The Getty Conservation Institute Newsletter

Volume 18, Number 3 2003

Front cover: Thomas Roby, a senior project specialist with GCI Field Projects, demonstrating the technique for injecting lime-based grout. The instruction was part of a 2003 training campaign in Tunisia for technicians responsible for the maintenance of in-situ archaeological mosaics—a program in partnership with Tunisia’s Institut National du Patrimoine. Photo: Elsa Bourguignon.

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

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

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

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Thoughts on Conservation Education
By Kathleen Dardes

Heritage conservation is experiencing a variety of new pressures—greater stakeholder involvement, changing expectations for heritage use, disparate and conflicting values, diminishing or changing resources, and new materials and media to conserve, to name just a few. In addition, ensuring that heritage is accessible and valued by the public is critical to conservation’s viability. How will the evolving state of conservation be reflected in the way that professionals are educated? Will the learning models of the past and present equip students with the knowledge, skills, values, and attitudes they will need for the way conservation will be practiced in 5, 10, and 20 years?

A Partnership in Education
The UCLA/Getty Master’s Program
By David Scott and Kathleen Dardes

The conservation of archaeological and ethnographic material is an important part of our efforts to preserve the cultural remains of the past and to ensure that future generations can know and learn about the past directly from surviving artifacts. The Getty Conservation Institute and the University of California, Los Angeles, are currently developing a graduate-level program in archaeological and ethnographic conservation designed to complement existing programs and to expand educational opportunities. The aim of the program will be to provide students with a solid educational base and practical training.

Education in the Conservation of Immovable Heritage
An Approach in Sub-Saharan Africa
By Lazare Eloundou Assomo and Joseph King

Until recently, African approaches to conservation education were based on Western concepts in which the materials, style, and monumental character of heritage formed the basis for conservation. But African heritage concepts embrace spiritual, social, and religious meanings, myths, and relationships with ancestors and the environment. Some in Africa are now developing conservation approaches related to intangible heritage and cultural landscapes, and they are incorporating these approaches into training initiatives aimed at increasing national capacities for management and conservation of immovable cultural heritage.

A Lifetime of Learning
A Discussion about Conservation Education

Three conservators who now direct academic programs—May Cassar, Michele Marincola, and Frank Matero—talk with the GCI’s Kathleen Dardes and Jeffrey Levin about where conservation education ought to be heading in a time of expanding information, diminished resources, and needed public involvement.
A Free, Meandering Brook

Thoughts on Conservation Education

By Kathleen Dardes

What does education often do?
It makes a straight-cut ditch of a free, meandering brook.
— Henry David Thoreau

A wise system of education will at last teach us how little man yet knows, how much he has still to learn.
— Sir John Lubbock

Over the centuries, there have been countless definitions, ideas, and opinions about education, its practice, and its mispractice. Philosophers, essayists, dramatists, assorted social commentators, and especially educators themselves have offered their wide-ranging and surprisingly mixed views on the subject of education and its perceived value. Throughout history, learning has been respected as the foundation for all manner of artistic, scientific, technological, and humanistic advancement, bringing benefit to individuals as well as to society. As the old Chinese proverb sums up: “Learning is a treasure, which accompanies its owner everywhere.”

However, education—the process by which we acquire learning—has not always been assessed with such a kindly and uncritical eye. Education can take many guises, the formal and the informal. In its formal state, it can be daunting and even self-defeating, as Thoreau’s remark suggests. However, Thoreau also believed strongly in the benefits of learning and understanding as essential human activities. It was the particular mode of learning—the educational process itself—that could ultimately serve or deter the attainment of understanding. At its best, education provides the compass for a free, meandering, and lifelong journey of discovery.

By its very nature, education is forward looking and anticipatory—and herein, perhaps, is one of the greatest challenges for those who teach. Brian Fagan articulated the dilemma for archaeology in a recent article for Conservation (see vol. 18, no. 1). Fagan noted that although an increasing number of archaeologists in the United States pursue a form of archaeology commonly known as cultural resource management, their education is still rooted in a time when archaeology was a purely academic discipline and archaeologists were concerned largely with “survey, excavation, laboratory work, and peer-reviewed publication.” Conservation, although a component of cultural resource management, still does not figure in the education of most archaeologists. This disconnect between the present and future realities of professional practice and an academic education that stems from the working contexts and experiences of the past has serious implications for both archaeology and conservation.

It may be worth considering whether the example of archaeology is emblematic of the situation in other areas of heritage conservation, particularly since the field has been affected by new external pressures in recent years. In all likelihood, many of these pressures will introduce new dynamics in relationships and new changes in how we think about and practice conservation.
We are already witnessing greater stakeholder access and involvement in decision making, changing expectations for use of heritage, recognition of a range of disparate and sometimes conflicting values, diminishing or changing resources, increased interdisciplinary collaboration, and the need to deal with the conservation of new materials and media—to name just a few. As a consequence, there has been a great deal of introspection and discussion among conservation professionals as to the new roles and opportunities that may await the field. The result is a growing acknowledgment of the imperative of conservation’s social dimension. Ensuring that heritage is accessible, understood, and valued by the public, as well as by other professional colleagues, is increasingly critical to not only the practice but also the viability of conservation. As such, it is also increasingly critical to the teaching and learning of conservation.

How will the evolving state of conservation thought and practice be reflected in the way that conservation professionals are educated and trained? Will the learning models of the past and present be able to equip students with the knowledge, skills, values, and attitudes they will need for the way conservation will be practiced in 5, 10, and 20 years? It is, of course, impossible to know for certain what students will actually face in their professional lives. In fact, it may not even matter. Education must prepare people to function in an unknowable future. Education—and especially education for the professions—equips people for lifelong learning and discovery. The ever-expanding pool of knowledge within every field requires professionals to concentrate on learning how to form the right questions rather than how to simply absorb information, and to work as part of an extended team of specialists.

The most important part of teaching is to teach what it is to know.
— Simone Weil

Because it serves the future, education can be said to be at least theoretically progressive and forward looking in its purpose. Yet, academia can be notoriously conservative and resistant to change. Even so, some remarkable learning “revolutions” have occurred within the heart of academia, driven by compelling needs recognized within the realm of professional practice. The best example of this can be found in medical education, which over the course of the past two decades has witnessed far-reaching reforms.

For much of the 20th century, most medical schools followed an educational model drafted in 1910. But by the late 1970s it had become clear that this basic model did not allow teaching and learning to keep pace with the rapid and dramatic changes occurring within health care, including the expansion of medical knowledge and the blurring between the boundaries of the specific medical sciences. No student or practicing doctor could reasonably be expected to absorb the amount of information that makes up the modern body of knowledge in medicine, even within one specialty. In addition to developing the usual diagnostic, problem-solving, and other technical skills, the modern doctor must be equipped for the social dimension of medicine—understanding and interacting with patients—which is fundamental to a contemporary and holistic approach to medicine.

Educators realized that future medical practice would make new and different demands upon doctors and that their curriculum needed to reflect this expectation. The reform of the medical curriculum, already under way by the early 1980s, has led to new teaching and learning goals and methodologies. These innovations—which include problem-based learning and interdisciplinary cooperative learning—link pedagogy to the new circumstances and conditions of professional practice. Other fields—such as law, business, and public administration, to name a few—have also sought to link more closely the educational experience to the realities of professional life. Active, student-centered learning is becoming increasingly important in higher education because it allows students to develop the particular habits of thinking and behavior that characterize the profession for which they are preparing. Learning, especially for the professions, should be an active and constructive process that contextualizes technical issues and problems.

Conservation education faces many of the same challenges that characterize education in other professions. The pedagogical solutions to these problems also have some interest and relevance to teaching and learning conservation. For this reason, the GCI researches examples of “best practices” within the educational mainstream that can be adapted to the aims of our projects—
and to conservation education generally. For example, problem-based learning is one of the educational strategies that we have employed within some of our courses, adapting it to the particular audience, learning aims, and situation with which we are working. Its particular advantage as a pedagogy for conservation is the way in which it can integrate and contextualize different aspects of professional life—blending the technical, social, ethical, and other dimensions of real-life practice.

A range of factors influences the teaching approach that we may take within a project. Since the GCI works internationally, educational projects can address a range of different audiences and learning needs. The educational strategy that we may ultimately develop takes into account context, audience, and learning traditions, as well as the need for specific information and skills.

The task of the modern educator is not to cut down jungles, but to irrigate deserts.
—C. S. Lewis

Conservation is still fairly young as a profession, and the need for suitable education and training opportunities remains great at all levels of professional practice. Unfortunately, in many areas of the world, there are few or no opportunities for training, even at the most basic level. Over the years, organizations like the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICOM) and the GCI have sought to address this situation through strategic and long-term projects that answer immediate training needs while laying the groundwork for the development of regionally based educational initiatives.

An example is Project Terra, a collaborative project of the GCI, ICOM, and the International Centre for Earth Construction–School of Architecture of Grenoble (Craterre–EAG). Terra encompasses both immediate and long-term strategies for educating professionals in the conservation and management of earthen architecture (including buildings, historic urban centers, and archaeological sites). An important project objective is to establish the conservation and management of earthen heritage as an area of study within university structures, recognizing that such academic “anchors” can substantially enhance both education and scholarship in this area. In the meantime, there is still an immediate need for training professionals to address conservation and management of the earthen architectural heritage. Terra has dealt with this through a series of short courses, including the Pan-American Course on the Conservation and Management of Earthen Architectural and Archaeological Heritage (known as PAT), delivered in 1996 and 1999 in Trujillo, Peru.
Over a decade, the Terra partners have tested, applied, and adapted a range of new and conventional approaches to teaching earthen architecture conservation through their individual and joint educational initiatives. These approaches were linked to an understanding of the working profile of the professionals responsible for heritage and to their need to participate in a process that integrates conservation, access, education, and security with the values of a range of stakeholders. The Terra partners have developed curricula, didactic materials, and methods that reflect the blending of social, cultural, and technical aspects of earthen architectural heritage. The project has integrated problem-based learning within a training framework as a means of presenting the multidimensional aspects of earthen architecture conservation and management. (For more on Terra, see: www.getty.edu/conservation/activities/terra/.)

A Socrates in every classroom.
— A. Whitney Griswold, President, Yale University, on his standard for Yale faculty (1951)

Collaborations are important to the GCI’s strategy of extending and strengthening the teaching of conservation within the academic environment. The Getty’s partnership with the University of California, Los Angeles (UCLA), in the development of a new program in archaeological and ethnographic conservation includes an opportunity for the GCI’s education section to work with the course director to develop the pedagogical foundation for the program (see p. 21). Over the course of the next year, this collaboration will define the professional profile and expected competencies of graduates, the program’s teaching and learning aims and objectives, the core curriculum, teaching strategies, evaluation mechanisms, and other defining characteristics of the program. The result will be a curriculum document that will serve as a blueprint for further course development.

In the past year, the GCI also partnered with the Centre for Sustainable Heritage of University College London (UCL), in developmental work for its new midcareer graduate course (formally titled Master of Science in the Built Environment: Sustainable Heritage), which will begin in October 2004. The collaboration addressed the curriculum and teaching objectives, which include the integration of problem-based learning to foster interdisciplinarity and the eventual use of Web-based learning to extend the course to students over a wider geographic area.

The GCI’s partnership with the UCL Centre for Sustainable Heritage has included the joint offering of the short course Historic Buildings, Collections, and Sites: Sustainable Strategies for Conservation, Management, and Use, designed for senior-level heritage professionals. This course allowed us to investigate the potential of the Internet in extending the boundaries of traditional classroom-
based learning. The course was offered in two phases. During the first phase, participants, working at their own institutions, completed a program of preparatory exercises, readings, and other work as a foundation for the second phase, which took the form of a workshop at UCLA. Providing background readings and assignments, via a course Web site during the preliminary phase, made way for more active learning activities—such as discussions, exercises, and collaborative group work—during the second phase. Collaboration in learning was a major objective of the course and was key to promoting interdisciplinary thinking and problem solving among the participants.

Collaboration was also essential in the actual teaching of this course, as it has been for other projects, including Project Terra. In a course like Historic Buildings, Collections, and Sites, interdisciplinary teams of teachers bring different and sometimes competing perspectives to the classroom, challenging students to consider the various ramifications of situations in which there may be no single right answer. Collaborative teaching also gives teachers an opportunity to model cooperative behavior and problem solving in the classroom. The teamwork among teachers, which begins in the planning process, can also greatly aid the integration of ideas, information, and teaching approaches.

I have never let my schooling interfere with my education.
— Mark Twain

In the GCI’s field projects, training may occur within the framework of a multifaceted project that combines research and the testing of new conservation methodologies. Educational strategies employed within field projects are tailored to specific issues and conditions encountered within the region or countries in which we are working and may be targeted to a range of different professionals with responsibility for the conservation and management of heritage. The GCI collaborates closely with institutional partners to develop the right aims and strategies for the situation encountered, taking into account learning styles, traditions, and resources.

While field projects usually offer ideal opportunities for educational initiatives, they can also offer unique challenges. In some situations, a short course or workshop may not always provide the level or depth of training needed and so is combined with a long-term program of mentored practice that allows skills and confidence to be developed slowly and systematically. During the practice period, trainees have intermittent access to a teacher who can provide guidance and evaluation. An example of this is a GCI project that is part of a larger effort to conserve in-situ archaeological mosaics in the Mediterranean region. Begun two years ago, the project—a partnership with Tunisia’s Institut National du Patrimoine (see p. 24, and Conservation, vol. 17, no. 1)—trains technicians responsible for the maintenance of in-situ archaeological mosaics in Tunisia. Training for the first group of technicians was carried out over an 18-month period through four successive campaigns, with intervening periods of assigned practical work arranged by instructors. The practical work was evaluated during successive campaigns, at which time remedial or additional teaching, if necessary, could take place.

An upcoming phase of this project will involve the development of a site management workshop for personnel who oversee archaeological sites in Tunisia. This will facilitate the development of a supporting structure within Tunisia that will help ensure the sustainability of the technicians’ maintenance efforts over time.

GCI training of technicians responsible for the maintenance of in-situ archaeological mosaics in Tunisia. The program, done in partnership with Tunisia’s Institut National du Patrimoine, combines a series of training courses with a long-term program of mentored practice that allows skills and confidence to be developed slowly and systematically. During the practice period, trainees have intermittent access to a teacher who can provide guidance and evaluation. Photos: Elsa Bourguignon, Richard Ross.
There is not an ounce of doubt in my mind that the way we learn throughout our lives is and will continue to be profoundly influenced by the use of digital media, the Internet, the World Wide Web, and devices and systems yet to be developed.

— Charles M. Vest
President, Massachusetts Institute of Technology

Disturbing the Educational Universe: Universities in the Digital Age

In recent years it has become clear to most educators that digital technology—and, in particular, the Internet—now makes possible a variety of new opportunities for teaching and learning. Experimentation has ranged from placing courses and teaching materials online to the creation of teaching and learning communities and coops, and the development of online interactive learning environments.

One of the more promising aspects of the Web is the way that it can also assist in the formation of Internet communities—a concept that, at first glance, may seem antithetical to the anonymous nature of Web-based interactions. But, in fact, the Web is now appreciated for the way in which it facilitates informal communication and information exchange among individuals.

The GCI has experimented with the Web as a virtual work space for teacher collaboration in a few projects—including in the course Historic Buildings, Collections, and Sites and in Project Terra. In addition to providing a common area for posting materials and other project information, it supports a greater degree of day-to-day cooperative work among partners.

The GCI has also been investigating other ways that electronic technology can extend the impact of our educational work. We are in the process of launching an online teaching resource for conservation educators on the GCI’s Web site. This resource will feature teaching materials created by the GCI, as well as information about the courses and other projects for which they were created. The teaching materials will be available to conservation teachers who can download the material for classroom use.

How do we know what really works when it comes to teaching and learning in the online environment? The digital world brings many benefits but has also created new problems, many of which are specific to the online environment. We are still becoming acquainted with the promises of the digital age, which remains in its pioneering phase. Because we are in a period of experimentation, educators need to recognize that the best approaches will emerge only over time. The process of discovering what works and what doesn’t will influence not only how educational technology will evolve but also how we integrate it into teaching and learning in the future. As these technologies are explored and as the Internet becomes a reality for an ever-growing segment of the world’s population, new models for teaching and learning will be available—as will generally greater access to educational opportunities.

**Education is what survives when what has been learned has been forgotten.**

— B. F. Skinner

Education can have both a responsive and a catalytic function within the field of conservation at large. It responds to—and in some instances serves as laboratory for—new or changing requirements within professional practice. Given the opportunities that technology is bringing into all of education, it is probably fair to say that we are at the start of what is likely to be a period of rapid transformation and rejuvenation. Despite the challenges that the changing landscape of education presents, with those changes comes a growing sense of connection to a wider community of educators. In the digital age, Thoreau’s free, meandering brook has many new channels in which to flow.

Kathleen Dardes is a senior project specialist with the GCI's Education section.
Conservation asked three conservators who now direct academic programs to talk about where conservation education ought to be heading in a time of expanding information, diminished resources, and needed public involvement.

May Cassar is director of the Centre for Sustainable Heritage at University College London, where she is responsible for research and teaching on the sustainable use of historic buildings, collections, and sites. Formerly environmental adviser at Resource: The Council for Museums, Archives, and Libraries and the Museums & Galleries Commission, she is the author and editor of seven books relating to preventive conservation, including Environmental Management Guidelines for Museums and Galleries. She is a member of the directory board of ICOM-CC, a fellow of the International Institute for Conservation, and a UKIC-accredited conservator.

Michele Marincola is Sherman Fairchild Chairman and professor of conservation at the Conservation Center of the Institute of Fine Arts, New York University (NYU). She is also a conservator for the Cloisters, a branch of the Metropolitan Museum of Art in New York. An expert in the conservation and technical art history of medieval sculpture, she has written extensively on medieval master sculptor Tilman Riemenschneider. During the mid-1990s, she served as cochair for the objects specialty group of the American Institute for Conservation.

Frank G. Matero is associate professor of architecture and chair of the Graduate Program in Historic Preservation at the Graduate School of Fine Arts, University of Pennsylvania. He is also director of the Architectural Conservation Laboratory and research associate of the University Museum of Archaeology and Anthropology. In addition, he has been a lecturer at the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) in Rome, and he currently serves as regional editor for Conservation and Management of Archaeological Sites and the Journal of Architectural Conservation.

They spoke with Kathleen Dardes, a senior project specialist in the GCI’s Education section, and Jeffrey Levin, editor of Conservation, The GCI Newsletter.

Kathleen Dardes: I think it’s useful to begin by looking at the state of the broader field. In the past few years, there have been real or threatened closures of conservation facilities, as well as job losses within some institutions. As a result, there’s been debate within the profession over how our nonconservation colleagues, and even society itself, perceive and value us. Is the situation a passing anomaly or is it symptomatic of something fundamentally wrong in our relationship to the broader world?

May Cassar: We ought to view this change in a wider context. What’s happening in conservation is no different than what’s happening in other public-sector areas where there’s a move away from the direct delivery of services, and more is being contracted to be done by the private sector.

Michele Marincola: I would be interested in hard data on the loss of jobs in the public sector and whether short-term positions, such as museum fellowships, have replaced them. I think that this is a problem of the economic times. I remember the proliferation of jobs in conservation in the 1980s, when there was more money for cultural programs, and I expect that we might see that time again. To plan for the short term by shutting down programs or by taking far fewer students might be very shortsighted. There might be other ways to approach cyclical job loss, such as teaching better interdisciplinary skills or resourcefulness in the face of adversity.

Frank Matero: We also have to distinguish between conservation in the public and private sectors. It depends on the place. Europe has a much stronger tradition of conservation in the public sector than the United States, where the private sector has always been—
at least in the built environment realm—a stronger area of opportunity.

**Cassar:** The United Kingdom began to be hit particularly hard about 10 years ago, when a lot of conservation jobs within museums and galleries started to disappear, and the private sector began to deliver the services that previously were done by conservators in the public sector. That experience came as a great cultural shock, one to which we haven’t quite adjusted.

**Jeffrey Levin:** Assuming that there is some shift toward private conservators taking place—either in the short term or the long term—what effect would that have, if any, on the way we educate conservators?

**Marincola:** I think that it would have little effect on training programs. It doesn’t change the fundamental information that needs to be imparted in a three- to four-year program. I have a lot of concern about adding too much to programs. Instead, we need to see if what we’re doing is the right thing, rather than infinitely expanding the curriculum.

**Cassar:** Michele, I wonder whether I might ever so politely disagree? It isn’t just a question of curriculum stretch. Yes, we have to be careful about constantly adding to a curriculum and expecting it to be forever elastic, but we may have to make some difficult choices, particularly in graduate programs where we have to be selective about the information that our students actually need. In the United Kingdom, public institutions such as museums and galleries are still perceived as the natural employers of conservators. I don’t think that education programs are necessarily preparing conservators for a different world—the cut and thrust of negotiation, being hard nosed and businesslike. That worries me. We have to look at everything, including nonconservation subjects in the curriculum, and see what is needed.

**Matero:** This is an interesting time for higher education everywhere—many established academic and professional disciplines are undergoing intellectual reflection in terms of principles and practices. I don’t think anyone has been spared this. We’ve been slow to participate in the rapidly expanding discourse on these larger issues of heritage. We haven’t been very good about coming to the table and presenting our case as relevant. We’ve avoided a critical examination of our own historical-based and culturally based narratives. But the amount of critiquing that is going on by nonconservators about conservation and heritage suggests that it’s time to reenter the dialogue. We’ve got to contribute to the discourse using the very strengths that our transdisciplinary training provides. Conservation has always been about theoretical and practical matters and their relationship to the larger social and global issues. We don’t do a very good job communicating that.

On the subject of current education, it’s not unlike many fields. For example, medical education is reeling under the amount of information being generated that students need to know. We have to be careful about the pressure to know less and less about more and more. That’s the opposite of the traditional thinking about professionalization. Graduate education is about knowing what questions to ask. Students have their lifetime to get the answers. I’d hate to see us embrace changes because of temporary fluctuations in the economy.
Dardes: Frank, do you think conservation education needs a critical assessment? Does it need reform, or is it basically on the right path?

Matero: We have to continually find new ways to make what we do relevant. I was intrigued by May’s title of being the director of the Centre for Sustainable Heritage. Sustainability is one of those concepts to take a broader view of how conservation fits into the big picture. The word has suffered, unfortunately, from overuse and from misuse, but it’s still a useful concept. I think if you polled most conservators working in the built or immovable area, many of them would have very traditional and somewhat rigid notions about who they are and what they do. They underestimate their effect on the public in terms of why we do what we do and the effects it has on society.

Marincola: The burden cannot rest with the graduate programs to complete a conservator. We’re in the business of teaching students the skills to enable them to continue learning. How to look at a work of art to judge its condition. How to ask the right questions. How to think about the object’s material nature, its authorship, its authenticity, its historical record, and its aesthetic nature. And to have a basic understanding of scientific methodologies. We don’t train conservation scientists at the Conservation Center of the Institute of Fine Arts, but it is important that our graduates have a basic familiarity with analytical methodologies, their applications, and, most important, their limitations. There is internal pressure to teach more treatment-based courses. But to think that we can impart in three to four years the skills necessary to brilliantly inpaint, line a painting, varnish correctly under different circumstances, remove polychromies—that’s asking too much of a program. We all spend a lifetime in acquiring these skills. We’re really here to set up critical thinking—to teach students how to ask the right questions and where to go to get answers to them.

Cassar: What our program intends to do is bring into the classroom interdisciplinary professions to discuss issues related to conservation decision making, in terms of what should or could be done to objects or buildings or sites. To break out of the niche into which conservators often seem to retreat. I see conservation as part of a growing public attitude that society needs to be sustainable. I agree that the word sustainable has been overused. It’s up to us to recapture the essence of that word in terms of conservation because, after all, it all started with concern over the conservation of the planet. The environment isn’t only the environment inside our buildings—it’s the environment outside them. Otherwise, how do we overcome the environmental double standards of wanting to conserve objects in very controlled environments without being concerned over the cost to the environment outside? I can’t call myself a conservator without taking this holistic view. We need to be aware of society’s expectation of conservation and to consider why, when it thinks about conservation, it thinks first about the natural environment. Why doesn’t society think about material culture, which is the physical evidence of our identity?

Dardes: Do you think that newly minted conservators coming out of programs understand that they actually serve society rather than objects? Do we make that fundamental connection as clear as we need to?

Cassar: I think many do not understand that conservation is primarily about people.

Matero: I liken conservation training and the practice of conservation to programs in ecology that developed out of the more traditional disciplines of the natural and physical sciences. Many of these programs were developed not only with natural and physical science components but, more recently, with cultural components. You cannot take people out of ecology, and culture is part of people. To get back to education, we should never give up the idea that one of the strengths of the field, despite the pressures to specialize more, is the fact that conservation is firmly built on the hybridization of education in the humanities and the sciences. This gives us breadth of vision, let’s us see the problem in as many aspects as possible. Right now I’m working in the American Southwest, where I’ve been engaged in one of the most interesting aspects of conservation, which training never prepared me for—making culturally relative the process of conservation. Working in indigenous traditional communities is one aspect of the cultural dimension in the contemporary context. Another area is the notion...
of prevention—looking at ways of mitigating damage before it happens. That has given rise to this whole interest in management. These are contemporary issues that are changing the way education views the necessities of the field. They also reflect the way the field is changing.

Cassar: Frank, you’ve spoken about the conservator as being almost a polymath, a generalist—not a specialist working in a very narrow field but being able to range widely. Somebody like that should be valued in any organization and be involved in decisions at a senior level. Yet we don’t see that in practice. Conservators are not always perceived as team players, part of a collaborative decision-making process. There is a defensiveness that we need to counter. And one way of doing this is to have conservation students come into contact with potential users of heritage, clients who put them on the spot, challenging them in a safe environment so that they learn not to come out fighting or to retreat into their shell—but can actually exchange information and be prepared to lose some battles for the greater good. It isn’t the end of the world if we don’t win every single argument.

Marincola: Or whom we accept into programs? Are we going to the right undergraduates within our universities to inform them about conservation?

Cassar: There will always be a need for practitioners, the people who actually do hands-on conservation. But there is also a desperate need for tomorrow’s conservation leaders. Where are they going to come from?

Dardes: So do you think we need to recruit a different type of conservation professional?

Cassar: Maybe in recruiting students, we need to be aware not only of what they can offer on graduating but of what they are going to do in 10 or 15 years. What is their growth potential?

Marincola: How do you judge that? We’re asking ourselves this question right now. At NYU, we’ve just started the process of curriculum review, setting the goals for the next 5 to 10 years for the Conservation Center and also forming committees to look at the curriculum. We’ve conducted surveys of our graduates and their supervisors and have been working with that feedback on what works well and what needs amplification or improvement in the program. Two of the questions that we have are: What kind of core curriculum will we teach? and Are we targeting the right people to come into this field, or are we simply taking whomever offers themselves?

Cassar: The way that I would deal with this is to look at the applicants not only in terms of their potential skills at dealing with objects but also in terms of their skills at dealing with people. Can they demonstrate that they love people as much as they love objects?

Matero: In working with the built environment, you cannot avoid people—although some try. In the past 22 years that I’ve been teaching, I’m seeing a much more sophisticated and a much more aware applicant—now more than ever before. Conservation certainly is out there in the public sphere, and applicants are getting that information, whether it’s through public television or through the press. But it’s not coming from us, and that is partly the problem.

Cassar: Providing conservation professionals who are studying in our programs with the opportunity to work closely with other disciplines might be a way not only to reassure and reinforce what is good about conservation and our knowledge base but also to communicate the value of conservation to others.

Matero: This is an important point, because students emulate what they experience during their education. The programs I’ve been involved with have always been embedded in larger professional schools, so students in architecture, planning, and landscape
architecture cannot help but take courses with—and become somewhat familiar with—conservation as a subset of those professions. Their sharing of approaches makes for better professionals. They come out better sensitized to the issues and the possibilities. That’s probably been the greatest success that I’ve seen at Penn, where there is much cross-disciplinary discussion and respect.

**Cassar:** I endorse entirely what you said. This encourages young conservation professionals to listen to what others are saying about conservation and cultural heritage. Increasingly, the public is more knowledgeable and is setting the agenda. We need to listen to what is out there and not just do the talking.

**Matero:** Right. One thing I want to clarify that was mentioned earlier—the word *generalist.* Although I talked about a broad perspective being one of the great strengths of the field, that perspective is nothing unless it is backed up by expertise in the various components that make it distinct. It is a daunting task when you actually look at the required knowledge and skills that a conservator has to have.

**Marincola:** It’s a lifetime achievement, actually. The question for us is, What needs to be imparted in the short amount of time that we have them?

**Matero:** This goes back to the old arguments about apprenticeship versus formal education—is the role of a formal education to lay out the path which has been set by others before you, in ways that are complete?

**Cassar:** Which is why I prefer calling it “education” rather than “training.” The understanding of the philosophical and wider ethical values and significance of the heritage is so strong that it influences the formation of the profession so much—or it ought to. It’s not just “training.” We’re not teaching people the mechanics of fixing an object. There are ethics involved. There are serious issues relating to authenticity and renewal, which are paralleled in the environmental field. We have to be knowledgeable and confident about the conservation field, but our role is not exclusive.

**Matero:** Recently I’ve seen within the ranks a certain amount of criticism focused on this distinction between the tangible and the intangible. It’s been advanced by those who are concerned with issues of heritage but who’ve had very little experience in the realities of the materiality of places and things. As a conservator and an educator, it never once crossed my mind—and I hope not my students’ minds either—that the tangible is divorced from the intangible. To do so puts down conservators as plumbers. And that’s why conservation education involves art history, architectural history, the sciences, and a certain amount of cultural anthropology. It’s about people, not things. It’s about ideas and beliefs and values—and not about atoms and aesthetics only. I agree that there have been moments in the field when the hegemony of science dictated the way we were perceived and the way we get our information and the way we communicate, because science is privileged in contemporary society.

**Marincola:** It’s perceived, incorrectly, as being objective.

**Matero:** Shining the spotlight on the dichotomies of intangible and tangible is important. It illuminates the fact that conservation developed out of recognition of both simultaneously.

**Dardes:** Frank, you said earlier that students emulate what they learn. How do we construct classroom or field experiences to form the kinds of conservation professionals we want in the field?

**Matero:** In the years I’ve been teaching, I’ve seen tremendous strides in conservation education. I have not seen equal strides in the profession, and I say that with the caveat that I’m talking about the immovable cultural heritage. I don’t see the upper levels recognizing the need. Values, if anything, have been politicized, and recent events clearly indicate the power of things and places.

But let me turn to pedagogy. Conservation of the built environment is a bit more inclusive at the University of Pennsylvania. It ranges from material conservation to preservation planning to site management to landscape conservation. And—with a core curriculum in history, theory, technology, and practice that everyone takes—students move in their second year to specialization in one of the four areas I’ve mentioned. Any program has to balance knowledge with skill-based education, and of course we’re all
Conservation education involves art history, architectural history, the sciences, and a certain amount of cultural anthropology. . . . It’s about ideas and beliefs and values . . .”

—Frank Matero

straining under the amount of technical know-how, as well as general information, students need to have under their belt. This big reevaluation of conservation curriculum has forced me to look at my own institution in terms of what we’re delivering to students. We’ve fiercely upheld the notion of the core curriculum. I’ve gotten a lot of pressure from other institutions to have students specialize within the first year, but I don’t believe in that. The idea is to create courses that recognize the need for praxis, not just by ejecting students into internships but by actually building skills—for example, using the tremendous explosion of digital technologies for recording and documentation. We also have a program in heritage economics and visual communication skills.

Levin: Are there things that conservation education can learn from education in general? Are there innovations in the education field that can be applied to conservation education specifically?

Cassar: We have, together with the GCI, been trying out some techniques that we are keen to utilize in the master’s program we’re launching in 2004. One thing that has worked extremely well but that is also resource intensive is team teaching. We had two teachers from different disciplines teaching in the classroom, each offering different takes on a specific problem. There was the confidence between the two to disagree, to contradict, to generate a discussion, and to come to a consensus with the students. We used case studies dealing with complex issues, which we have written specifically for the program, and we used them throughout the workshop to enable students to look at the issues in depth together and to learn from one another, as well as being guided by the teachers. The other aspect was the Web. We put basic information on the Web, which students had to read before class. The classroom was the venue for discussion and debate rather than for imparting basic information.

We were, of course, dealing with experienced professionals, very varied in terms of their backgrounds, but they were all talking conservation. And that was the delight. There was no question that their perception of conservation was enhanced, and they each took something different away with them. But, of course, we were not training conservators—we were not attempting to turn architects or scientists into conservators.

Marincola: John Sexton, the new president of NYU, is very interested in interdisciplinary studies, and we are interested in incorporating more into the program. By its nature as part of the Institute of Fine Arts, the Conservation Center offers an interdisciplinary approach to conservation education. But we offer more than lots of art history classes for conservators. We also teach a fair number of courses designed for both art history students and conservation students. And those are team-taught, as May was describing, and offer a paradigm for how art historians or curators might work with conservators or scientists. Some courses are open to undergraduate study with the idea of attracting interested undergraduates from chemistry, sociology, or other fields, who are curious and want to broaden their knowledge. We don’t expect that they’re going to become conservators, but it does raise their consciousness.

Cassar: Exactly. It makes them more receptive to the whole ethos of conservation.

Marincola: The other two programs similar to ours—the art conservation program at Buffalo State run by Chris Tahk, and the University of Delaware–Winterthur program that Debbie Hess Norris directs—are sharing resources. We’re often able to share the expertise of, say, a photograph conservator and a photo historian and teach a weeklong course that all three programs participate in. I would love to do more sharing with the programs that are within reach of one another.

Cassar: I’m particularly interested in looking at ways in which our program might be able to provide colleagues from developing countries with some time in London studying—but also to do some of the course back at home. Developing countries, very often, have limited number of staff. Releasing somebody for even a year to study abroad overloads those left behind. It also creates a sense of displacement for those who have gone abroad, and they often have difficulty reintegrating once they return. So I’m looking at ways to enable people from developing countries to take advantage of our course—but not offering it as a full distance learning, because the value of the face-to-face is something that I don’t want to lose.
Marincola: For years, NYU has provided the opportunity for students from other countries to study for a year as special students. They’re not obligated to commit to three years of art history, language, conservation, and conservation history, but they can focus immediately on an area that interests them—plus, take courses throughout the university. The drawback has been that some students have opted to stay in the United States, so you can argue that there’s no benefit for their country.

Matero: I’d like to address this in a slightly different way. As educators, we need to get into the discussion that’s taking place on the relevance of international training programs. There’s a growing abandonment of these programs, which have been considered a lingering form of colonialism. But conservation, as a methodological approach, is about as close to universal tenets as we can get.

I’ve heard again and again—and I’ve experienced it with the many international research fellows, who don’t have access to higher education for two or three years but can come for six months—that one of the most life affirming experiences they’ve had is to sit in a room where no one has a common language but all share aspects of universality related to conservation and heritage. There’s been a growing detraction of conservation as a First World, Western import to developing countries. Those of us who feel strongly need to counteract that. Conservation is one of those areas—heritage is one of those areas—that is universal, but it has to be contextualized, culturally and geographically. There is a real dearth right now of opportunities to share in the knowledge and the dialogue of conservation that we can provide. I think the conservation field is in a bad way right now with respect to international programs.

Cassar: Can I give you one argument that we might be able to use? A key principle of sustainability is local distinctiveness—which isn’t only about wildlife or topography or local building styles. It’s distinctiveness in relation to education, personal skills, local product, values, and knowledge. What we teach doesn’t replace these things for those who take our programs. I think we’re sensitive enough to realize that what we ought to be doing is enhancing the local knowledge that these students bring with them.

Matero: But the notion of doing just that is perceived as part of this importation of applied approaches that has been criticized. There are people like you and like myself who are, in fact, practicing this form of sustainable conservation. But at the moment, there is the louder voice insisting on the irrelevance of the international approach in training and favoring only regional training—which I agree is important, but not at the expense of the opportunity for cross-cultural exchanges.

Cassar: We need both.

Marincola: And it goes in both directions. Students from the United States might be interested to study abroad.

Cassar: If you go back to ancient philosophical texts in any culture—be it Hinduism, Buddhism, Christianity, Judaism—you can see how embedded conservation is in the way of life of communities.

Matero: Right, but the trouble is that the embrace of modernism has set itself apart from tradition—and apart from conservation. New is good, old is bad. That is what conservation has to fight—the false dichotomies of modern versus tradition and new versus old. These are still operating. So even when individuals come to study conservation or to explore further conservation from within their own context, the support systems that they return to can be rather limited. And that’s another reason to argue for an investment in regional training and education—it’s reinforcement. We have to recognize that as well.

Cassar: If I could say one last thing in this conversation, it’s that we also need to be in listening mode. We need to be aware that we occupy very privileged positions. We get to handle wonderful things, and we almost take that as a right, when actually we have to make what we do accessible to a much wider public. We need to explain what we do, and we need to put people first.

Matero: If I could take the opposite view—not from the perspective of the relationship between the conservator and the heritage but between the conservator and the public. Conservation has had a small voice in the United States. While federal policies have recognized the need for conservation, there’s been very limited follow-up in employment and in funding, particularly in training and research. We’ve made great strides in education, but we’ve neglected to convince the public and the politicians of the importance of the work. We need only to compare our resources and programs with those of European countries to see the discrepancy. We really need to communicate what we hold to be so critical and important to contemporary society.

Marincola: I think advocacy is key. To educate our students to do that effectively is going to be increasingly important—as is helping them to grasp the importance of working within a group. Innovation is not done by a genius alone in a room. We need to help our students understand that innovation and problem solving within our field are best done with a group of people from various backgrounds. Our students need to learn how to talk with one another and work with one another better—and to continue the classroom on the outside.
Any successful approach to conservation education must first look at the specific concept of heritage in the region or country concerned. Until fairly recently, African approaches to conservation education were based on Western concepts of heritage. According to Dawson Munjeri, former vice president of ICOMOS, the concept in Europe and America was created based on “the cult of the physical object and its aesthetic.” That is, the materials, style, and monumental character are the foundation on which heritage has been understood, and they form the basis for conservation actions.

In Africa, this understanding of the heritage is insufficient. Indeed, the notion of cultural heritage, as perceived in Africa, celebrates the unbreakable link between man, nature, and God. African concepts of heritage have always embraced spiritual, social, and religious meanings, myths, and strong relationships with ancestors and the environment.

By ignoring these important aspects of heritage and focusing only on technical solutions to problems, African professionals and their European counterparts have had difficulties in ensuring the conservation of sites. In some cases, important protective rituals, taboos, or restrictions have been lost. In others, traditional conservation and maintenance practices have been abandoned as globalization and modernization have accelerated. Even identification of sites has been problematic at times, as the “monumental” or “built” aspects of the heritage were favored over less tangible, but perhaps more important, associations. In short, significant heritage in Africa has been deteriorating and even disappearing because appropriate measures have not been developed to take into account the African concept of heritage.

A Global Strategy in Africa

To confront this problem, some in Africa are now trying to take a lead in developing concepts related to intangible heritage, cultural landscapes, and other new ways of looking at both the identification and management of heritage. Two processes launched by the World Heritage Committee of UNESCO in the early 1990s have supported this effort.

The first is the Global Strategy for a Balanced and Representative World Heritage List. This initiative, begun in 1994, grew from the realization that the World Heritage List, up to that time, had been based on a “monumental” concept of heritage. The Global Strategy has tried to broaden definitions of the heritage with the goal of creating a World Heritage List that better represents all cultures.

With regard to Africa, the World Heritage Centre conducted several meetings from 1995 to 1998, aimed at changing
the perception of African cultural heritage. In February 1995, an international meeting of experts recommended the identification, study, protection, and publicizing of the archaeological, architectural, technical, and spiritual components of African cultural heritage. In October of the same year, African experts representing 13 countries met in Zimbabwe and called for a concept of cultural heritage that transcends the monumental vision and aesthetic notion of artistic masterpiece. They emphasized the need for a much broader anthropological approach, which takes into account the complex societal and symbolic values of sites, without limiting the analysis to form and building material. The fundamental role of the spiritual and the sacred as part of cultural heritage, along with its physical aspect, was recognized as characteristic of Africa. Since that meeting, there have been four additional meetings to discuss such topics as cultural landscapes and the notions of authenticity and integrity as they relate to Africa.

The second process launched by the World Heritage Committee and developed by ICCROM (the International Centre for the Study of the Preservation and Restoration of Cultural Property) was the Global Training Strategy aimed at increasing the capacity of countries to deal with all aspects of the World Heritage Convention. The approach requested by the Committee was to look both at global needs and the specific needs of the various geographical regions. A meeting of experts held at ICCROM in 1996 invited professionals from around the world to analyze training needs and strategic approaches to education and training.

At that meeting, a paper was presented on a strategic approach to training in sub-Saharan Africa. The paper—prepared by CRATERRE-EAG (the International Centre for Earth Construction—School of Architecture of Grenoble), in partnership with the World Heritage Centre and ICCROM—was based on a survey distributed to 44 countries. The results of the survey led to the identification of a number of issues to be considered in developing a training strategy for Africa:

- the insufficient human resources and capacity to carry out management, conservation, and maintenance using traditional methods and materials;
- the difficulty for African countries to integrate conservation policies into a framework for sustainable development;
- the ineffectiveness of legislation aimed at protecting immovable cultural heritage;
- the noninvolvement of local communities in conservation planning and management;
- the lack of awareness of politicians, decision makers, and local communities of the role that conservation can play within rapidly changing economic, social, and environmental situations;
- the lack of national inventories of immovable cultural heritage; and
- the difficulty for African professionals to share information, specialized knowledge, and best practices in the region.

**A Regional Training Program**

After its presentation to the experts meeting in 1996, the training strategy for sub-Saharan Africa was adopted at the 20th session of the World Heritage Committee. In June 1997 the three organizations involved in the survey signed an agreement to develop a program based on the proposed strategy. In 1998, after a period of consultation and program development, the UNESCO World Heritage Centre, ICCROM, CRATERRE-EAG, and African cultural heritage organizations launched the Africa 2009 program. Its long-term aim is to increase national capacities in sub-Saharan Africa for management and conservation of immovable cultural heritage.

Financial partners include the Swedish International Development Cooperation Agency and the Swedish National Heritage Board, the Norwegian Agency for Development Cooperation, the Ministries of Foreign Affairs of Italy and Finland, the World Heritage Fund, the UNESCO Division of Culture, and ICCROM.
The program—managed by a steering committee of African directors of cultural heritage and representatives of the three international organizations—is guided by several principles. These principles include involving local communities in planning for and protecting heritage resources within their territory and ensuring that tangible benefits can be derived by these communities; giving priority to local knowledge systems, human resources, skills, and materials; ensuring that activities contribute to capacity building within national institutions; giving priority to simple, incremental solutions to problems that can easily be implemented within an existing framework; creating awareness and respect for international conservation norms and standards; and focusing on prevention and maintenance as a cost-effective and sustainable strategy for management and conservation.

It terms of structure, activities are carried out at the regional level (Projet Cadre) and the site level (Projets Situés). The Projet Cadre comprises regional activities that include training courses, workshops, seminars, research projects, and networking. The Projets Situés aim at improving conservation at individual sites in the region. The strength of the program is derived from the link between the two levels. Information from the Projets Situés is fed back into the Projet Cadre to help improve training methodologies and techniques at the regional level and to ensure that the program is rooted in the realities of the field. In turn, developments on the regional level are used to strengthen the Projets Situés. The relationship between both levels highlights another important principle for Africa 2009: the promotion of hands-on practical experiences as an effective means of training. This hands-on approach to training is not only used during the Projets Situés but is also an integral part of regional courses and other activities.

The Projet Cadre has carried out five regional management courses, training over 100 participants. Twenty of these participants have been invited back to act as course assistants or resource persons. The year 2003 marked the introduction of an annual regional technical course, the first of which took place in Cameroon on the topic of documentation and inventory. A number of other activities have been carried out under the Projet Cadre, and a series of African sites have been the focus of Projets Situés work (see sidebar).

The Larger Context

It is important to recognize that the Africa 2009 program exists within a larger training context in sub-Saharan Africa. In an effort to avoid duplication and take advantage of shared goals and interests, the program has tried, where possible, to create partnerships.

Two important partners are the Ecole du Patrimoine Africain (EPA), located in Porto-Novo, Benin, and the Program for Museum Development in Africa (PMDA), located in Mombasa, Kenya. EPA is a university institution with a regional focus specialized in training and research for the conservation and promotion of movable and immovable cultural heritage. PMDA is a nongovernmental organization dedicated to the preservation, management, and promotion of cultural heritage in Africa through a program of training and development of support services. Both institutions were created as a final output of Prema, a multiyear program of ICCROM aimed at building capacity for museum professionals in the region. EPA works primarily with Francophone and Lusophone countries, while PMDA works with Anglophone countries. While these institutions work primarily on training related to conservation in museums, both are also interested in immovable cultural heritage. In initial phases, they provided a stable base from which to implement the annual regional courses of Africa 2009. In 2003, however, a broader agreement was signed so that collaborative projects could increase.

Universities also play an important training role within the region. Africa 2009 has established a relationship with the University of Zimbabwe, which recently initiated a master’s program in heritage management. The partnership includes funding scholarships for individuals to study for a master’s degree in heritage management at the university. Partnerships are also being sought with other universities in the region. In addition, relationships have been established with the International Council of African Museums and the West African Museums Program; both play an important networking role for museum professionals within sub-Saharan Africa.
The implementation and coordination of Africa 2009 is a large undertaking, but its size gives it some unique benefits. By carrying out many different activities each year, the program is able to approach certain topics from different angles. For example, the topic of documentation and inventory is covered annually as part of the regional management courses, and it has also been the subject of a regional thematic seminar, three research projects/workshops, and a short technical course. Each time the topic is treated, concepts are developed and improvements are made. Another benefit of the size of the program and number of its activities is that it allows continued contact with regional professionals in a variety of contexts. This ensures that there is a sustained exchange of ideas, giving these professionals support in their continuing effort to improve the conditions for conservation in their home institutions. This constant contact functions, in effect, as a long-term capacity-building support.

The program is currently set to run through the end of 2009. Discussions are ongoing with partner institutions in the region to determine the shape of capacity-building activities aimed at conservation of immovable cultural heritage after that date. In the meantime, the program will continue to work with national heritage organizations in the region to improve capacity for the conservation of this important part of the world’s heritage.

Lazare Eloundou Assomo is a program specialist with the Africa Unit of the UNESCO World Heritage Centre. Joseph King is a senior project manager with the Heritage Settlements Unit of ICCROM.

Since 1998, the following sites have benefited from work through the Projets Situés (site projects) of the Africa 2009 program:

- Asante Traditional Buildings, Ghana
- Khami Archaeological Site, Zimbabwe
- Kasubi Tombs, Uganda
- James Island, Gambia
- Kondoa Irangi Rock Paintings Site, Tanzania
- Niamey, Zinder, and Agadez, Niger
- Tombeau des Askias, Mali
- Stone Built Structures in the Mandara Mountains, Cameroon
- Cathédrale de Sainte Marie, Libreville, Gabon
- Leven House and Steps, Kenya
- Koutammakou Cultural Landscape, Togo
A Partnership in Education
The UCLA/Getty Master’s Program

By David Scott and Kathleen Dardes

The reassembly of a Greek kylix vase. The forthcoming UCLA/ Getty Program in Archaeological and Ethnographic Conservation will provide practical conservation training in both archaeological and ethnographic materials, as well as an appreciation of the often complex issues relating to significance, access, and use of these materials. Photo: Courtesy of the Antiquities Conservation Department of the J. Paul Getty Museum.

The conservation of archaeological and ethnographic material is an important part of our efforts to preserve the cultural remains of the past and to ensure that future generations can know and learn about the past directly from those artifacts that have survived. In conserving archaeological and ethnographic artifacts, conservators deal not only with the materiality of the object but with the array of values and meanings that are attached to it. Present and past use—as functional objects, historical documents, spiritual and cultural symbols—adds fascinating layers to artifacts, which require conservators of these materials to take an approach that respects both tangible and intangible attributes.

In 1984, the Washington, D.C.–based National Institute for Conservation (now known as Heritage Preservation) identified the development of educational opportunities for conservators of archaeological and ethnographic materials as a priority. Since then, a number of efforts have helped address this need, including the inclusion of archaeological and ethnographic conservation into the framework of existing academic conservation programs in the United States. These programs, along with those offered in other countries, have produced many of the current leaders in ethnographic and archaeological conservation. However, there remains a need for more conservators equipped to address the particular requirements of ethnographic and archaeological materials.

During the 1990s, the Getty Conservation Institute began a search for an appropriate university with which to develop a graduate-level program in archaeological and ethnographic conservation that could complement existing programs and expand educational opportunities. After a series of meetings and exploratory discussions with several institutions of higher education, the University
of California, Los Angeles (UCLA), was identified as the most suitable partner for the GCI to develop this needed component of conservation education. In 1999, Getty Trust President and CEO Barry Munitz and UCLA Chancellor Albert Carnesale formally announced their intention to work together in creating a new academic program in conservation. It was agreed that the program would be administratively housed within the Cotsen Institute of Archaeology, an organized research unit at UCLA.

**Program Objectives**

The aim of the UCLA/ Getty Program in Archaeological and Ethnographic Conservation will be to provide students with a solid educational base and practical training in both archaeological and ethnographic materials, as well as an appreciation of the often complex tangle of issues relating to significance, access, and use of these materials, which—in many cases—sets them apart from fine art or historical materials. In the case of ethnographic materials especially, the program will facilitate an understanding of the multiple values and meanings these materials continue to have for their communities.

The positioning of the program at UCLA—a major research university with outstanding faculties in the social and physical sciences—will help students develop a sense of kinship with colleagues in archaeology, anthropology, and the sciences. For the conservators who emerge from the program, this sense of kinship will lead to an interdisciplinarity that will be an important attribute of their working lives.

The new program will equip students with a range of skills and knowledge that will help them respond flexibly and proactively to changing needs and conditions in the field of ethnographic and archaeological conservation. It will stress the importance of interdisciplinary collaboration and decision making and prepare students to operate in a number of potential contexts—in the field or the lab, in the private or the public sector, under contract or in conventional employment. Topics to be covered in the program include:

- the technology and deterioration of materials,
- the nature and history of conservation,
- preventive conservation and environmental management,
- conservation in situ and aspects of field and site conservation management,
- the conservation treatment of ethnographic and archaeological materials,
- museum practice,
- scientific methods in conservation, and
- ethics and issues in conservation.
One of the strengths of this collaborative new program will be the opportunity to draw upon the expertise and resources that both the Getty and UCLA have to offer. UCLA has a strong research and academic reputation, while the Getty, for its part, has curatorial, conservation, and science staff that are engaged in research and the development of new methodologies for the management and conservation of cultural heritage. Within the Getty, the GCI has a particularly strong record in archaeological conservation and in scientific research. Working in tandem, the Getty and UCLA will offer exceptional opportunities for learning in the classroom and in museum and field environments.

The three-year program—which will lead to a master’s of art degree—will include two years of classroom-based teaching and laboratory work at UCLA and the Getty, followed by a one-year supervised internship at other museums or conservation facilities. This course of study will provide students with a combination of theory and practical work during the first two years, followed by a final year of concentrated practical experience.

The program’s teaching will look to many of the new and exciting pedagogical developments within higher education. Teaching will combine traditional lectures with case studies, seminars, and other active-learning exercises. Internet-based resources will be employed as the quality and quantity of Web-based information for conservation continues to grow. The course will integrate interactive Web-based learning tools as they become available. As part of their summer or internship work, students may be able to participate in field projects undertaken by the GCI and UCLA’s Cotsen Institute of Archaeology. These projects will allow them to learn directly from experienced practitioners in actual working contexts. In addition to their didactic resources, the Getty and UCLA both offer extensive library collections and teaching resources.

Elements of the Partnership

The Education section of the GCI is working with the UCLA program director of the master’s program on the preliminary stage of the program’s development. This stage includes creating a profile of the graduates of the program and defining the curriculum in general terms. Over the next two years, as the program prepares to accept its first class of students, the curriculum will be refined by the program director and the program’s other faculty.

As a component of its contribution to the program, UCLA will provide faculty positions and office space for the program at the Cotsen Institute. The Getty, for its part, will provide new teaching and lab facilities at the refurbished Getty Villa in Malibu, which will house the Getty Museum’s antiquities collection, as well as be a center for the study of archaeology that includes lectures, special exhibitions, and facilities for scholarly research.

The program will begin to admit students in fall 2005. It will be the only graduate-level academic conservation program on the West Coast of the United States and the only U.S. program with its sole focus on archaeological and ethnographic materials. The program will admit both U.S. and international students, and admission to the program will be offered every two years, with an incoming class size of 10 to 12 students.

The UCLA/Getty Program in Archaeological and Ethnographic Conservation hopes to contribute to an increased interdisciplinarity between the practice of conservation and the fields of archaeology and anthropology. There is a greater need for the integration of conservation into ethnological and archaeological practice as the stewardship of our heritage resources becomes increasingly important. As described in a recent issue of this newsletter, conservation is increasingly seen not only as desirable in the wider archaeological context but also even as a necessity (see Conservation, vol. 18, no. 1).

The conservation graduate program at UCLA aims to create conservators who can exercise a central role in decision-making processes regarding cultural heritage and the treatment and use of archaeological and ethnographic materials. The partnership between the Getty and UCLA—each institution engaged in its own way with the study and conservation of archaeological and ethnographic materials—should provide a comprehensive educational structure for this new and necessary program in conservation education.

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For more information about the program, please contact:

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In spring 2003, a training course for technicians in the maintenance of in situ archaeological mosaics continued in Tunisia at the site of Neapolis, outside the modern coastal town of Nabeul. The course is a collaboration between the Getty Conservation Institute and the Tunisian Institut National du Patrimoine (INP) to train technicians on stabilization and routine maintenance of in situ archaeological floor mosaics. It is part of a national strategy to train a maintenance team for every region of the country.

The GCI previously provided training for a group of technicians now working on mosaics from sites in the northeast region of the country. A second course started in fall 2002 with a new group of 10 trainees who are employed at sites in the central region. In May 2003, in the second part of this course, the new trainees were introduced to the practical work of stabilizing floor mosaics using lime-based mortars.

Through classroom instruction and hands-on practice, the trainees learned about the various materials to use for in situ conservation and about the mortar mixes appropriate for each type of treatment. They also continued to improve their documentation skills by recording in written, photographic, and graphic form the conservation interventions they performed.

The participants worked on the mosaic of the peristyle of a Roman villa—the Maison des Nymphes—that dates from the fourth century and was excavated in 1965–67. As was typical practice at the time, the figurative parts of the mosaic decoration were detached and placed in the nearby museum, while the much larger surface area of geometric mosaics was left largely uncared for, with only sporadic repair work.

This campaign also provided the opportunity for the trainers to review the documentation work carried out by the trainees after the last campaign on specific mosaics at their respective sites. At each site, planning for the stabilization interventions that the trainees will perform in between campaigns was carried out with them. The stabilization work will be reviewed during the third part of the training course to be held in fall 2003.
At Copán in Honduras—site of an important city-state during the Maya Classical Period—project work continued with activities aimed at developing a conservation strategy for the site’s hieroglyphic stairway. At 10 meters wide by 24 meters high, the stairway is composed of 63 steps with over 2,000 carved glyphs that recount centuries of Copán dynasty history.

In July 2003 the GCI assisted its project partner, the Instituto Hondureño de Antropología e Historia (IHAE), in planning the construction of an access stairway to replace the temporary wooden one constructed in 2000. The installation of netting around two sides of the stairway was also designed to test the effectiveness of such a system in preventing the accumulation of leaves on the monument. Leaf removal has been required frequently in the past; finding a way to avoid the need for IHAE personnel to walk on the stairway and brush its surfaces would be an important improvement in its maintenance. This recent campaign also provided the opportunity for GCI project staff to meet the new director of IHAE, Margarita Duron de Galvez, on site and to update her on the progress of the project.

GCI project conservators continued working with IHAE personnel to perform treatment trials on selected blocks of the stairway. This effort included trials of different pigments as additives to lime mortars in order to obtain suitable color matches for the variety of stone colors found on the stairway. Trials were also conducted with both lime and silica sol–based grouts for treating areas of surface detachment and flaking. The complete conservation treatment of selected stairway blocks continued, focusing on the removal of acrylic resin from stone surfaces previously treated to prevent surface loss in past decades.
Values Case Studies Project

Four case studies on values-based planning for site management—produced as part of the GCI’s Research on the Values of Heritage project—have been published electronically and are now on getty.edu at: www.getty.edu/conservation/resources/reports.html.

These case studies represent the culmination of many years of research. They examine the role of values in site management and provide examples that describe and analyze the processes that connect theoretical management guidelines with management planning and its practical application. They are intended as didactic materials and for use by institutions, by professionals in the field, and for teaching. A print publication of the case studies, with additional material, is planned.

The case studies result from a collaboration among the Australian Heritage Commission, Parks Canada, English Heritage, the U.S. National Park Service, and the Getty Conservation Institute. A broad spectrum of professionals around the world participated in and informed the work. The four studies present Chaco Culture National Historical Park in the United States, written by Marta de la Torre, Margaret MacLean, and David Myers; Grosse Île and the Irish Memorial National Historic Site in Canada, written by Margaret MacLean and David Myers; Port Arthur Historic Site in Australia, written by Randall Mason, David Myers, and Marta de la Torre; and Hadrian’s Wall World Heritage Site in England, written by Randall Mason, Margaret MacLean, and Marta de la Torre.

The results of the case studies project, directed by Marta de la Torre of the GCI, reflect its dedicated and thoughtful steering committee:

- **Gordon Bennett**, Director, Policy and Government Relations, National Historic Sites Directorate, Parks Canada
- **Christina Cameron**, Director General, National Historic Sites Directorate, Parks Canada
- **Kate Clark**, Head of Historic Environment Management, English Heritage
- **Marta de la Torre**, Principal Project Specialist, Getty Conservation Institute
- **François LeBlanc**, Head, Field Projects, Getty Conservation Institute
- **Jane Lennon**, Commissioner, Australian Heritage Commission
- **Margaret G. H. MacLean**, heritage consultant, Los Angeles
- **Francis P. McManamon**, Departmental Consulting Archaeologist, Archaeology and Ethnography, U.S. National Park Service
- **Randall Mason**, Assistant Professor and Director, Graduate Program in Historic Preservation, University of Maryland
- **David Myers**, Research Associate, Getty Conservation Institute
- **Dwight Pitcaithly**, Chief Historian, U.S. National Park Service
- **Christopher Young**, Head of World Heritage and International Policy, English Heritage

Information about the values research project can be found at: www.getty.edu/conservation/activities/values/index.html.

China Initiatives

After a hiatus in spring 2003 due to the SARS epidemic in China, the GCI team returned in August and September to the Mogao grottoes and the Imperial Summer Resort at Chengde in the application of the China Principles at these two sites. The Principles—developed through a collaboration among the State Administration for Cultural Heritage (SACH) in China, the GCI, and the Australian Heritage Commission (AHC)—provide national guidelines for conservation and management of cultural heritage sites in China. The recent work campaign was also the occasion for a renewal of the cooperative agreement between SACH and the GCI in a fifth phase of the collaboration since 1989. Deputy Director-General Zhang Bai signed the new agreement, and Neville Agnew from the GCI initiated it.

At Mogao, the joint GCI–Dunhuang Academy team undertook grouting of extensive areas of wall painting in Cave 85 to re-adhere the plaster layer of the conglomerate rock into which the cave temples of the site are hewn. GCI staff also made a presentation to the Dunhuang Academy staff on the information management system developed for the project, including the visual representation of quantitative, analytical data. With the rescheduling of the Second Silk Road Conference to the end of June 2004, the Cave 85 project will be in its final stages. The cave is being
In spring 2003, the GCI collaborated with the Centre for Sustainable Heritage, University College London, on an advanced course entitled Historic Buildings, Collections, and Sites: Sustainable Strategies for Conservation, Management, and Use. It was designed for mid- to senior-level professionals with responsibility for the care of the movable or immovable cultural heritage.

The course took place in two phases. During the first phase—April 1 to May 30—participants completed readings and assignments while at their home institutions. This work provided a foundation for the workshop phase of the course, which took place at University College London from June 16 to 27, 2003. Teachers were affiliated with the Centre for Sustainable Heritage and the Faculty of the Built Environment (The Bartlett), as well as with other schools and institutes of University College London. In addition, a guest instructor from the United States rounded out the teaching team.

The aim of the course was to equip participants with current scientific, technical, and practical information on the preservation of cultural heritage and to stimulate thought and discourse on the challenges and opportunities available to conservation professionals. The course considered how a variety of factors may affect the integrity of materials used for both the built heritage and for collections, noting the interrelationships that may exist when materials are used in composites or in juxtaposition, as in the case of museum collections and buildings. The course also presented monitoring and diagnostic strategies to meet different objectives, and it explored conservation and management approaches for various types of materials, contexts, and resources.

The course emphasized an understanding of the range of issues that often factor into decisions relating to conservation, management, and use of heritage; it also covered the means of identifying effective working strategies and effective partnerships with other professionals and with the public. An important aspect of the course was consideration, from various vantage points, of the sustainability of measures taken on behalf of heritage.

Throughout the course, teaching strategies emphasized problem solving, interdisciplinarity, and cross-fertilization of ideas among professionals working with movable and immovable cultural property.
Replicas from the Tintori Center will be used to test various investigation techniques—from noninvasive in-situ examination (e.g., using UV light to see fluorescence) to more sophisticated analytical procedures that require sampling (e.g., gas chromatography). Each technique will be evaluated for its potential and limits in identifying organic materials. In addition to vetting these techniques, the project will produce a large set of categorized data that will constitute a comprehensive reference for consultation and comparison when studying a wall painting.

The GCI’s main role in this project is to coordinate the research by the different laboratories—including the GCI’s—and to integrate the results into the development of an appropriate protocol for the characterization of organic materials. The GCI will also manage, disseminate, and make accessible to the larger conservation community the information produced by the project.

A feasibility study of the project began in 2002 and was completed in spring 2003. As part of the feasibility study, two samples were circulated to selected laboratories for noninvasive investigations, and microsamples were collected for invasive nondestructive and invasive destructive investigations. In June 2003, a project workshop was held in Italy, at which the project participants discussed the feasibility study and sought to define further the analytical protocol. This year the project will continue with an examination of 18 additional samples with over 40 types of wall painting techniques, including the use of egg, animal glue, oil, and gum as binders.

The application of the methodology to a case study—a project component in development—will help demonstrate the process and illustrate the level of information required to ensure the appropriate conservation of a painting. It is hoped that the project will result in more detailed study of wall paintings prior to intervention, reducing the risk of irreversible damage to wall paintings during intervention.

Despite improvements in identifying organic materials in wall paintings, there remains much to understand about the nature and role of organic materials in these works. The knowledge of the different types of organic materials in wall paintings and of their behavior is fundamental for developing appropriate conservation and maintenance procedures. Not knowing the presence and the nature of the organic material contained in a paint layer can result in inappropriate interventions using harmful materials and can cause irreversible damage.

The GCI is participating in a new scientific research initiative that addresses this issue. The Organic Materials in Wall Paintings project (OMWP) seeks to develop an analytical protocol for the study of organic materials used in wall paintings. The project brings together an international group of conservation science laboratories that will provide their expertise in the study of wall paintings and in the use and evaluation of analytical techniques.

This research will be made possible by studying over 60 wall painting replicas from the Tintori Center in Italy, established by the late conservator Leonetto Tintori in 1983. The center is a repository for hundreds of wall paintings replicas of known composition, simulating different techniques and material combinations and created for research purposes.

A June 2003 meeting, at which participants in the Organic Materials in Wall Paintings project discussed the work program of the research initiative. Photo: Giacomo Chiari.
The Getty Conservation Institute is collaborating with the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) to develop training in risk assessment, emergency planning, preparedness, and response within the framework of the Museum Emergency Program, an initiative of the International Council of Museums (ICOM).

The GCI-ICCROM collaboration will focus initially on creating a curriculum for a pilot training course and on developing teaching strategies and didactic resources. The training model developed through the GCI-ICCROM collaboration will eventually be incorporated into a broader program of courses taught regionally around the globe as part of the Museum Emergency Program’s efforts to provide training and support to museum personnel implementing emergency preparedness procedures.

Additional information about the educational work of the Museum Emergency Program will appear in an upcoming issue of Conservation.

The GCI announces its winter and spring 2004 schedule for “Conservation Matters: Lectures at the Getty”—a public series examining a broad range of conservation issues from around the world. Lectures are held monthly on Thursday evenings at 7:00 p.m. in the Harold M. Williams Auditorium at the Getty Center. Events are free. Reservations are required. To make a reservation or for further information, visit the Getty Web site (www.getty.edu/conservation/activities/). Reservations can also be made by calling 310 440-7300.

Exceeding all Preconceptions: Twenty-One Years with the Rothko Chapel Paintings
January 15, 2004
Carol Mancusi-Ungaro—director of conservation, Whitney Museum of Art, and founding director, Center for the Technical Study of Modern Art, Harvard University Art Museums—discusses the unusual problems and conservation treatment of the Rothko paintings.

Building Communities through Heritage
February 19, 2004
Sir Neil Cossons, chairman of English Heritage, reviews current trends and thinking on communities, heritage, and conservation, and he explores some of the new options for the future.

The Preservation Follies: Inventing the Near and Distant Past
April 15, 2004

Lecture on the Bibliotheca Alexandrina
May 13, 2004
Ismaïl Serageldin—director of the Bibliotheca Alexandrina (Library of Alexandria) in Alexandria, Egypt—discusses both the ancient library and the new library.
Since the 1970s, sustainability has evolved as a significant mode of thought in nearly every field of intellectual activity. In 1992 the United Nations Conference on Environment and Development in Rio de Janeiro brought the ideas of sustainability and development to the forefront of global politics.

For historic resources—whether a cultural landscape, town, building, or work of art—that cannot be physically regenerated but only retained, modified, or lost, sustainability means ensuring the continuing contribution of heritage to the present through the thoughtful management of change responsive to the historic environment.

This volume brings together contributions from specialists in a wide range of fields—archaeology, architecture, conservation and management, city and regional planning, anthropology, biology, economics—who examine issues of sustainability as they relate to heritage conservation. The topics range in scale from individual buildings and sites to cities, landscapes, and other historic environments. The volume offers a global perspective and demonstrates that conservation must be a dynamic process, involving public participation, dialogue, consensus, and, ultimately, better stewardship. Through its dual focus on theory and case studies, the book also makes an important contribution to the larger debate on quality of life and the environment.

Jeanne Marie Teutonico is associate director for field projects and science at the Getty Conservation Institute. Frank Matero is associate professor of architecture and chair of the Graduate Program in Historic Preservation in the Graduate School of Fine Arts at the University of Pennsylvania.

224 pages, 8½ × 11¼ inches
16 color and 77 b/w illustrations, 6 tables
ISBN 0-89236-692-3, paper, $50.00

All GCI books can be ordered online by visiting www.getty.edu/bookstore.
Kris Kelly’s childhood was spent in the U.S. Midwest and East Coast. Born in Illinois, she moved with her family to Connecticut at age five and then to Minnesota five years later. Four years after this, it was back to the East Coast, this time to Washington, D.C. There Kris attended a Quaker high school where theater and politics were major extracurricular interests. Her activities ran the gamut from Vietnam peace rallies to productions of Oklahoma and Brigadoon.

Kris began Bryn Mawr College planning to be an English teacher, but after an art history class, her interest shifted. Fascinated by the meanings and significance of art objects, as well as by their aesthetic qualities, she majored in art history, with studies that included archaeology. Following graduation, she entered graduate school at Columbia University to study early Christian and Byzantine art. In 1978 she began dissertation research in Rome, supported partly by a fellowship from the American Association of University Women.

She returned to New York in 1980 to attend a summer graduate program in business administration at New York University, having realized that she was more interested in management than in academe. While she continued her Ph.D. studies—receiving her doctorate in art history and archaeology in 1986—she spent the 1980s working in line management and human resource positions for several large retail companies in California. It was a rich experience in terms of people and situations, but over time she missed the connection to art and history.

In 1990 she was hired as the Getty Museum’s manager of personnel and administrative services. Over the next nine years, her job expanded and she became the Museum’s manager of administration. At the same time, a fascination with the art and cultures of Southeast Asia—sparked by a 1993 trip to Vietnam—led her to write a book entitled The Extraordinary Museums of Southeast Asia, published in 2001. In 1999 she joined the GCI as a senior project manager, later becoming head of Public Programs & Communications. Kris oversees GCI publications, the Conservation Guest Scholar and GCI Internship programs, the public lecture series, Conservation, and conservation content on getty.edu. She enjoys her regular contact with conservation professionals and enjoys having the chance to contribute to the field, in part by bringing issues of conservation to a broader audience. In her spare time, she heads as frequently as possible to Southeast Asia, conducting research on the region’s arts, cultures, and museums for possible future personal projects.

Luke Swetland was born and raised in Lincoln, Nebraska, the seventh of eight children. Both parents—who worked in nursing—stressed reading, and Luke developed a strong interest in literature. After working for a couple of years following high school (and after encouragement from workplace colleagues), he enrolled at the University of Nebraska—making him the first, but not the last, in his family to attend college. There he studied German language and literature before transferring to the University of Massachusetts, Boston, where he ultimately earned a degree in English. He spent part of his final year at the university’s program on Nantucket Island, where he wrote his bachelor’s thesis on Nantucket’s Athenaeum Library.

After living in New Mexico for a year, he began graduate work in American Studies at the University of Michigan with a Mellon fellowship. He concentrated on American history and cultural anthropology, but by the time he was awarded his master’s degree in 1989, he had decided to pursue a career in the libraries and archives field. After earning a master’s degree in information and library studies, he was hired by the Henry Ford Museum in Dearborn, Michigan, to reorganize the personal papers of Henry and Clara Ford. Over time he was given expanded responsibilities for the museum’s research center; early in 1995 he was appointed head of Research and Access Programs, overseeing public access for all of the museum’s artifact, library, and archival collections.

In the fall of 1996, Luke moved to Los Angeles, where he became the chief archivist and National Resource Center manager of the Japanese American National Museum. Over the next three years he was given greater programmatic and operational responsibilities, and in 1998 he was appointed deputy director and senior vice president of the museum. During his time there, the museum completed an ambitious building program, and the staff doubled in number.

During 2000, Luke was asked by the GCI to consult on the Institute’s information management systems, and he was subsequently invited to consider joining the staff. Attracted to the opportunity to return to hands-on information management, Luke began work at the GCI in early 2001 and was shortly thereafter appointed head of Information Resources. Since coming to the Institute, he has focused on reorganizing services to better support and advance the work of the Institute’s program staff, as well as on exploring new ways to provide information to the wider conservation community.
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