring phase. The course will conclude this summer.

In 2008 the MEP partners will evaluate the effectiveness of the TIEM course. Have the course approach and methodology been successful in achieving the course’s goals? Can the course be easily transferred from region to region? What are the long-term results of the project—has the pilot course been able to help build sustainable emergency preparedness in the region? Addressing these kinds of questions is important in achieving the objectives of TIEM, and the evaluation will provide valuable information that can guide the future direction of the project.

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More information regarding the Teamwork for Integrated Emergency Management course can be found on the GCI Web site (www.getty.edu/conservation/education/teamwork/).

2005–6 TIEM Course Participants
National Museum of Cambodia, Phnom Penh
National Museum of Mankind, Bhopal, India
National Museum of Ethnology, Osaka, Japan
National Museum of Korea, Seoul
Colombo National Museum, Colombo, Sri Lanka
National Museum of the Philippines, Manila
University of the Philippines Diliman, Quezon City
National Museum, Bangkok, Thailand
Vietnam Museum of Ethnology, Hanoi
Ha Noi University of Culture, Hanoi, Vietnam

2007–8 TIEM Course Participants
National Archaeological Museum of Tirana, Albania
Museum of Republika Srpska, Bosnia and Herzegovina
Old Village Museum of Hrvatsko Zagorje, Croatia
Institute for Protection of Cultural Monuments and the National Museum, Ohrid, Former Yugoslav Republic of Macedonia
National Museum of Ethnography and Natural History, Republic of Moldova
Maritime Museum of Montenegro, Montenegro
Brukenthal National Museum, Romania
Museum of Pozarevac, Serbia
Technical Museum of Slovenia, Slovenia

In addition, the Museum Studies Program of the University of Zagreb, Croatia, and the Department for Preventive Conservation DIANA of the National Museum in Belgrade, Serbia, are participating as educational programs.
An upcoming Getty Research Institute (gri) exhibition, The Marvel and Measure of Peru, Three Centuries of Visual Histories, 1550–1880, explores the ways Peru and its peoples were depicted by artists after the conquest. In conjunction with the exhibition, staff from the Getty Conservation Institute (gci), the Getty Museum, and the gri, along with colleagues from the Metropolitan Museum of Art and gri scholars in residence, have conducted an investigation of two illustrated and hand-colored manuscripts by Martín de Murúa, a Spanish Mercedarian friar who lived in Peru at the end of the sixteenth century.

The manuscripts, Historia del origen y genealogía real de los reyes Incas del Piru (1590, private collection of Seán Galvin) and Historia general del Piru (1616, J. Paul Getty Museum), contain elaborate color illustrations depicting Inca royalty, history, and traditions. Both show evidence of extensive editing, including the insertion of folios and illustrations from other manuscripts. While some of the illustrations have been attributed to Guaman Poma de Ayala, a native Peruvian best known for his illustrated manuscript El primer nueva corónica y buen gobierno (1615, Royal Library, Copenhagen), it is also apparent that a number of additional artistic hands were involved. In order to elucidate the number and identity of the artists responsible for the illustrations, the process by which they were made, and the sequence of their insertion into the manuscripts, an extensive collaborative study of the two Murúa manuscripts was conducted.

The team undertaking the study included senior scientist Karen Trentelman, gci; manuscripts conservator Nancy Turner, Getty Museum; head of exhibitions and curator Barbara Anderson, gri; textile conservator Elena Phipps, Metropolitan Museum of Art, New York; and gri scholars in residence Tom Cummins of Harvard University and Juan Ossio of the Pontificia Universidad Católica, Lima.

An investigation into the pigments and colorants used in the illustrations was initiated by Phipps in 1999, when she was a Getty Museum Scholar, with assistance from Nancy Turner and then–gci scientists David Scott and Narayan Khandekar. In 2005, in conjunction with the forthcoming exhibition, the project entered a second phase, which included an ambitious program of comprehensive analysis conducted by Trentelman and Turner in the gci Museum Research Laboratory. Because of the delicate nature of the illustrations, only noninvasive analytical methodologies—X-ray fluorescence spectroscopy and Raman microspectroscopy—were employed. Several distinct pigment palettes, each composed of traditional painting materials, were identified in the illustrations in the Getty Murúa manuscript, leading the team to conclude...
that the illustrations were created by a workshop, with various artists responsible for creating the individual components of the illustrations—from the initial outline of the forms to the final addition of metallic silver embellishments.

Recent studies into the illustrations in the Galvin Murúa, the majority of which are executed in Guaman Poma de Ayala’s characteritic style, have refined the team’s understanding of his palette and have allowed them to attribute components of illustrations by other artists to his hand, suggesting Guaman Poma may have been responsible for the final editing of the illustrations.

Details of the investigation will be featured in the accompanying exhibition publication and will be presented at a symposium on recent research into the manuscripts and other topics related to the exhibition to be held in October 2008. In addition, a wall panel within the exhibition will highlight the scientific investigation for visitors. The Marvel and Measure of Peru, Three Centuries of Visual Histories, 1550–1880, will be on view at the Getty Research Institute from July 8, 2008, to October 19, 2008.
Following discussions with the director of the Department of Antiquities of Jordan (DoA), Dr. Fawwaz Al-Khraysheh, the Getty Conservation Institute (gci) and the World Monuments Fund (wmf) signed a memorandum of understanding in May 2007 with the DoA to develop a new national geographic information system (gis) to assist the department in inventorying, monitoring, and managing the thousands of archaeological sites in Jordan. The new system, Middle Eastern Geodatabase for Antiquities (MEGA)–Jordan, will be a Web-based, bilingual (Arabic-English) system that will allow easy access for both DoA staff and for scholars conducting research. MEGA-Jordan is expected to be fully implemented in 2009 and will subsequently be adapted for use in Iraq.

As an initial step in this new collaboration, the gci and wmf held a workshop in June 2007 for DoA personnel in Amman at the American Center of Oriental Research (ACOR), to introduce the process of developing the new gis for Jordan. In the workshop, DoA personnel discussed their requirements for the content and functionality of the system and refined their skills in topographic map reading and the use of global positioning system (gps) devices, which will be essential for locating sites and establishing site boundaries for the new system. The workshop was attended by nineteen DoA inspectors and sixteen members of the DoA team assigned to the gis development effort.

In February 2008 the gci and wmf installed a new data collection and processing system at DoA offices in Amman and Irbid, and they trained staff to begin completing and correcting the existing data for over ten thousand site records from the DoA’s previous gis (jadis), so that they can be incorporated into MEGA–Jordan.

Under the auspices of the Iraq Cultural Heritage Conservation Initiative, the gci and wmf also signed a separate memorandum of understanding in late 2007 with the Iraq State Board of Antiquities and Heritage (sbaH) to renew their commitments to the collaborative project launched in 2004 (see Conservation, vol. 20, no. 5). The Iraq Initiative has received generous support from Jordan’s Department of Antiquities—including hosting the initiative’s activities in Jordan and offering access to Jordanian sites during training sessions.

In December 2007 the gci and wmf held a workshop in Amman at acor for twenty-four high-ranking staff from the sbaH, including Acting Chair Dr. Amira Edan, department heads, and directors of thirteen of Iraq’s eighteen provincial offices. The workshop focused on gaining insight into the existing working conditions in Iraq and understanding the sbaH’s current priorities, as well as planning activities for 2008 and 2009. Several discussions were also held to initiate the process of gathering sbaH’s requirements for the new gis for Iraq (MEGA-Iraq), which will be developed soon after the Jordanian system is implemented.

To obtain more information on the gci’s Iraq and Jordan initiatives, visit the Getty Web site at www.getty.edu/conservation.
In 2006 the GCI began a six-year collaborative project with Egypt’s Supreme Council of Antiquities to develop a plan for the conservation and management of the Valley of the Queens, part of the World Heritage Site of Ancient Thebes with its Necropolis. More than three millennia ago, the Valley of the Queens was the necropolis of the royal wives and children of Egypt’s New Kingdom.

In September 2007 the GCI and consultant Heinz Rüther of the University of Cape Town carried out fieldwork in the valley to produce a new topographic map of the site that will include the locations of its nearly one hundred rock-cut tombs, ancient features, and modern infrastructure. The work was carried out with long- and short-range laser scanning instruments and additional survey equipment to produce a highly accurate, precise, and detailed map covering the entire catchment area of some 205 acres (83 hectares).

The results of this work are contained in a geographic information system (GIS) that will serve multiple needs, including precisely locating tombs and other ancient features; accurately defining the catchment area and drainage paths to assess flood risk in order to design mitigation measures; aiding in the understanding of the structural geology of tombs and their stability; planning of shelters and visitor infrastructure; and designing visitor routing. Assessing the flood risk to tombs is one of the most pressing needs addressed by the mapping, as throughout its history, the necropolis has been subject to the devastating effects of periodic flash flooding—most recently in 1994.

After completing the current assessment phase, the project will begin a second phase of detailed design and planning for site interventions scheduled to begin in 2009.

For more information on the Valley of the Queens project, visit the Getty Web site at www.getty.edu/conservation/field_projects/egypt/.

A member of the survey team conducting laser scanning at the Valley of the Queens in Egypt. This work will be used to generate an accurate, GIS-based topographic map indicating the locations of tombs, other ancient features, and modern infrastructure. Photo: David Myers.

GIS view of the rainfall catchment area showing drainage lines converging in the vicinity of more than ninety tombs (see arrow). The GIS will be used to assess the risk from flash flooding in order to design protective measures. Satellite photo © 2006 DigitalGlobe, Inc.
In January 2008, “The Object in Transition: A Cross-Disciplinary Conference on the Preservation and Study of Modern and Contemporary Art” was held at the Getty Center. A close collaboration between the GCI and the Getty Research Institute (GRI), the conference brought together conservators, curators, art historians, artists, and conservation scientists to discuss interdisciplinary case studies on the conservation of some of the varied—and frequently untraditional—materials used by artists over the last seventy years.

A public panel discussion, “The Object in Transition: Contemporary Voices,” organized as part of the GCI’s Conservation Matters lecture series, opened the conference. Elisabeth Sussman from the Whitney Museum of American Art served as moderator for a discussion among artists Rachel Harrison, Paul McCarthy, and Doris Salcedo and conservator Christian Scheidemann, in which they described the often complex production processes of their art, the fleeting nature of some of the materials they use, and the implications for the long-term survival of their work.

The two-day conference for professionals in the field included case studies debating the conservation issues presented by specific works of art, dialogues among conservators and art historians on the interdisciplinary study of particular artists, and general panel discussions.

Among the works chosen for study by panelists were Piet Mondrian’s Victory Boogie Woogie, Roy Lichtenstein’s Three Brushstrokes, Sol Lewitt’s Three-Part Variations on Three Different Kinds of Cubes, James Turrell’s Trace Elements: Light into Space, David Novros’s 6:30 and V1:XXXII, and Eva Hesse’s Expanded Expansion.

Interdisciplinary studies were presented on artists Bruce Nauman and Barnett Newman, and panels on issues such as “The Painted Surface,” “Artist’s Voice: History’s Claim,” and the “Life and Death of Objects” allowed for significant discourse on topics brought up during the conference.

Many of the objects discussed during the conference were on display in the J. Paul Getty Museum for conference attendees to examine, including two sections of Eva Hesse’s Expanded Expansion from the Guggenheim Museum in New York; three related paintings by David Novros, two from the Menil Collection in Houston and one from the Museum of Modern Art in New York; a rejected Barnett Newman study from the Harvard University Art Museums, and a maquette for Roy Lichtenstein’s Three Brushstrokes. In addition, a material mock-up of a section of Expanded Expansion was on display for comparison.

In order to provide colleagues unable to attend with a lasting record of the meeting, all of the sessions of this two-day conference were recorded in video. These videos are available for viewing online on the Getty Web site at www.getty.edu/conservation/publications/videos/object_in_transition.html.

Two sections of Eva Hesse’s Expanded Expansion and a material mock-up (left) of a section of the same work on display at the Getty Museum as part of the “Object In Transition” conference. Photo: John Kiffe.
In February 2008, the Getty Conservation Institute, in partnership with the Ministry of Culture of Mali, organized the conference “Terra 2008” in Bamako, Mali. This tenth meeting on the study and conservation of earthen architectural heritage, and the first to be held in Africa, provided a forum for 470 participants from sixty-five countries to discuss and exchange information about earthen architectural heritage across a variety of disciplines. Over one hundred presentations and posters addressed issues including preservation of archaeological sites, living sites, local knowledge systems, conservation and development, training and education, advances in research, seismic and other natural forces, and standards and guidelines for earthen architecture.

In addition to the formal conference sessions, two exhibits designed to raise public awareness of earthen architecture were on view in Bamako: a photographic exhibit at the National Museum of Mali showing earthen architectural heritage in Mali and around the world and an exhibit of work on earthen architecture undertaken by foreign embassies and nongovernmental organizations in both Mali and their home countries. The latter exhibition included construction demonstrations by masons from different regions in Mali showcasing traditional materials and techniques used in earthen buildings.

The conference was followed by postconference tours to earthen heritage sites in Mali, including Timbuktu, Djenne, Mopti, and the Dogon country, where significant earthen architectural sites are undergoing conservation.

Funding for nearly two hundred participants from throughout Africa and the developing world was made possible through grants from the Getty Foundation, the World Heritage Centre, Misereor, and the Ford Foundation.

This conference was part of the GCI’s Earthen Architecture Initiative, which over the past twenty years has included research on surface protection for adobe walls, treatments and shelters for earthen archaeological sites, conservation treatment techniques for polychrome earthen bas-reliefs, and seismic issues related to earthen structures.

For more information on the Earthen Architecture Initiative, visit the Getty Web site at www.getty.edu/conservation/field_projects/earthen/.

A mason demonstrating traditional building materials and techniques, as part of the Terra 2008 conference. Photo: Kathleen Louw.

Terra 2008 conference in Bamako, Mali. Over four hundred fifty people from sixty-five countries attended. Photo: Leslie Rainer.
Photograph Conservation Course

The Getty Conservation Institute, the Academy of Fine Art and Design in Bratislava, and the Slovak National Library are pleased to offer a three-module course, “Fundamentals of the Conservation of Photographs,” to support the development of photograph conservation in central, southern, and eastern Europe.

The course has been designed to provide learning and practical experience in both classroom and workplace settings over a period of nine months. This combination of theoretical and hands-on training will allow participants to build a strong understanding of photographic materials and processes, the deterioration mechanisms associated with them, and the appropriate conservation strategies that will assure their long-term preservation.

The first module of the course is scheduled for July 2008 and will be held at the Academy of Fine Arts and Design in the Slovak Republic. Participants, midcareer conservators or cultural heritage specialists, will be drawn from museums, libraries, and archives in Albania, Belarus, Bulgaria, Bosnia and Herzegovina, Croatia, Czech Republic, Hungary, Macedonia, Moldova, Montenegro, Poland, Romania, Serbia, Slovakia, and Slovenia.

This educational initiative complements the GCI’s Research on the Conservation of Photographs project, which seeks to develop improved methodologies for the detailed characterization of photographic material and to improve the practice of photography conservation.

For more information on the “Fundamentals of the Conservation of Photographs,” visit the course Web site at www.getty.edu/conservation/education/cons_photo/.

Scientific analysis of nineteenth-century photographs by Eugène Durieu. Photo: Dusan Stulik.

Survey of Conservation Readers

We are seeking your views in order to improve Conservation, The GCI Newsletter and to explore new ways of meeting your information needs.

Please take a few minutes to tell us what you think by completing the enclosed paper survey or the online version at www.getty.edu/conservation/survey.

By completing the survey, you will be eligible to win one of five US$100 gift certificates from the Getty Museum Store (employees of the Getty Trust are not eligible).

The deadline for receipt of completed surveys is May 30, 2008.
In January 2008, Susan Macdonald became the head of the GCI’s Field Projects. She was previously director of the New South Wales (NSW) Heritage Office, one of Australia’s leading heritage agencies.

Susan attended the University of Sydney, where she earned bachelor’s degrees in both science and architecture. Following graduation, she spent three years with private architectural firms in Sydney before moving to London in order to work on a greater range of historic buildings and building materials. Again working for private firms, Susan participated in a number of conservation projects, including one for which she served as project architect for conservation work at Baron Ferdinand de Rothschild’s Waddesdon Manor in Buckinghamshire. During this time, she also earned an Architectural Conservation Certificate from ICCROM in Rome.

Her experience at Waddesdon led, in 1994, to the position of senior architectural conservator with the Architectural Conservation Team at English Heritage. Her work there, which included a broad spectrum of practical issues in historic building conservation, involved site analysis and research, training, conferences, and the development of publications. Susan oversaw major research projects on stone slate roofing, the use of sacrificial graffiti barriers, and mosaic-clad concrete. While there, she received a master’s degree in conservation studies from the Institute of Advanced Architectural Studies at the University of York. Also during her time in Britain, she developed a strong interest in the conservation of twentieth-century architecture.

In 1998 she returned to Australia to head the Local Government Heritage Management Team of the NSW Heritage Office. The emphasis of much of her work was on the adaptive reuse of historic buildings and on improving the quality of architecture developed in the context of historic structures and complexes. In 2002 she became director of the Heritage Office, taking responsibility for, among other things, policy and legislation development and implementation, as well as day-to-day management. A highlight of her time there was serving as project director for the Australian nomination of the Sydney Opera House to the World Heritage List.

Her interest in coming to the GCI stemmed from a desire to do more to enhance conservation practice internationally by developing, consolidating, and disseminating methods and models. She welcomes the opportunity to partner with other organizations in the field and to work in areas where needs are not currently being adequately addressed. Among the areas she is interested in developing at the GCI are the preservation of historic settlements and cities and the preservation of twentieth-century architecture.

Jemima Rellie joined the GCI in September 2007 as the assistant director of Communications and Information Resources. Prior to her arrival at the Institute, she was head of Digital Programs at Tate in London.

Passionate about art from childhood, Jemima studied art history at University College London, majoring in modern and contemporary art with a minor in archaeology. Graduating in 1991, she went on to earn a master’s degree in the history of art at the University of Leeds. After interning in the exhibitions department of the Institute of Contemporary Arts in London, she moved to Japan to teach English at a private university in Nagoya. A year later she returned to England to work on Macmillan’s Dictionary of Art as an assistant editor. When the thirty-five-volume dictionary was completed, she was hired by Phaidon Press as a picture editor, working on contemporary art, architecture, and culture books. As part of her work there—and at her suggestion—she created the company’s first Web site.

After leaving Phaidon, Jemima pursued her interest in new media and spent several years as an account manager at Saltmine Creative, a development firm focused on the Internet. This was followed by similar work at RC1 Media, an interactive television company. While there, she learned that Tate was looking for someone with a background in art, publishing, and new media to head up the institution’s new Digital Programs department, with the mandate of creating digital content for Tate’s various audiences. Jemima applied for the job and was hired in 2001. At Tate, she worked with departments throughout the institution, implementing a variety of Web-based services and increasing public exposure. As head of Digital Programs, she established Tate Online as the “fifth gallery,” achieved in part by commissioning artwork specifically for it. She also succeeded in increasing corporate sponsorship of the Web site. Her position at the GCI offers her an opportunity to gain further experience working in international cultural heritage and to expand her knowledge of conservation issues. Her initial priorities for her department are to seek ways to improve access to GCI content and to promote the Institute’s activities more effectively. She will be working to ensure that the activities of the department—which include publications, AATA Online, the Web, the Information Center, public programs, and press—support the GCI’s central mission of advancing conservation practice.
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