# Conservation



### The Getty Conservation Institute Newsletter

Volume 14, Number 3 1999

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#### Conservation, The Getty Conservation Institute Newsletter

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

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

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

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#### **Millennium Edition I**

This is the first of two special editions of *Conservation* dedicated to creating a portrait of the conservation field as the 20th century comes to a close. In these issues, a distinguished group of colleagues reflects on a series of topics, providing a perspective on the past and a consideration of the questions and challenges that may lie ahead. We hope that these essays collectively offer a picture of conservation at the dawn of the 21st century.

Introduction 4 Conservation at the Millennium Timothy P. Whalen Essays 5 Authenticity: Rock of Faith or Quicksand Quagmire? David Lowenthal 8 The Scientist in Conservation Giorgio Torraca 11 Conservation of Monuments and Sites Sherban Cantacuzino and Caroline King 14 Conservation of Museum Collections Carolyn L. Rose 18 **Repatriation Sharon Sullivan** 22 Conservation of Historic Architecture Jukka Jokilehto 25 International Conservation Organizations Mounir Bouchenaki GCI News 28 Projects, Events, Publications, and Staff Updates on Getty Conservation Institute projects, events, publications, and staff.

# Conservation at the Millennium

By Timothy P. Whalen

As THE 20TH century comes to a close, we are dedicating two issues of our newsletter to glance, Janus-like, at the field and profession of conservation. In doing this, the GCI joins the fin-de-siècle examination that reflects on where we have been and on what may lay ahead.

For this issue and the next, we invited a distinguished group of colleagues to share their thoughts on a number of subjects that currently seem to be on the minds of conservation professionals. For example, we asked two of our writers to consider the concepts of "authenticity" and "the scientist in conservation"; in return, we received essays on these subjects that gave us a wonderful perspective on the past while articulating the challenges that will occupy us in the years to come.

The topics covered in these pages are vast and varied, while the length of each essay is, of necessity, short. The writers have focused on subjects in line with their interests, and in some instances, they have offered very personal perspectives. Yet, as we consider the essays collectively, we find some common threads.

While a few decades ago, a similar undertaking might have resulted in an anthology focused on scientific and technological issues, all our authors emphasize that conservation is fundamentally a social and cultural activity. The emphasis on understanding the value that we attribute to cultural heritage reflects the search for meaningful ways to integrate the past into the present and the recognition that how we value heritage affects—perhaps more than technical matters—how we conserve it.

Our authors highlight the imperative of conserving the values and the history of the object, as well as the recognition that cultural heritage is much more than its constituent materials. Sherban Cantacuzino and Caroline King speak of the contexts of the monuments, which give them their social meaning. Giorgio Torraca assures us that the exactness of science, made impossible by accretions that history attaches on the materials, is only an illusion. Jukka Jokilehto, in considering historic architecture, sees the need for broader public and private involvement in efforts to balance cultural values with economic and social arguments.

As heritage becomes a central preoccupation of different groups in society, these groups insist that the values they see in heritage be preserved, alongside the aesthetic and historic ones that have traditionally guided conservation decisions. Some of these values, as pointed out by Sharon Sullivan and Carolyn Rose, require that we reconsider our professional assumptions.

This need to view conservation from different perspectives is reflected by several authors, who assert that some certainties that might have comforted an earlier generation of conservation professionals are no longer available to us. Mounir Bouchenaki writes about how international organizations tried to codify some principles that would give us these certainties. Yet the same organizations now realize that differences in cultural values make these principles difficult to apply globally and that heritage conservation must be approached differently.

Authenticity, a 20th-century preoccupation, has been in the forefront of the cultural field in recent years. David Lowenthal traces the evolution and change of this concept over time and assures us that this process will continue. Future generations, he observes, will certainly question our current views of authenticity.

It is our hope that these essays will not only prompt discussion and reflection but also cause us to consider and acknowledge the many creative men and women who, in the era that is coming to a close, chose conservation as their profession. Their extraordinary contributions have made possible the great strides in the field during the 20th century. That same level of creativity can be found in our own time, and it will carry us forward into the next century, in a way that increasingly respects the diverse values we have come to embrace. Indeed, preserving those diverse values—and the places and things that embody them—is what conservation is ultimately all about.

Tim Whalen is director of the Getty Conservation Institute.

# Authenticity: Rock of Faith or Quicksand Quagmire?

#### **By David Lowenthal**

THE CRAVING FOR AUTHENTICITY IS WIDESPREAD, above all in heritage conservation. It denotes the true as opposed to the false, the real rather than the fake, the original, not the copy, the honest against the corrupt, the sacred instead of the profane. These virtues persuade us to treat authenticity as an absolute value, eternal and unshakable. Yet authenticity is, in fact, in continual flux, its defining criteria subject to ceaseless change.

The standards by which we gauge it change over time, with circumstance, place, and culture. Authenticity, once focused on performance and possession, has given way to authenticity of materials and form, of structure and process, and of aim and intent, moving from exclusive concerns with buildings and artifacts to broader considerations of landscape and nature, folklife and folklore, ideas and beliefs.

In the realm of heritage, authenticity becomes as fragile and evanescent as it is pervasive. Popular fascination with antiquity and art erodes not only authentic fabric and ambience but public faith in the very concept of authenticity. Dismayed by the seedy commodification of "authentic" Sarlat-la-Canéda, one of France's first protected heritage towns, a recent visitor preferred Lascaux II's replicated Cro-Magnon paintings nearby. The attrition of atmosphere and context had utterly demeaned the "authentic" Sarlat; the

A folio from a 15th-century French illuminated manuscript, depicting relics. Authenticity to early modern Europeans meant something other than it does now. For example, they held religious relics to be authentic not by proofs of origin but by their begetting of miracles. *Photo:* Courtesy the J. Paul Getty Museum.



real thing was now far less soul inspiring than the virtual reality of Lascaux II. Restoration likewise subverts the authentic—even the cognoscenti kill what they love. "How many Baroque churches," asks Letizia Franchina in Italy, "have been destroyed in the name of authenticity?" Overuse mocks the very word. "This gem is a fake!" judges a jeweler. "But it came with a certificate of authenticity!" protests the purchaser. "That should have been your first tip-off."

#### —Authority and Veracity

Authenticity is an ancient concept of ever-changing meaning, functions, and criteria. In architectural relics and objects of art, heritage veracity has variously attached to materials and forms, to origins, to the fame or notoriety of the owners of such works, and to erosions -and restorations. In one epoch, authenticating the maker makes a work genuine; in another, ownership credentials may be the prime consideration. Newly found or discredited evidence about motives or techniques, age, or provenance again and again reclassifies relics and monuments as "fake" or "authentic."

The word *authentic* conflates Greek and Latin terms for authoritative and original. Through late medieval times, authority and originality were entitled to credence, respect, and obedience. Things were trustworthy if they came from someone in authority. Authenticity accrued a legal cachet, as with "old deeds under authentic seals." Scriptural texts were commended as authentic, thanks to their incontrovertibly sacred authorship.

Early modern Europeans held things to be authentic because "authorities" told them so, because of their supernatural manifestations, and because faith was shown to be efficacious. Christian relics were authenticated not by proofs of origin but by their begetting of miracles. No one in the 15th century would have thought to date the Shroud of Turin; being widely revered made it ipso facto authentic. Sacred relics remained credible, despite their multiplication; five churches treasured the authentic head of John the Baptist, fourteen the true foreskin of Christ. Luther's gibe that 300 men could not have carried all reputed fragments of the True Cross left Catholics unperturbed, since it was capable of perpetual regeneration. Infinite replication, a miracle ordained by a 6th-century bishop of Jerusalem, ensured an inexhaustible supply of authentic holy souvenirs.

Many moderns find this early faith in sacred bones and artifacts bizarre. How could folk have accepted the authenticity of those multiple heads and foreskins, those veritable forests of the True Cross? The forging of relics was long a major industry. Even in the late 19th century, a papal inventory revealed that tenfold as many "authentic" relics had been repurchased within 30 years of monastic dispossession as had been expropriated. Yet believers were neither foolish nor deluded. Authenticity to them meant something other than it does now, requiring other kinds of proof. Conflicting or contrary evidence that is now patent was earlier seldom to hand. Little-traveled and ill-informed about other lands, people lacked the opportunities for comparison that are today taken for granted.

To authenticate the origins and provenances of relics was pointless when holy relics were by their very nature capable of miraculous removal and replacement. Modern criteria of materials, form, process, provenance, and intentionality scarcely mattered. What made a relic authentic was less what it *mas* than what it *did*. The miracles that relics engendered proved them authentic. But authenticity demanded continuing activity—a relic that remained too long inert ceased to inspire the awe needed to sustain credibility.

#### **From Faith to Fact**

The rise of science added sense criteria to articles of faith. By the Enlightenment, *authentic* came to mean veridically genuine, as opposed to forged or apocryphal. Standards of critical evidence, triggered by the dispersal of printed books, transformed notions of truth. Once scholars had access to variant sources, they saw that "authentic" principles of Biblical scripture and Roman law, once supposed innately pure, were in fact barnacled with later accretions and perversions. Comparative criticism disclosed the biases of ancient authors, manifold views at odds with timeless Church ideals, and classical realities often grossly repugnant to modern culture.

Although much that had previously been deemed authentic was now dethroned as false, fakes proliferated more than ever. The 17th and 18th centuries were as remarkable for fabricating new as for exposing old forgeries. By the 19th century, verbal and visual images in history and fiction, paintings and prints, brought the past to life for mass audiences as never before. But the popularity of these surrogate images undermined the authenticity of the originals. The term authentic began to take on the angst that continues to corrode it today. Journals referred to "authentic documents artfully copied." Replica makers touted their "expert copies" against the "base imitations" of rival manufacturers, while customers simultaneously decried and lauded artificers' skillful deceptions.

Verisimilitude was now so commonly contrived that authenticity came to be termed something untampered with natural, not artificial—the very virtue things fashioned to *seem* authentic lacked. Plein air sketches, eyewitness accounts, scrupulously restored buildings, and unembellished histories exalted "reality" that was intended to transcend artifice.

Above all, authenticity reflected public trust that material things, unlike words, did not lie. Scholars familiar with textual forg-

eries and corruptions hailed material relics as more trustworthy witnesses; the verbal chronicler was venial or parti pris, while the anatomist of antiquities was free from bias. Many archaeologists continue to trumpet artifacts as more authentic than texts, more honest because less apt to be contrived.

Vain hope! That artifacts are no less altered than chronicles is now abundantly evident. Yet public faith in the veracity of material objects lingers; what can be seen and touched *must* be true. Here they are, they seem to say; you cannot doubt your senses. At the same time, the sanctity long linked with physical relics makes their faking especially repugnant.



A 19th-century forgery of a marble statue from antiquity. By the 19th century, authenticity came to mean something untampered with. Scholars familiar with textual forgeries hailed material relics as more trustworthy. While it is now evident that artifacts can be no less altered than chronicles, public faith in the veracity of material objects lingers. *Photo:* Courtesy the J. Paul Getty Museum.

Nineteenth-century technologies stepped up demands for authenticity. Growing knowledge of the past and skill in its delineation commanded ever-more-convincing illusions of reality. And laboratory provenance and dating superseded revelation and miracles as criteria of authenticity. Expert scrutiny of sites and structures, archives, and contextual data confirmed or denied authenticity. Yet professionals continued to parade their own biases as authentic truths.

Modes of cleaving to truth, however, have undergone a major shift. To retrieve the true past, the 19th century consciously altered it; today's conservators try to abstain from doing so. Whereas Victorian restorers openly lent history their help, the genius of past epochs is now supposed to reveal itself unaided. Interventions to improve old buildings, artifacts, or musical performances by purifying or updating them are condemned as inauthentic.

#### From Substance to Form to Folkways

Most recently, the global growth of heritage has compelled awareness of cultural differences in the meaning of authenticity. Over the past decade, global heritage agencies—ICOMOS, ICCROM, ICOM, and the World Heritage Organization—have fundamentally revised authenticity criteria. Guidelines laid down a generation ago in the Venice Charter became increasingly problematic as heritage concern expanded beyond its west European heartland to embrace countries and cultures the world over. Above all, authenticity of material substance was of less moment where heritage structures were apt to be built of wood, generally less durable than stone. For example, in Norway and Japan, heritage conservation focused not on preserving original substance but on rebuilding with new materials while keeping traditional techniques and forms.

Elsewhere, most weight was accorded to nonmaterial aspects of heritage, such as language, religion, music, and dance. Fidelity of spirit took precedence over survival of substance where little was built to endure. As Poland's Olgierd Czerner put it, the Venice Charter "leaves other cultures and traditions ill at ease; *they* place more emphasis on authenticity of thought than on material symbols." As a result of reconsiderations agreed to at international meetings in Bergen, Nara, San Antonio, and elsewhere, culturally diverse choices have replaced canonical homogeneity in judging what is authentic in World Heritage site nominations.

> Present-day view of Warsaw's historic center. Destroyed by the Nazis at the end of World War II, the city's historic core was quickly and completely rebuilt. Affirming Polish national identity and retrieving a familiar cityscape mattered more than scrupulous fidelity to original or reconstructed details. *Photo:* Molly Selvin.



#### From Fixed and Founding Moments to Historical Palimpsests

Broadly speaking, however, new ways of viewing and relating to a host of pasts engender more nuanced and sophisticated criteria of gauging truth, whether in artifacts, archives, or accounts. Authenticity now inheres not simply in some original source, some founding moment, some first structure, but in entire historical palimpsests and in the very processes of temporal development. No longer is truth innate to the oldest remains, earliest forms, autochthonous creations, steadfast continuities. It inheres instead in the whole stream of time that continually reshapes every object and idea, structure and symbol.

Authenticity of materials, of pattern, of context, or of intention increasingly valorizes heritage not only at the moment of its presumed beginning but at every stage of its development, including its attrition and decay. Instead of stripping away time's accretions and accidents to reveal some ur-form, we esteem all its ongoing traces. This perspective is not novel—its roots go back at least two centuries. But it is now more than ever accepted. And it calls for skills and insights—and mandates actions and obligations—different from and more complex than in past heritage stewardship.

The shift from original state to historical palimpsest varies with locale, culture, and heritage medium. Its best-famed antecedents lie in the Victorian "anti-scrape" movement. Appalled by destruction committed in the name of authenticity by restorers bent on returning cathedrals and churches to idealized Gothic "purity," connoisseurs like John Ruskin and William Morris insisted that old buildings not be tampered with, save for rudimentary repair. Buildings were integral organic beings that must inexorably succumb to age and decay. What was authentic about them was the entire record of the changes they had endured.

Landscape compages more slowly gained value as authentic palimpsests embodying remnants of changes over time. Only in the 1950s did British conservators decide to preserve the medieval tithe barn, lying athwart the earthworks of prehistoric Avebury, as a welcome addition to the historical compage, rather than as an intrusive later element in a more ancient scene. Archaeologists, too, no longer scrape away remnants of later legacies to reveal earlier layers of occupance, as was commonly done in Schliemann's time.

#### **Caveats of Continuity and Change**

This shift of values stimulates but also lumbers heritage stewards with manifold perplexities. Are all historic alterations equally sacrosanct? How can authenticity accommodate incompatible recent additions too risky or costly to do away with, as with 20th-century plumbing and heating elements in a 14th-to-16th-century wool merchant's house in Lavenham in Suffolk, England?

Varying extents of obliteration or levels of damage affect restoration options to differing degrees. Utterly demolished by the Nazis, Warsaw's historic center was speedily replicated in toto, to affirm Polish national identity and to retrieve familiar scenes with a minimum period of hiatus. The general semblance of the old cityscape mattered more than scrupulous fidelity to original or reconstructed details. In contrast, Hungarians restored only those buildings in the old Buda castle precinct that had been left more or less intact, while filling vacated spaces with compatible new structures. To build replicas alongside surviving old structures would have seemed inauthentic.

While living continuity in today's heritage-conscious world challenges earlier preserved-in-amber authenticity ideals, not all heritage should alter in conformity with the flux of events. Sites commemorating specific battles or massacres, arrivals, or discoveries lose their poignancy if historical change occludes the critical moment; an authentic aura demands a semblance of some particular date. At Oradour-sur-Glane, in western France, the empty village is kept as it was just after the June 1944 S.S. massacre of all its inhabitants, rusting cars and decaying houses simulating initial decrepitude. Keeping an authentic semblance of a specific moment convincingly recalls the tragedy.

Increasingly, though, authenticity inheres in processes of change, mutabilities of time and history, continuities enlivened as much by alteration as by persistence. But even as we acknowledge these new ideals, we should continue to respect the old stabilities that inspired our precursors. In the course of tracing these and other changes, we may be tempted to debunk previous criteria of authenticity. But our successors will see us as no less naive and credulous than we see those who came before us. Each generation views authenticity in a new guise, reflecting its new needs for truth, new standards of evidence, and new faiths in the uses of heritage.

David Lowenthal is emeritus professor at University College London and visiting professor of heritage studies at St. Mary's University College, Strawberry Hill, England. He helped organize the 1990 British Museum exhibition on fakes and participated in UNESCO/ICOMOS/World Heritage workshops on authenticity in Bergen, Norway, and Nara, Japan. He is the author of The Past Is a Foreign Country, The Heritage Crusade and the Spoils of History, and George Perkins March, Prophet of Conservation.



# The Scientist in Conservation

#### By Giorgio Torraca

A SCIENTIST IN CONSERVATION may get involved in preserving material of historic or artistic value in various branches of the profession and at various levels—from working directly with the material itself to doing basic research. A scientist can work in analysis for archaeometry (how was an object made? when? where? was it modified later?) or for conservation (is it deteriorating? why? how fast?). He can work in technology for the restoration of anything from small artifacts to large monuments (e.g., cleaning and consolidation processes, immediate and long-range effects) or in technology for protection (e.g., modification of the environment, protective layers, maintenance procedures).

In the past, the choice of the scientist was mainly dictated by chance—perhaps a friend asking, "Would you take a look at our problem?" Then he might remain trapped for quite a long time in a maze of fascinating riddles. Today, however, a scientist usually enters the game by personal choice, during training, and aims to work in a particular branch. Conservation science is now an established profession, even if its core is not yet well established and its borders fuzzy.

Other people involved in the conservation trade—conservators, historians, architects, engineers, amateurs, administrators, politicians, and journalists—seldom realize how specialized science for conservation is, or should be. They frequently consider the conservation scientist to be a jack-of-all-trades to whom they turn for the solution of any awkward problem they feel unable to solve (that means, of course, that the problem must be a most untreatable one, because people in conservation usually feel competent to solve anything).

Unfortunately, most scientists, this writer included, are unable to say no—because the postulant is desperate, or there is an exhibition tomorrow, or the object is exposed to a most unfriendly environment and on the point of collapsing. Scientists feel obliged to answer the call, even if the material and the action required are out of their domain of competence. They normally pick up the gauntlet and take a gamble. It may pay off, but sometimes damage is done.

#### Is Conservation Science Really "Science"?

The fact that conservation scientists occasionally venture out of their field of competence and take risks that can potentially damage precious materials is not the only problem that affects conservation science as a whole. Unfortunately, scientists involved in conservation are gamblers even in their field of competence, because most of the time they offer interpretations and solutions despite insufficient knowledge.

Consider an analyst studying a piece of an ancient monument. In the majority of cases, he lacks the information required for a reliable interpretation of the results. One reason for this is that the object probably has been modified or treated several times, and typically the scientist has incomplete information on its history. Many samples should be taken and compared to separate materials belonging to different phases, but frequently this is not possible, either because of cost constraints or because damage would be inflicted by sampling.

Furthermore, several analyses should be made on each sample in order to extract maximum information and to cross-reference the results. This makes the data more reliable, as ancient artistic or architectural materials are normally very complex mixtures that offer no clear-cut result in any single method of analysis. Unfortunately, the application of multiple analyses to the same sample is normally not possible, either because of cost or because of the dimension of the sample.

In such conditions, interpretation will be based on insufficient data and be strongly influenced by the analyst's preconceived notion of what the result should be. Nonscientists often don't realize that in routine analysis, the scientist finds only what he seeks i.e., what the scientist thinks is in the sample. The chance of unforeseen findings increases when the results of different analyses are compared. This explains, for instance, why calcium oxalates, found by Justus von Liebig on the Parthenon marbles in the 19th century, were not detected again on the surface of ancient stones for a long time, while today—after they were identified again in the 1960s by an intensive use of X ray diffraction—they seem to be almost ubiquitous.

When the analyst writes a report interpreting data in terms of the history of the object or its state of conservation, he gambles, relying on general experience to extrapolate from the data a presentable hypothesis (which is necessary if the analysis is to be of any use to those paying for it). Another reason for gambling is that the analyst thinks it unlikely that anyone will read the report in detail; to further reduce that possibility, he uses the most abstruse technical jargon in writing it.

The scientist dealing with conservation processes must also gamble. The data at the scientist's disposal for evaluating the cause and rate of deterioration of an object requiring treatment are normally insufficient. The same applies to the evaluation of the future service life of the materials that may be used to consolidate the object under treatment and delay its decay.

Conservation today is a production line—the more so in architectural conservation. It no longer proceeds at the leisurely pace of the still-recent past, when conservation was such a quiet and pleasant profession. Problems must be solved within deadlines that do not allow sufficient time for experimentation and analysis. As a consequence, when a scientist proposes a conservation treatment and guarantees its reliability and durability, he is either consciously bluffing—in the best cases—or suffering from delusions because of lack of experience.

Actually, all branches of science and technology involve some gambling in the creation of hypotheses or models that are not logically deducible from the available experience. However, science proceeds by experimenting in such a way that a hypothesis may be refuted or supported by the data thus obtained. "Progress" in science is achieved by modifying the models, according to the results of experiments, in order to bring them closer to reality; gambling becomes less important as science becomes more mature.

In conservation science, however, the importance of gambling (explaining things by unsupported hypotheses) is much greater than in most domains of science. This may mean that conservation science remains in an early state of development, in which imagination still prevails over hard facts. But there are also reasons to suspect that conservation science may not—or may not yet—be a "science," as defined by contemporary thinkers, even if it employs scientific equipment and scientific language.

The main reason supporting such a statement is that it is difficult to falsify or support a hypothesis (or model) in conservation.

If "scientific" research is directed toward understanding the history of an object, it is difficult to prove or disprove any hypothesis about an object's past on the basis of the "scientific" data alone. Help may come from other disciplines. There may, for instance, be the discovery of that rare document whose interpretation is univocal. But in the typically uncertain domain of history, positive proof is the exception rather than the rule.

If we are dealing with conservation treatment technology instead, any hypothesis that is advanced can lead to the practical consequence of conservation treatment, and the result—for example, the object's decay rate after conservation—might be measured.





These photographs document the creation of a new conservation technique, illustrating how conservation science operates on the border of different domains-in this case, chemistry, mechanics, and the empirical knowledge of conservators.

Top left: The 1981 testing in the ICCROM laboratory of a grouting mixture, made of hydraulic lime combined with various admixtures, intended for consolidating surfaces of artistic or architectural importance. The grout is injected into a column of sand to test its injectability. Testing also includes, an analysis of soluble



salts, and the measure-

ment of the flow of the

injected grout and of the

porosity of the hardened

material after injection.

Top middle: Testing the

grout on a larger scale in

1982, at the Construction

Science Laboratory of the

University of Rome. Photo:

Photo: J. Malliet.

Giorgio Torraca.

Top right: Further testing wall, partially crushed

at the University of Rome in 1982. An experimental under a press, is consolidated by grout injection. Photo: Giorgio Torraca.

Bottom left: Using the grouting technique in the field in Pompeii in 1983. Photo: Giorgio Torraca.

#### **Bottom right:**

Consolidation in 1985 in Assisi of a mural painting, damaged by earthquake. New conservation techniques always carry risks, even when extensive test-



ing precedes fieldwork. In the case here the grouting technique has thus far proven successful. Some commercial products, with composition similar to the **ICCROM** grout, are now widely used in the conservation of mural paintings, mosaics, and stones. Photo: Giorgio Torraca.



In such a case, a model could be supported or disproved. However, it takes a great deal of time-probably decades or even centuriesto confirm that long-term conservation has been achieved. While falsification or support for a hypothesis is possible in principle, it can only occur after a lengthy period. Scientific progress is therefore bound to be very slow.

#### **Between Two Cultures**

Conservation scientists might be quite annoyed to be told that their discipline should not be considered "real" science. Still, the idea that its nature is to straddle the frontier between two different cultures has positive elements in it.

In the first place, this middle position helps explain some facts about science applied to conservation that keep disturbing us. These facts would be viewed more leniently if they were considered to be normal consequences of conservation science's borderline status.

An example of such disturbances is the frequent occurrence, in conservation, of inaccurate analyses and unreliable testing of materials.

I remember that many years ago Tom Chase of the Smithsonian Institution led the ICOM committee for metals in an experiment of interlaboratory analysis using a homogeneous sample that he had made by grinding an ancient piece of bronze into a fine powder. The scattering of results he obtained from museum laboratories was far beyond the limit considered acceptable for industrial laboratories. (Nowadays, we protect ourselves against similar discouraging finds by never repeating an analysis.)

If the analytical data are unreliable, their interpretation is bound to be more unreliable by an entire order of magnitude. For example, a few years ago, a well-known mineralogist declared authentic some Modigliani sculptures retrieved from a ditch (where the sculptor presumably threw them). The basis for this conclusion was the finding that the layer of mud in contact with the stone sculptures contained almost no lead (evidence that there were no cars and no gasoline with tetra-ethyl-lead in it at the time the mud layer was formed). Contrary to what normally happens with archaeometric interpretation, the gambler in this case was unlucky. The forgers were there and able to prove that they had made the presumed masterpieces a few days before their discovery.

I also think that the testing of materials to be used in conservation is strongly conditioned by the preconceived idea that the scientist has of what the result should be. In fact, most testing reports, aimed to justify the use of a given consolidant or protective material in a conservation process, look very much like the televised claims that a certain detergent washes whiter than another detergent. There is no need, however, to be overly pessimistic. If we concede that conservation science may not be "science," this does not exclude the notion that it may be quite useful (just as detergent technology and advertisement are useful, even if they are not "science").

I would even go beyond such a purely defensive statement to assert that the fact that conservation science is not entirely scientific makes it more interesting, at least to people like me, who think that reality should not be explained only by numbers and formulas. Rather, it should be explained by models that include-besides the

numbers (which should be decently correct, if possible)—a lot of material of a different type (words and images) produced from the other culture, the humanistic one.

Since conservation analysts need to consider historic data in carrying out their daily jobs, they should become, little by little, expert also in the techniques used in that domain—archival research, reading of ancient documents—and should acquire a broad view of culture, including social and political history and the history of technology. This would also help the historian; a complete understanding of the meaning of an ancient technical document may be obtained only when it is also read by a technical expert. The professional life of this kind of analyst would be far more attractive than that of the "real" scientific analyst. The conservation analyst will be quite a useful person, even if his or her analyses will probably be less accurate.

Another important consequence of being imperfect scientists is that conservation scientists have a chance to speak and write in such a way that an architect, art historian, or conservator may understand what they have to say. Such an understanding, obviously essential for the success of any enterprise in conservation, is seldom achieved today.

But let's leave the conservation scientist, tinkering on the borderline between two cultures with his high-tech equipment and hyperspecialized language, because on the subject of mutual understanding, something should also be said to the people inhabiting the region beyond. Archaeologists, architects, and art historians, too, should be trained to move into the frontier between culture and science, as conservators already do. These professionals should learn at least enough about science to allow them to look through the scientific trappings that adorn laboratory reports and to reach the useful information that may be there. That sort of activity would be an unorthodox one, as it leads out of the normal paths in the humanities and social sciences. But I believe that such an educational effort is essential for historians, architects, and archaeologists who plan a career in the management of cultural property.

Going back to conservation science for a conclusion, I think that there is no reason to be antagonized if it is found not to be "real" science. To the contrary, if all people in the profession are able to acknowledge this, I am sure that they would be happier and more efficient. The outlook for the artistic and historic property entrusted to their care would be much brighter, and a domain of scienceculture would grow, with benefits for both sides of the borderline.

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# -Conservation -of Monuments -and Sites

#### By Sherban Cantacuzino and Caroline King

• OVER THE YEARS, the definition of a monument has grown broader. This is reflected in UNESCO's World Heritage list, which has accumulated more and more of the numberless wonders of the world. At the same time, the iconic significance of the world's monuments is now often manipulated, as are the monuments themselves. Transplanted or cloned by the urban designers of Las Vegas and Japan, they reappear as sensations within entirely altered landscapes. One has the sense that the concept of monuments is more widely appreciated and more widely associated with more people's lives in more parts of the world than ever before. This is why it is increasingly important to extend an understanding of monuments and their conservation—and to remain clear on the essence of their worth amid the array of mutating images that monuments can acquire.

What is it that makes a monument special? How should its specialness be conserved? First, a function of a monument is commemoration. The essential value communicated by the monument is an evocation of the notions of memory and time. The word monument is from the Latin *monere*, meaning "to remind, to cause to think." Traditionally, it is something that inspires a certain degree of melancholic reflection.

The Shorter Oxford English Dictionary more narrowly defines a monument as "a structure, edifice or erection intended to commemorate a notable person, action or event," generally in the singular—an isolated case of brilliance which stands out from the rest of the world and is not be forgotten. Buildings have tended to express this by taking the form of towering columns, such as London's Monument, a giant Doric column built sixty-two and a half meters high to commemorate the fire of London, or the Washington Monument, an even higher column.

Increasingly now, we have landmark buildings which define the skylines of cities around the world, such as the World Financial



The Khadimain Mosque in Baghdad. In the 1970s, international consultants thought it would increase the visual impact of the mosque to raze the structures immediately around it. Unfortunately, the grace of the building and its rapport with the surrounding buildings were lost when these "detractions" were stripped away. *Photo:* Sherban Cantacuzino.

Center in Shanghai, which out-towers, overpowers, and contains the image of all the other best-known monuments in the world, from the Eiffel Tower to the Leaning Tower of Pisa. These modern monuments reflect a manifest desire for monu*mentality*, and are appropriated for their psychological power.

Memory and time as the dual essence of the monument is a broader concept of the term than that suggested by the dictionary—a tower structure, which in this day and age is doomed to be quickly outreached by the next skyscraper in its vicinity. The dictionary's "monument" is likely to be stillborn in significance at the outset: "erected over the grave or in a church, etc., in memory of the dead," like some would-be Ozymandius's tomb.

Yet there is a more Proustian life and renewal inherent in memory which asks that the monument's built manifestation should live on to perpetuate it—whether in mourning, as the Anglo-Saxon root *mur-nan* suggests, or in celebration. This continuity of life in a monument is recognized by the ICOMOS Management Guidelines for World Cultural Heritage Sites, where renewal is taken as the natural continuation of "events or actions associated with a building at a specific moment in the history of the building," including its successive alterations. These, more than the "patina of age," express the passage of time over the building and its life as a monument.

It is through conservation that the life of a monument is intended to be renewed. Over the years, conservation has matured from its primitive sense of a necrophile curation of objects to a more profound and far-reaching synthesis of the various values that can associate themselves to a living monument. A monument, with all its values, can make a contribution to the everyday life environments which surround it, and vice-versa, in two senses.

First, there is society, culture, and economy in the abstract sense. These are at the heart of urban renewal initiatives, such as



A view of the Grand Canal in Venice from the Accademia Bridge. Area conservation in Europe is embodied in Venice, where UNESCO has developed an international model project that has conservationists working with environmental scientists to control the water level around the city and to reduce air and water pollution. *Photo:* Sherban Cantacuzino.

English Heritage's regeneration through conservation program, which advises local authorities on the management of designated conservation areas and offers grants for the regeneration of conservation areas in need. The objective is to protect these areas without "freezing them in time," accommodating the change that accompanies modern life in a way that preserves local character.

The second sense in which monuments relate to their surroundings is their interaction with their "townscape"—the built urban environment most directly affected by the immediate intervention of conservation work. The relationship of a monument to its contextual environment in its aesthetic sense has more readily been appreciated over the past few decades by the world of architectural criticism than has the more complicated and far-reaching socioeconomic environmental impact of heritage conservation (these issues were discussed at the December 1998 GCI meeting on economics and heritage conservation). In this sense, conservation architects, through their own gestures of relating a monument to its site or surrounding environment, have progressed in a direction as yet underexploited by conservation planners. Planning for the more far-reaching and wider benefits of conservation remains a challenge.

An example of this progressive understanding of extended conservation ecology in architecture can be seen in the case of the Khadimain Mosque in Baghdad. This is an example of a monument that has lived through a deepening appreciation by international conservationists of the local significance of a monument in its interactions with the townscape around it. During the 1970s, a group of international consultants thought it would increase the visual impact of the mosque to raze its surroundings, producing a powerful presence in a void. The grace of the building in its scale and proportions and its inherent rapport with its surrounding buildings were lost by the stripping away of its "detractions," and the material imperfections in the surfaces of the walls, not previously exposed to an unfettered scrutiny, were suddenly apparent. The failure of this approach was noted by a more recent scheme to reinstate the life which had surrounded the mosque, and a number of dwellings were designed and built back into the empty space.

For conservation planning, as for conservation architecture, it is necessary to graduate from a preoccupation with the object-form of the monument alone—the isolated shell of a mosque, for example, seen as a material artifact or object to be viewed, lovingly retouched, and set apart from the world—to a dialogue undertaken by conservationists with an animate and accessible diffusion of meanings radiating across whole areas of the city districts around the monuments. That this graduation to conservation planning is clumsily expressed through economics is inevitable, and yet the processes of conservation, like those of any urban project, increasingly require quantification of impacts and benefits which must include the areas of their local environments.

The work of the World Bank is fascinating in this respect, since the quest for transparency has resulted in a conservation project's being analyzed for its impacts, and the information made available through the Internet. A tabulation of general assessments is, of course, not exhaustive, but in a cost-benefit context it can make a persuasive argument. The scope for such an assessment is necessarily as wide as possible. In the case of the Bank's project for the rehabilitation of the Medina of Fès, a World Heritage site, the effects of the conservation work extend from the original level of material repair and improvements to creating jobs, giving access to services, and increasing the environment of social and familial stability for residents in the area.

It is fitting that the opportunity for organizations specializing in monument conservation should be in area conservation. United Nations Development Program (UNDP) conservationists in Cairo, for example, first produced a framework plan, grouping several monuments, then addressed the economic requirements of a project and sought to build the local capacities for carrying it out. This kind of plan embodies a comprehensive view of the monuments—their significance and conservation—by encompassing both the physical (i.e., townscape) and social (i.e., town life) of the community on which it is focused.

Many of the most dramatic examples of the possibilities of this approach are to be found in the ancient world around the southern shores of the Mediterranean, in Cairo, Tunis, Algiers, and further inland in the Medinas of Fès and Marrakech, where urban areas are full of the curiously time-smoothed forms (monuments) that speak of more than a single individual's inspiration. The romance of these swaths of city areas, seen as monuments, has a wide appeal, as was noted over a half century ago by French architect Le Corbusier, who called the Medina of Algiers "the glittering entity."

"It is in consonance with nature," he wrote, "because from every house, from the terrace—and these terraces add on to each other like a magic and gigantic staircase descending to the sea—one sees the space, the sea."

There is a universal value in conserving these human civilizations in city form. The recognition of the value of whole areas has led to the inscription of entire quarters as World Heritage sites, and to international projects which take these tracts of everyday life, and throw into relief the wonders around which they revolve. Local consultations are undertaken by conservationists, and local craftsmen are given support and training in the skills of fine building, restoration, and decoration, in the hope that the social effects of the project will be far reaching for them and their communities. The economic dimension of conservation projects has received attention

Street scene in the Medina of Fès, Morocco, a World Heritage site. Elements of a recent World Bank project for the rehabilitation of the Medina range from material repair and improvements to job creation, access to services, and increasing social and familial stability for residents. *Photo:* Sherban Cantacuzino.



as an essential stimulus to local industries, given the careful management that is necessary to redress the added pressures that tourism can bring to an area if not comprehensively managed. The contributions of these projects to the stabilization of areas of the developing world demonstrate the importance of a broader understanding of monuments, their value, and their conservation.

Area conservation in Europe is embodied in the ancient city of Venice, where the Venice Charter for conservation was produced. UNESCO's work there has since developed a highly publicized international model project which has conservationists working cooperatively with environmental scientists in efforts to control the water level around the city, and to cut down on the pollution of air and water. Yet the slow progress and spectacle of the conservationists' Venice above its emergency subaquatic transformations has also given a reactionary air to conservation in the present-day "old continent," where conservation has sometimes been a way-rightly or wrongly-for rejecting the modernizing currents of the time and slowing development. For example, for more than a decade the area around London's Paternoster Square next to St. Paul's Cathedral continued to deteriorate while controversy over development raged; only recently was a master plan finally approved, but nothing yet has been built. Having recognized the importance of area conservation, we must give life to the processes of renewal in the areas which should become our monuments for the future.

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# Conservation of Museum Collections

#### By Carolyn L. Rose

•MUSEUM CONSERVATION PRACTICES shifted in approaches and goals during the last century, especially in the last 30 years. Some changes were the result of a maturing of the field. Others were a consequence of changes in museums themselves, including growing professionalism among staff; redefinitions of museums and their roles and responsibilities; and the impact of political, cultural, and economic pressures on museum management. National and international museum and conservation organizations, as well as professional training programs, were influential in this process. Equally important has been the development of preventive conservation, with a collections-based orientation supporting the mission and goals of the museum.

Historically, museum conservation centered in the larger institutions and emphasized restoration techniques and the application of scientific methods to the examination of objects and the identification of materials. Museum publications disseminated conservation information, and annual reports discussed treatment and research, which focused on the fine arts and classical archaeology. Natural history, ethnographic, and historical collections usually were prepared by the collector/scientist/curator or assistants, or they were not treated at all, except with pesticides. Exceptions were items for exhibition, in which case exhibit staff would clean, restore, and sometimes repaint them. This traditional approach to the preservation of collections has gradually changed in many institutions throughout the world; in others, restoration and exhibition practices remain the same.

The two decades following the Second World War set the stage for new developments in conservation in the 1970s. During this time, museums and their collections grew in number and diversity, as museums redefined their role as educational institutions. National and international professional organizations developed conservation codes of ethics, standards of practice, and museum



Ethnology collections in the Arts and Industries Building of the Smithsonian Institution, circa the 1890s. Many early ethnology collections were acquired for research and usually were not restored or treated, except for the application of pesticides. *Photo:* Courtesy of the Smithsonian Institution.

accreditation programs. By the 1970s, many major art museums employed conservators, and interns from new conservation training programs were more common. Museum conservation scientists, although still few in number, were conducting experiments to improve treatment techniques and test new synthetic materials. However, conservation was not well integrated into museum activities, and conservators were generally assigned to a specific division or a curator, according to their expertise.

The 1970s was a period of reassessment as museums struggled with shifting priorities, professionalism, fund-raising, and increased visitor access. The rising value of museum collections and the importance of their conservation was increasingly noted by national and international preservation advocates, influencing leaders in the museum community and government funding. Many institutions centralized conservation functions, and new conservation laboratories and scientific facilities were developed in larger museums. Conservation documentation improved because of new professional standards, and some institutions developed computer databases to integrate conservation data with other records. Conservation laboratory directors received more recognition, higher salaries, and seats on museum implementation committees. However, as students from conservation training programs became interns and then employees, and their responsibilities broadened, the role of this new, academically trained staff in the traditional, hierarchical system was not always clear. Thus, while conservation was included in museum mission statements and the services of the conservation staff were considered desirable, conservators were not regularly involved in decision making. This was especially evident in exhibition development, as conservators became more concerned with the museum environment and its impact on the preservation of collections on display.

Exhibition was a driving force in conservation work in many museums, and as a result, conservation became increasingly impor-

tant. However, the new focus on traveling blockbuster shows with hundreds of objects, new technology, and demanding, fast-paced production schedules was antithetical to the slow-paced, thorough conservation approaches traditionally employed. As conservators were forced into a reactive position, conservation controls tightened, written procedures increased, and conservation staff relationships with other museum colleagues became strained. Compounding the situation were educators' mandates to make the exhibitions—and objects—more accessible to, and interactive with, museum visitors.

During the next decade, some challenges were ameliorated in part by three factors: training of museum personnel, accountability, and funding. All led to the development of preventive conservation, a holistic approach to identifying all factors (including policies, procedures, and lack of training) that could contribute to the deterioration of collections—and the development and implementation of systematic, practical approaches (frequently based on risk assessment) to mitigate them.

In the 1980s, the number of seminars, workshops, and courses in collections care and management dramatically increased. The role of the collections manager gradually evolved, especially in natural history and larger historical museums. Concerns about the ability of museums, especially small ones, to meet standard requirements were addressed with new government programs and grants for improving management and conservation. From these initiatives grew conservation surveys and assessment programs that produced quantitative information on the needs of collections, as well as a foundation for developing strategic plans for collections care. Biodiversity issues and new initiatives in the preservation of natural history collections spurred additional requests for space, funding, and the development of appropriate and cost-effective conservation methods for large research collections. The preservation of related documentation, such as archival records (including field notes and audiovisual materials) and specimen samples (such as microscope

> The Anthropology Conservation Lab of the National Museum of Natural History, Smithsonian Institution. By 1980 many larger museums had consolidated their conservation functions, building new conservation facilities, some with analytical capabilities. Interns from conservation training programs assisted with research projects, developing new techniques, and improving exhibition and storage areas. *Photo:* Chip Clark.



slides), added new challenges for conservators. Interest in these materials and the employment of more comprehensive conservation approaches also resulted in stronger ties between museums and the library and archives communities, where preservation planning had been practiced for years. Some funding programs began to coordinate the preservation of museum collections located in historic buildings with the preservation of the building itself. These activities led to an increase in systematic conservation planning and the inclusion of conservators in management planning teams. In addition, conservators became more involved in public awareness campaigns and outreach activities, such as "conservation on display" exhibits, public tours, and the creation of visible storage.

In the United States, new museum conservation projects resulted in increased use of regional conservation laboratories and private conservators to conduct surveys and treat collections. In some instances, regional laboratories were set up within the museums, delicately balancing the needs of the museum's own collections with those of outside museums and collectors paying for services. This challenge became acute later as museum management considered the fund-raising potential of these laboratories.

In a number of countries, the use of outside contractors, including conservators, grew more common in museum projects, especially exhibitions. In some institutions, curators and conservators felt they were losing control of the collections, and that exhibition and conservation activities should remain integrated with the other functions of the museum to maintain museum standards and procedures, such as documentation. In other instances, outside contractors enabled permanent staff to undertake important activities that otherwise would not have been possible, and provided expertise in specialized areas. Whether this approach has led to a decrease in permanent conservation staff in museums or been the salvation for conservation in times of downsizing remains under debate.

Discussions began in the 1980s concerning the appropriate preservation of cultural objects. There was growing interest in the museum's place in society, cultural diversity, and community participation. In addition to ethnic-based museums, cultural centers were established; especially noteworthy were those created by Native American groups. As conservators consulted cultural representatives in order to explore traditional methods of preservation and to learn about cultural and religious beliefs and practices, approaches often were modified to reflect cultural concerns. In addition, new procedures were developed as some museums housed collections that were regularly used or cared for by tribal members.

This was also a period of outreach to developing museums throughout the world, and conservators were frequently included in teams sent to assist museums and cultural centers in their formation. In addition, new international preventive conservation programs were established, complementing antecedent, treatmentbased programs in several countries. A goal in these undertakings was developing indigenous trainers to foster local preservation initiatives.

In the 1990s, preventive conservation gained popularity. Some reasons for this were related to general museum concerns, such as accountability for all of the collections, and the adoption of strategic planning and other management techniques to secure and allocate resources. It also reflected a better understanding of the positive impact of a holistic approach to preservation, and the need to involve various staff in achieving conservation goals. The concepts of shared responsibilities and an integrated approach to conservation grew out of museum training courses and programs, whose graduates were more knowledgeable about a wide range of museum activities and goals and were now assuming decisionmaking roles. Team management systems and increased electronic mail communication among staff members fostered participation.



Light monitoring during installation of an exhibition at the Museo Histórico Regional de la Colonia San José in Argentina. This 1999 exhibition was created as part of a preventive conservation and exhibitions course for museum professionals from Argentina, Brazil, and Chile. Important to its success and to the development of future initiatives was the partnering of foreign instructors with local counterparts in the program's planning and implementation. *Photo:* Carolyn L. Rose.

Attitudes and practices in conservation also changed. Not only were more cautious, less-intrusive approaches to treatment advocated, but also the methods and goals for the treatment of artistic and scientific collections were reevaluated, especially those created with new mediums and technology. Questions concerning an artist's intent, the function of the museum that held the object, who owns the object, and who decides how certain cultural objects should be used or displayed also were being asked. Relationships to the natural environment, intangible qualities of an object, and repatriation issues posed additional considerations.

Today, as 30 years ago, we have established patterns that will foster significant change in the future. Fundamental are changes in



A 1996 workshop on conservation and collections management in Samarang, Java. In the last 20 years, collections care courses for museum staff have increased worldwide. Current emphasis is on collections—knowing the agents of deterioration; testing of exhibition and storage materials; conservation assessments; collection care programs, including emergency planning; and funding strategies for collection improvements. *Photo*: Carolyn L. Rose.

the ways museums are managed and supported. The proportion of government support for museums has decreased worldwide, earned revenue has become more important, and marketing strategies are used to attract new audiences. Although museums continue to increase in number and collections, and visitor numbers have doubled in the last decade, major museums worldwide have dramatically reduced their staffs, including conservation positions. As many museums are promoted as social centers, forums, and agents of change, some suggest that the objects they hold are not as important as they once were.

This shift to public service affects how conservation strategies must be developed if they are to compete with the large expense of dynamic public programming. Conservation managers are required to employ more sophisticated management techniques and to participate in marketing strategies, donor cultivation, and difficult decision making concerning collections use. In some instances, the concepts of cost recovery and the for-profit conservation laboratory are being explored. Other avenues include public awareness activities with conservation exhibitions, conservation clinics, and partnerships with local organizations and the public to "adopt" museum objects to be preserved.

Electronic media, World Wide Web sites, new technologies, and virtual museums have engendered other creative conservation approaches. Increased collection access through digitization is widely practiced, and the electronic restoration of object images, rather than the objects themselves, is being explored. Communication through electronic media enables conservators and restorers, once isolated from current developments, to readily access materials, take courses, and ask questions on the Internet. Partnerships and international projects have exponentially increased training opportunities, providing practical, basic information in a number of languages, assisting museums in the care of collections. Preventive conservation literature—including scientific investigations and information on appropriate materials, as well as collections care techniques—is having substantial impact on the preservation of collections worldwide. In addition, technological advances provide tools to develop new approaches and techniques, and enable us to reexamine and assess object condition and treatment records, as well as environmental data—information needed to plan for the future.

While the last decade has been challenging for museum conservation, even more challenges lie ahead. What really constitutes a museum today? Certainly it is not what we thought of at the beginning of the century, or even 30 years ago. As museums struggle with evolving and often mandated roles as businesses rather than institutes of higher education or research, and as entertainment centers rather than collection repositories, many traditional conservation approaches are outdated. To be effective, conservation strategies must consider the museum's changing objectives.

In a time when the museum emphasis is on short-term goals, conservation professionals must make special efforts to redirect focus to long-term museum preservation responsibilities for the collections held in trust. New conservation paradigms need to be developed and new skill sets acquired in management, organization, and planning. We should reassess how conservators operate in museums and the methods by which conservators, scientists, administrators, and other museum professionals are trained. Creative funding strategies must be developed to support conservation staffs to maintain the collections, carry out treatments, conduct research, and oversee a variety of collection care activities, providing continuity and upholding standards. It is essential to develop partnerships with different kinds of organizations to join in this responsibility, and to leverage precious resources. Fundamental as well is continuing to share conservation strategies that can be modified and accepted by other museums, within their own cultural, political, and economic climate, in order to sustain their capabilities in the 21st century.

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### Repatriation

#### **By Sharon Sullivan**

*REPATRIATION* CAN BE DEFINED as the return of cultural property from a museum or a private collection to its place of origin, or to a place, country, or group for which it is considered to have particular significance and from which it has been removed. It is now commonly accepted in museum codes of ethical conduct and in a growing number of national jurisdictions that recently looted or illegally acquired or exported cultural property should be repatriated.

There are numerous examples of repatriation in modern museum management. But there are also less clear-cut cases that prompt controversy and raise interesting issues. What is our evolving practice in the case of requests for return of material acquired through historic theft or collecting activities that, while not illegal, are the consequence of colonization, conquest, or hegemony, and that in some way culturally impoverish the subject country?

I would like to look briefly at a few cases that illustrate several recent changes in practice and that pose key questions for curators and cultural heritage managers.

#### The Fate of Truganini

In 1876, a little less than 100 years after European colonization of Tasmania, the woman who was widely believed to be the last "fullblood" Tasmanian Aborigine, Truganini, died in Hobart. Before her death, she was often seen in the streets of Hobart wearing a red turban, a serge dress, and knitted cardigan and scarves, always accompanied by her dogs. She frequently expressed fears that she would be cut up like other Tasmanian Aborigines and placed in the museum. She wanted, she said, to be interred in the deepest part of the D'Entrecasteaux Channel, in her traditional lands. Instead, she was buried in the grounds of the Female Convict Factory. However, two years later, the Museum of the Royal Society of Tasmania (now the Tasmanian Museum) acquired Truganini's body, prepared it as a specimen, and exhibited it. Many of Truganini's Aboriginal con-\_temporaries were similarly treated.

Truganini's skeleton stayed on display until 1947. It was not until 1974, following legal proceedings and the passing of special —legislation, that the Aboriginal community in Tasmania succeeded in achieving the cremation of the remains and the scattering of the ashes in the D'Entrecasteaux Channel.

Why were Tasmanian Aboriginal remains stolen from
Christian cemeteries and distributed to museums around the world?
Ironically, their remains were valued in part because Tasmanian
Aborigines had been rendered extinct through colonization. Also,
they were regarded as important because they were believed to represent a missing link between modern humans and their less
advanced ancestors. This erroneous belief had a profound effect
upon the descendants of the "specimens" and on the way in which they were regarded in modern Australia. The supposed scientific value of the remains overrode personal and moral considerations.

In 1974 there was disagreement among Tasmanian Museum Trustees about the repatriation of these human remains. Today, human remains are treated with a great deal more respect and circumspection than was formerly the case, and repatriation of these remains has become law or practice in many countries. This is the case in Australia, even when the remains are ancient and of undoubted scientific value (though not all archaeologists or curators have accepted this extension of the Truganini principle to other human remains). Events such as the case of Truganini cast a shadow over the future of anthropological studies and collections generally, especially those from the colonized world.

A key issue is the different meanings that the object or group of objects have to different groups. The challenge is to pay full attention to all values of an object and to deal with it accordingly.

#### The Soapstone Birds of Great Zimbabwe

Sometimes collected artifacts are of great symbolic importance to a group or nation, and this symbolic value is increasingly seen as out-weighing their value as museum objects.

Zimbabwe is perhaps the only modern nation named after an archaeological site. The site of Great Zimbabwe is of immense symbolic importance to Zimbabweans. When Europeans discovered the site in the late 19th century, it was immediately attributed by many to a lost white civilization, perhaps the lost realm of the Queen of Sheba. Colonists found this a convenient justification for the founding of the white state of Rhodesia. Though repudiated by scientists, the supposed nonindigenous origins of Zimbabwe played an important role in the defense of white Rhodesia, while claims of an independent African origin for Great Zimbabwe came to be a significant



A view of the ruins of the Great Enclosure, part of the Great Zimbabwe complex, a World Heritage site in Zimbabwe, Africa. Early in this century, at least 8 and perhaps 10 imposing green soapstone birds were excavated from the Great Zimbabwe, and ultimately removed from the country. Following independence, the Zimbabwean government set about reclaiming the birds that had been taken to South Africa and Germany. *Photo:* Neville Agnew.

rallying cry for the Zimbabwean independence movement.

Early in this century, at least eight and perhaps ten imposing green soapstone (steatite) birds were excavated from the site, despite the concern of the traditional guardians. One could summarize the removal by saying it was the result of intimidation, trickery, and bribery. Certainly no regard was given to the traditional beliefs of the Shona people, for whom the site was of great significance. One stone bird was claimed by Cecil Rhodes and remains at the official government residence in Cape Town, South Africa. Four and onehalf birds went to the South African Museum. Half a bird ended up in a museum in Berlin and the rest are unaccounted for. There's no doubt that one reason for the collection and exportation of these birds was their supposed connection with a lost white civilization.

Immediately after independence, the Zimbabwean government set about to reclaim the birds because of their high symbolic value and the belief that the potency of Great Zimbabwe as the guardian spirit of the nation depended on its possession of sacred artifacts such as these birds. The four and one-half birds from the South African Museum were repatriated, and negotiations are now under way for the return of the half bird in Berlin. Other birds may yet turn up. Their exportation split up a very valuable group of artifacts and caused the (at least) temporary loss of some. The repatriation of the majority, it can be argued, has enhanced the significance both of the artifacts and of Great Zimbabwe itself. Site managers are currently designing a new museum on the site to house the birds..

#### The Empty Library Cave of Mogao

At about the same time that the soapstone birds of Zimbabwe began their journey, Western adventurers were exploring the Silk Road. The Mogao grottoes site, on the World Heritage list, is an immensely rich ancient cave temple complex near Dunhuang in western China. Aurel Stein, a British adventurer and commissioned collector, arrived at Mogao soon after the discovery by a Daoist priest at the site of perhaps the largest and most important collection of Buddhist scriptures and other manuscripts ever found. Stein bought many of them from the priest, quietly took them out of China, and shared them among his patrons.

Other adventurers followed, and the priceless collection is now scattered in museums across the world. A very important part of the collection was given to the British Museum, where the manuscripts were stamped to identify them as its property. The manuscripts, one of the many glories of the British Museum and British Library, attract scholars from around the world and have been well curated and cared for. Meanwhile, the Library Cave is empty, and the well-managed and much-visited World Heritage site where the manuscripts were found lacks a key element of its significance, as do the Chinese scholars who work there. Opportunities to study these manuscripts have been more available to the international scholarly community than to Chinese scholars. Undoubtedly, the guardians of Mogao feel that these important manuscripts should be returned—or at least more equitably distributed.



Interior view of Cave 17 at the Mogao grottoes near Dunhuang, China. The cave was originally created in the 9th century to honor Buddhist priest Hong Bian, whose statue is seen here. In the 11th century, thousands of manuscripts were sealed up in the cave and remained undiscovered until the beginning of the 20th century. A large number of scrolls were obtained by British explorer Aurel Stein and by others who followed him; these scrolls are now scattered in museums across the world. *Photo:* Wu Jian; Courtesy the Dunhuang Academy.



Exterior view of the Mogao grottoes, an ancient Buddhist cave temple complex rich in art documenting a thousand years of Chinese life. For over 50 years, the Dunhuang Academy, located adjacent to the grottoes, has studied and preserved the cultural heritage at this World Heritage site. None of the manuscripts discovered in Cave 17 remain at the site. *Photo:* Francesca Piqué.

Repatriation in this instance is less straightforward than that of Truganini's remains or the Zimbabwean birds. The collection of the spoils of empire has a long history. Cicero commented on it centuries ago: "Where do you think is the wealth of foreign nations which they are now all deprived of when you see . . . all Asia . . . and Achaia and Greece and Sicily now all contained in a few villas?"

Within Europe, the disposition of various pieces of European material culture—saints' bodies, royal jewelry, and works of art similarly reflects the history of conquest and politics. David Lowenthal points out that the great treasure-house museums of the modern world are almost exclusively in Europe and North America and reflect a history of colonization and hegemony in their vast collections from the rest of the world.

In 1985 David Wilson, director of the British Museum, defended these museums: "The universal museums have looked after the collections for many years—they are great monuments to man's achievement. They have saved much from oblivion. . . . Only in them can we grasp some idea of the totality of man's mind, its possibilities, its weaknesses, its similar or different reactions." He cautioned that "if once a group of objects were returned, then there would be a continual and increasing demand for return from all over the world: each one a 'special' case. . . . This is a bandwagon which could result in wholesale cultural destruction for the sake of narrow nationalism. Such demands can only lead to cultural isolationism and mutual misunderstanding."

This squarely makes the case for what some perceive as the dangers of repatriation. But this argument is based on a strongly held but narrow assessment of the value of these collections and artifacts. It is also inconsistent with the actions of the holding nations with respect to their own heritage. The Mogao manuscripts will not leave Britain soon—but neither by law may any British heritage item held to be of national significance.

The Mogao manuscripts are of almost unique value to Chinese and international scholars. But we have similar contentious situations when the artifacts are much more commonplace.

#### **Great-Grandma's Wedding Dress**

There is an Australian museum story of an elaborate wedding dress donated to a museum by the wearer's family, and of the original wearer's great-granddaughter attempting to borrow it back for her own wedding—temporary repatriation, if you like. This request caused consternation and distress to the curators.

Many of the ethnographic objects in collections are not famous or exceptional. When collected, they were ordinary and everyday and were traded for objects judged more valuable. Often they were collected by people outside the culture from which they came, because Westernization and modernization made them rare or, in many cases, because their prescient collectors could see that this would happen. These objects were often traded for more highly desired articles. Because they have been preserved by a policy of assiduous curation, they are still available to be reclaimed by people who now value them as symbols of the continuity of their culture and who seek custody of them. The situation is made more complex by the fact that those who seek custodianship may not value or curate the artifacts in such a way as to preserve them as museum objects. When they are repatriated, they often pass again into the realm of living, used, and sometimes used-up artifacts. And the overriding reasons they are valued sometimes change.

David Lowenthal illustrates this clash of values when he quotes from a U.S. curator describing a meeting about repatriation: "Finally one Native American activist said, 'why do you white people need to know all this stuff? Why can't you just let it go?' Listening, I had such a visceral reaction of horror, I knew he had hit on something very sacred to *my* culture. The thought of deliberately letting knowledge perish was as sacrilegious to me as the thought of keeping one's ancestors on a museum shelf was sacrilegious to the Indians in the audience."

Should the dress be worn again, even though it is fragile and rare? Should artifacts be returned to indigenous American groups to give them the chance of reclaiming their culture, perhaps at the expense of the existence of the artifacts themselves? We have come a long way in this century from the certainties of respectable grave robbers—The Royal Society of Tasmania—to the complex questions facing modern curators. As the tide of colonization ebbs, and as postmodern scholars become more conscious of aspects of their academic and material hegemony, workers in the field are beginning to consider the complexities of these issues and to develop new ways of thinking about them. One way professionals are addressing these issues is by reassessing the significance of the artifacts or collection under consideration.

Today all the values of a cultural place are assessed as a first step in considering appropriate long-term conservation and manAlan Thorne, the paleontologist who reconstructed "Lady Mungo"—the 30,000-year-old remains of a young woman found in the late 1960s at Lake Mungo in Australia—returning her to the Aboriginal elders associated with the site. The remains now reside on the site in a decorated safe that requires two keys to unlock it. The archaeological community holds one key, the Aboriginal community the other. *Photo:* Neil Newitt; Courtesy *The Age*.



agement strategies. The role of the cultural heritage site manager is changing from the expert who pronounces on significance and conservation to the partner who works with the community to elicit all the elements of a place's value and consequent future management. This approach gives places a multifaceted significance, making their management more complex but ensuring that all the identified values are conserved. We have moved away from one-dimensional significance assessment and the resulting tendency to freeze-frame a place—to set it in heritage aspic. Now we consider a broader range of conservation and management options in which concepts of present significance, local value, and the importance of continuing traditional use contribute to decisions about conservation and management.

Issues relating to objects require the same process, as has happened in some recent cases. Traditionally, we have isolated what I might call the museum value of an object or collection from its other cultural values. The task for the future is to integrate all these values, both intellectual and emotional, and to come up with solutions to the repatriation question which honor this range of values. Curators need to work closely with groups that claim ownership or custodianship of, or a special relationship to, an object or group of objects. The example below exemplifies this approach.

#### The Return of Lady Mungo

In the late 1960s, archaeologists made an extremely important find at Lake Mungo in western New South Wales—the 30,000year-old remains of a young woman who had been cremated and covered in red ocher. Mungo woman (or Lady Mungo, as the Aboriginal people came to call her) was transported, carefully, but as a scientific specimen, to the Australian National University, which held her in temporary custodianship on behalf of the Australian Museum. During her time in Canberra, where she was carefully reconstructed by scientists, she taught us a great deal about ancient Australia and its inhabitants. But for local Aboriginal people, her removal and treatment as a scientific specimen were cause for offense and grief.

Twenty years later, Lady Mungo was returned to Lake Mungo in a custom-made wooden box lined in velvet. Accompanying her were scientists who had started with an intellectual curiosity about her but who had come to have much deeper feelings. She returned to a group whose feelings had begun as deeply emotional and deeply wounded; she was received as a gift enriched by science and made doubly significant for this reason. She now resides in a decorated safe on the site. The safe has two keys—both are required to unlock it. The archaeological community holds one key, the Aboriginal community the other. Since that time, archaeological work has resumed at the site with the full cooperation of the Aboriginal community.

This seems to be a successful example of repatriation. There are many others that illustrate trends in dealing with the issue of repatriation. David Lowenthal wisely suggests that issues such as these can be resolved "only by understanding what heritage means to myriad claimants, whose desires differ with culture, time, and circumstance."

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The author wishes to acknowledge the following sources in the preparation of this article: "Past and Present Indivisible? Archaeology and Society, Archaeology in Society" by Isabel McBryde, in *Prehistory to Politics*, edited by Tim Bonyhady and Tom Griffiths; *The Heritage Crusade* by David Lowenthal; *The Soapstone Birds of Great Zimbabwe: Symbols of a Nation* by Edward Matenga; *The Aboriginal Tasmanians* by Lyndall Ryan; "Buddhist Cave Temples and the Cao Family at Magao Ku, Dunhuang" by Ma Shichang, in *World Archaeology* 27 (2); and "Return and Restitution—A Museum Perspective" by David Wilson, in *Who Owns the Past?*, edited by Isabel McBryd.

# Conservation of Historic Architecture

#### By Jukka Jokilehto

AN OLD ROMAN FRIEND OF MINE USED TO SAY that the restoration of historic objects requires three things: the head, the hands, and the heart of the restorer. We can translate this by saying that the conservation of cultural heritage requires an understanding of the resource and its significance, the skills for the necessary conservation work, and love for the heritage.

We can speak of communication with the heritage resource as an informed and active learning process. The past couple of centuries have been characterized by such a process, which has evolved and developed in relation to the different aspects of the built environment. The process has usually been started by an initial interest, bringing one to ask questions about a place; the greater one's involvement, the more one learns to understand, appreciate, and love—or perhaps dislike—the place and its particular character. This intense involvement becomes the basis for the generation of values and for decisions concerning the conservation and reuse, the modification, or even the destruction of a site. This dynamic is, in fact, also the basis for the modern theory of conservation and restoration, understood as a critical process leading from knowledge to conservation action.

While the protection and restoration of ancient monuments and works of art owned by the public became accepted policy in many countries earlier in this century, beginning in the 1950s we can detect an active approach to defining the scope and objectives of the conservation of nonmonumental architecture. Signs can be seen in various national initiatives undertaken soon after World War II. For example, before 1945 in the United Kingdom, only a few ancient monuments were protected at the national level. Now, at the end of the century, the number of listed properties exceeds half a million. The concept of the "conservation area" was introduced in the Civic Amenities Act in 1967, and it has since become a major tool in planning control of historic areas in England. At present, about 9,000 such areas have been protected. Similar developments \_\_\_\_\_\_can be seen elsewhere, including most European countries and \_\_\_\_\_\_Japan (where the listing of historic areas was introduced in the 1970s), as well as in some countries in Asia, North Africa, and \_\_\_\_\_\_North and South America.

Today, policies for the treatment of historic buildings vary greatly, ranging from minimal intervention and conservative repair to artistic restoration, modernization, and ruthless adaptations according to the fashion of reuse and modern life. An early example of restoration policy is colonial Williamsburg in Virginia, started in the 1930s, with the aim of re-establishing the 18thcentury form of the town. In France, the 1962 Law of Malraux placed emphasis on architectural values, as seen in areas of Paris, Strasbourg, and Colmar. Restoration thus often resulted in expen-

A building in Pisa, Italy. The all-too-recurrent restoration fashion proposes to display different historical periods in a single historic building; the result is confusion and destruction. *Photo:* Jukka Jokilehto.



sive reconstruction at the cost of losing the character of the old that is, by eliminating past changes and rebuilding the "original" form, a replica was created.

A different approach was adopted in the Old Buda in Hungary. There, emphasis was given to the memorial value of the place, and the remains of war-damaged buildings were displayed as part of new constructions. A similar effect is seen in the restoration of historic buildings in some Italian towns, such as Pisa, Verona, and Florence, and in some places in Poland and the Czech Republic. Even though the purpose is to display fragments of different historic phases rather than to repair all damage or restore the architectural appearance of a building, aesthetically speaking, the results are seldom satisfactory.

Modern conservation and restoration treatments, in the Latin meaning of the words, have generally been reserved for buildings or areas of particular significance. "Ordinary" structures, even if architecturally valuable, have been given less attention. In many countries, this has led to "facadism" (i.e., keeping the facade while destroying the building), and the preservation of selected features, rather than the preservation of a historic building as a whole. Examples can be found in all parts of the world, from London to Helsinki to Sydney. Such solutions are often justified as the lesser evil, since they take into account the need to satisfy the rights of individuals to control their own property. This trend is particularly manifest in large cities, where high-rise buildings may be allowed, and where old structures can become expensive obstacles.

A positive effort to counterbalance this trend was the Main Street project in North America in the 1980s. Although it perhaps tolerated facadism, the purpose was to increase public appreciation of historic areas by encouraging businesses to invest in the restoration and improvement of their character. More recently, the suffocation of downtown areas has led to a broader reassessment of the potential of the remaining historic fabric; such rehabilitation has had a positive impact in places such as Recife, Brazil.

The cornerstone of British conservation policy is conservative repair and maintenance. This policy, developed during the era of John Ruskin and William Morris, and, thanks to their influence, promoted by the Society for the Protection of Ancient Buildings, was supported by the later efforts of the Civic Trust, the amenity societies, and the English Heritage. The results are seen in numerous historic towns and villages, such as York, Chester, and Bath. A certain deviation from this policy occurred during the period of massive reconstruction and the introduction of industrial building practice in the decades following World War II. With the greater sensitivity to environmental care seen since the 1970s, repair and maintenance have again been incorporated into policies related to existing buildings. This is reflected in the requiring of regular professional inspections of church buildings in Britain. It is worth noting that British engineers have adopted guidelines for the survey of existing structures. In the mid-1970s, Sir Bernard Feilden used the method of visual inspection to convince the authorities to opt for the conservation of historic buildings in the old market area of the town of Chesterfield, rather than replacing them with new structures. Under this method, the responsible architect or surveyor undertakes a sys-



An example of facadism in Sydney, Australia. Preserving a historic facade while replacing the rest of the building with an unsympathetic modern construction destroys the continuity of a historic environment. *Photo:* Jukka Jokilehto.



The historic street of Stonegate in the center of the city of York. The cornerstone of British conservation policy is conservative repair and maintenance, as shown here. *Photo:* Jukka Jokilehto.

tematic visual survey of all parts of a building and writes a report that includes a description of the structure and an indication of any alterations affecting its condition, as well as recommendations for action and a list of problems needing further study.

An important conservation challenge exists in seismic hazard areas, where building codes need to be properly interpreted for traditional structural systems to meet modern engineering constraints—as was the case in Montenegro after the 1979 earthquake. Often, relatively flexible historic structural systems have been altered or destroyed by the introduction of rigid reinforcements and concrete frames. As a result of research by specialized laboratories in the United States, Italy, and the former Yugoslavia, more appropriate reinforcement techniques have been developed. Much of the world's cultural heritage lies in regions affected by natural hazards—from the Far East to the Mediterranean to Central America. These regions continue to require special attention if modern norms are to be integrated with the character and potential of historic structures.

The practice of building inspections and surveys has motivated the development of methods and techniques for the recording and study of buildings and materials. In the 1960s and 1970s, architectural photogrammetry was developed to provide support for such documentation; it has since been complemented by computerized recording techniques. At the same time, there has been considerable development in conservation science, now an indispensable tool for modern conservation practice. While the role of science in conservation has often been debated, its importance to methodology is certainly established. However, science does need to respond to the cultural assessment of the place. As Professor Paul Philippot has often stated, conservation of cultural heritage is fundamentally a cultural problem.

More and more professions are involved in the conservation of historic architecture. *The Guidelines on Education and Training in*  *the Conservation of Monuments, Ensembles, and Sites*, prepared by the ICOMOS International Training Committee in 1993, list the skills that professional conservationists should be able to cover. On this basis, a British association, the Conference on Training in Architectural Conservation (COTAC), has drafted outline profiles of the main professions involved in multidisciplinary collaboration on conservation projects in the United Kingdom. The list of these disciplines, which demonstrates the range of conservation today, includes administrators or owners, archaeologists, architects, art and architectural historians, builders or contractors, conservation or historic buildings officers, conservators, civil and structural engineers, environmental engineers, landscape architects, historic gardens conservators, master craft workers, materials scientists, building economists (quantity surveyors), surveyors, town planners, and curators.

Apart from skilled labor, there is also the need for appropriate building materials. The problem of marketing is often an obstacle to the production of traditional materials. If they are produced in small quantities, the cost of production is high compared to that of industrial production. Can the modern building industry adopt traditional products in order to expand the market? The Council of Europe has made efforts to promote traditional crafts, and several training centers have been established. In some regions, such as the Middle East, Asia, and Africa, traditional skills have been maintained until the present, and they can become a link between the past and the future if planned as part of culturally sustainable development.

In Europe, the series of meetings organized in the European Architectural Heritage Year 1975 gave impetus to the protection of historic urban and rural areas. The final declaration of the concluding conference, the Amsterdam Declaration, launched the concept of "integrated conservation"-the integration of conservation requirements and cultural values into the planning process in historic urban areas. This concept had already been introduced in the European Charter of the Architectural Heritage, adopted by the Council of Europe in the same year. The reference for these concepts came from the management experiences of historic towns in several European countries, including Denmark, the United Kingdom, Germany, the Netherlands, and Italy. The master plan prepared in Bologna in the early 1970s became an important reference regarding the objectives and the methods of planning in historic areas. Similar methods have since been introduced in other continents, including the preparation by a UNESCO team of the master plan of Lamu, Kenya. Increasing emphasis is placed on social and economic issues, and an effort is made to rehabilitate old buildings, bringing back the original residents when possible, thus implementing the intentions of integrated conservation. In earlier

restoration projects, such as those based on the example of Williamsburg or others in France, the cost of restoration often became prohibitive because such restoration was not based on respect for an existing historical reality but rather on the expensive reproduction of lost features. In many cases, this approach has led to complete renovation and often to gentrification and the reuse of such areas for tourism and museum functions, or to their conversion into luxury habitats by wealthy families.

The Recommendation Concerning the Safeguarding and Contemporary Role of Historic Areas, adopted by the General Conference of UNESCO in November 1976, further supported the conservation and rehabilitation of historic areas. This recommendation emphasized the importance of considering the historic area as a coherent whole, "whose balance and nature depend on the fusion of the parts of which it is composed and which include human activities as much as the buildings, the spatial organization, and the surroundings." Since the 1970s, there have also been various initiatives regarding the general environmental management of the earth, its ecology, and its natural and built resources. Major conferences include the 1996 Habitat II in Istanbul, where the management and planning of the built environment were among the key issues brought to the attention of decision makers.

The Brundtland Report, issued by the United Nation's World Commission on Environment and Development in 1987, emphasized environmentally sustainable development. A decade later it has been complemented by the UNESCO report on cultural diversity. These two reports highlight issues to be properly integrated into planning processes. While some well-defined examples and case studies exist, local governments and private citizens need to be more involved in joint efforts to balance cultural values with economic and social arguments. Previously, particularly in Europe, legislation and planning norms were conceived in the context of government authority. The current greater involvement of the private sector requires a revision of this framework to accommodate present reality. A major effort is also needed for increased communication between specialists and nonspecialists, and for a clear definition of the roles of each for the benefit of our common architectural heritage.

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# International Conservation Organizations

A poster in Chinese and English, produced by the International Council of Museums (ICOM) in conjunction with its 1997 International Museum Day. ICOM was the first major nongovernmental organization in the cultural heritage field created after World War II. Devoted to the promotion and development of museums and the museum profession at an international level, ICOM has around 15,000 members in 147 countries. *Photo:* Courtesy ICOM.



#### By Mounir Bouchenaki

• WHEN HISTORIANS STUDY the half century preceding the beginning of the third millennium, they will certainly point out the very important change in mentalities, particularly in the Western world, after the two major disasters of the World Wars, during which so much destruction of historic buildings occurred. It was with a view to avoiding such a situation in the future that the first international normative instrument for the Protection of Cultural Property in the Event of Armed Conflict was prepared and adopted at The Hague in 1954.

The creation of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in the middle of the 20th century was certainly a landmark in the process that has led to an increasing awareness of the world's cultural heritage. Its constitution, adopted in London in 1945, stated that UNESCO was entrusted with the task of "ensuring the preservation and protection of the world heritage of works of arts and monuments of historic or scientific interest."

At the same time, the world was witnessing the decolonization and independence of most of the colonized countries in Africa and Asia. Along with this new political trend, the consciousness of cultural identities also developed, represented by cultural heritage. It was recognized that "political emancipation is of little significance unless it entails cultural emancipation" (1982 UNESCO report "The Cultural Heritage of Mankind"). Historians will certainly note that various organizations dealing with the protection of cultural heritage were also born in this context.

The oldest nongovernmental organization (NGO) in this field is the International Council of Museums (ICOM), created shortly after UNESCO. Very closely associated with UNESCO, ICOM has made a significant change in the role and function of museums in contemporary society. "Scattered over the five continents, there are many museums which are breaking new ground, in an effort to prove that the museum is not necessarily an obsolete, elitist institution and that it has an essential part to play in the world of today and tomorrow," wrote Kenneth Hudson in his 1977 report *Museums for the 1980s.* "To achieve the impact [museum professionals] are anxious to achieve, they are coming to realize that they must involve the community in what the museum is trying to do."

As mentioned in the 1995 *Report of the World Commission on Culture and Development*, "since the end of the Second World War, there has been an exponential growth of museums throughout the world, and probably well over 90 percent of the total number of the world's museums postdate the creation of UNESCO and the International Council of Museums (ICOM) in 1946."

ICOM was followed by the International Council on Monuments and Sites (ICOMOS), the second international NGO in the field of cultural heritage-this one dealing with immovable heritage. ICOMOS was created in 1965 in Warsaw just one year after the elaboration of one of the most recognized international charters on the conservation and restoration of monuments and sites, known as the Venice Charter. As one of the founders of ICOMOS and the main drafter of the Venice Charter, Raymond Lemaire, wrote years later: "ICOMOS was conceived as an organization aimed at promoting on an international level the conservation, protection, utilization, and valorization of monuments, ensembles, and sites. Following the accepted concept, which was very innovative at the time, the objective could only be reached through a large interdisciplinary collaboration. It was therefore necessary to gather within one single organization all institutions, organizations, and people professionally interested in the protection of our historic architectural and urban heritage. This professional aspect appeared to us very important, since it guarantees the scientific value of its activity, thereby giving it authority."

Nearly 30 years after the founding of ICOMOS, a great number

of experts in the field of cultural heritage met in Nara, Japan, in November 1994 in order to discuss the various aspects of the criteria of "authenticity" and—as K. E. Larsen, chairman of ICOMOS Norway and scientific coordinator of the Nara conference, observed during the meeting—to move forward "the international preservation doctrine from a Eurocentric approach to a postmodern position characterized by recognition of cultural relativism."

A third organization, this one with an intergovernmental character, was founded by UNESCO in 1956 and located in Rome after 1959 following an agreement with Italy. The main purpose of the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) is to link governments and specialists in the safeguarding of both movable and immovable cultural heritage; its statutory functions were defined as documentation, technical cooperation, research, training, and awareness building in member states. ICCROM is known as one of the world's international "centers of excellence" that deal with training and education. Hundreds of architects and conservators from all over the world have followed and are following specialized conservation training programs in areas such as architecture, mural paintings, stone, wood, paper, and textiles. As Jukka Jokilehto-former assistant to the director general of ICCROM and current president of the ICOMOS International Training Committee-noted in 1995, "international courses should be understood as part of the professional career structure of a professional, particularly when aiming at a leading position in one's country."



The main temple at Abu Simbel, constructed by Ramses II over 3,200 years ago on the southern frontier of pharaonic Egypt. In the mid-1960s, when the building of the Aswan Dam threatened the site, UNESCO conducted its first international campaign, raising funds from around the world to preserve the ancient temples at Abu Simbel. A project supported by funds from over 50 countries made possible the disassembly of the temples and their reconstruction on higher ground. *Photo:* Guillermo Aldana.

Our historians analyzing the role of international organizations during the 20th century would consider many other professional institutions that were also developing programs and activities related to cultural heritage during the second half of this century: the Council of Europe (as an intergovernmental body), the Getty Conservation Institute, the Aga Khan Trust for Culture, the International Foundation of Landscape Architects (IFLA), the World Monuments Fund, and many others at regional and subregional levels, such as Europa Nostra. All of these organizations faced the challenge of preserving the values of the past in a changing world in which heritage is often at risk.

The main achievement of these international organizations, according to historians, would certainly be the raising of international concern. This is, in fact, the first time in our history that the international community is considering expressions of the creativity of mankind, in both their tangible and intangible forms, as an indivisible whole. As the tangible expression of each national genius is now seen to be part of the world's heritage, all such expressions must therefore be respected, preserved, studied, and passed on to future generations.

This international perspective developed when the Egyptian temples of Abu Simbel and Philae were threatened by the building of the great dam in Aswan in 1960. Both Egypt and Sudan presented a request to UNESCO for assistance in their safeguarding, and this was the basis for the first international campaign of UNESCO. The response from public and private bodies was quite surprising. Even children from schools all around the world reacted by sending small contributions. The message was clear: these monuments do not belong only to Egypt. They represent a value to each and every one of us. It is no exaggeration to say that international campaigns for preservation undoubtedly constitute one of the key areas for the implementation of the concept of universal heritage.

This concept is the result of the development of the modern historical consciousness of the values of heritage that paved the way for the 1972 Convention, also called the World Heritage Convention. It was a significant innovation, as it linked sectors that had hitherto been considered very different—the protection of the cultural heritage and that of the natural heritage. The 20th century introduced the idea of *world* heritage, the significance of which transcends all political or geographical boundaries. The experts of all specialized organizations mentioned above have contributed to the development of this new concept and the doctrine applicable in this domain.

How will this emerging consciousness continue in the next century? Today, as we near the end of 1999, the number of states party to the 1972 Convention for the Protection of World Cultural and Natural Heritage is 158, and the number of sites inscribed is The 1997 ceremony marking the inscription of the historic city of Meknès in Morocco as a World Heritage site. Founded in the 11th century, the city was made the Moroccan capital in the latter part of the 17th century by the sultan who constructed the massive city walls and gates that still stand today. The ceremony for the city's inscription was enthusiastically celebrated by the community. *Photos:* Mounir Bouchenaki.



582. This spectacular increase reveals the determination of states to preserve their cultural heritage and their readiness to recognize that heritage is not the exclusive property of one nation but is, instead, the common property of the whole of humanity. These figures and the great commitment shown by authorities at all levels when a site is declared to be on this list suggest a trend that is likely to continue.

I have had the opportunity to attend ceremonies in various parts of the world in which the whole population of a given site has been present, singing and dancing, showing happiness and pride at having the site recognized by the international community. When attending a 1997 ceremony to unveil the plaque declaring the Medina of Meknès, Morocco, as a World Heritage site, the delegation headed by Federico Mayor, director general of UNESCO, was surprised to see the population of the city in the streets expressing their joy. On many other occasions—for example, in Italy in 1999, for the unveiling of the plaque declaring Paestum and II Valle del Cilento as World Heritage sites—I again saw the population attending the ceremony and celebrating the recognition of its heritage.

Hence, the role and function of UNESCO and its advisory bodies for the implementation of the 1972 Convention would certainly be pursued and reinforced, despite the fact that cultural heritage in many parts of the world is under threat. International organizations can be part of the response against the number of growing problems, ranging from natural to human-made disasters. For example, the International Committee of the Blue Shield—developed by a number of NGOS in cooperation with UNESCO to disseminate information and to coordinate action in emergency situations affecting cultural heritage—could constitute a way of strengthening the international campaigns.

In the same spirit, the intergovernmental committee created as an advisory body for the implementation of the UNESCO Convention of 1970 on the Means of Prohibiting and Preventing the Illicit Importation, Exportation, and Transfer of Ownership of Cultural Property, should be strengthened. At present, the illicit traffic of cultural assets is considered by all international organizations concerned as an expanding phenomenon. In his book, *Trade in Antiquities*, published in 1997 by UNESCO, P. J. O'Keefe writes that this intergovernmental committee "does not meet sufficiently often and is not representative of all parties involved. It would be desirable for formulation of the approach to take place in a non-partisan atmosphere. One of the large international foundations might be willing to provide the facilities for such meetings."

In conclusion, it is now apparent that the cultural heritage, as a legacy for all, cannot be treated only by local or national institutions. Concerted approaches and international cooperation with the public and the private sector are necessary to create the synergy that will ensure the participation of all the stakeholders. It is clear that international organizations have a major role to play in forwarding a global commitment to cultural heritage and development.

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### Project Updates

### Fall Campaign at Mogao

From September 17–30, 1999, the GCI Mogao conservation team was in China for the fifth campaign in the Institute's wall paintings conservation project at the Mogao grottoes.

During the campaign, the team and its Dunhuang Academy counterparts examined the exfoliation and loss of paint that has recently affected the west portion of Cave 85, the focus of the project. Prior to the GCI team's arrival, Academy staff treated portions of the exfoliating area with polyvinyl acetate, a synthetic adhesive that has been used at Mogao since the 1950s. This material and its relationship, if any, to the deterioration process are under study. Therefore, the project team agreed to develop temporary emergency stabilization procedures, such as facing with Japanese paper, that can be used by Academy staff to secure paintings following events such as the recent one, which occurred shortly after rain at the site. The emergency stabilization will prevent paint loss while giving the team more time to develop and test an appropriate adhesive mixture to fix the exfoliating paintings. Gum tragacanth was recently identified at the GCI as the binding medium for the wall paintings of Cave 85. This natural product and others will be screened for suitability as adhesives.





A major component of the campaign was testing the working properties and performance characteristics of earth-based mixtures. The evaluation of these properties will allow the team to choose new mixtures to be tested, as well as to make a final selection of material for grouting (to reattach loose plaster) and plaster repair. The conservation team prepared 26 earth-based mixtures and tested their working properties, such as shrinkage, setting times, and water content. The Academy team was shown how to measure performance properties such as water vapor permeability, adhesion to the conglomerate, and strength; they will carry out these tests on the 26 mixtures after the samples have completely cured.

#### Announcements

### Preserve L.A.

The conservation and analytical teams worked together to carry out core sampling in the rock conglomerate in the lower part of the cave where the painted plaster is missing. Samples were collected in six different locations at two to three heights, with depths up to 40 centimeters in 10 centimeter increments. A total of 64 samples were weighed immediately after extraction, then dried to determine the water content. The hygroscopicity of the samples will be determined at 60 percent and 80 percent RH. Qualitative and quantitative soluble salt analysis will be performed to obtain a profile of the distribution of salts within the lower part of the rock conglomerate. The analytical team identified sodium sulfate-a salt not previously found-in the conglomerate in the lower part of the cave.

Wall paintings conservator and project team member Zheng Jun of China's State Administration for Cultural Heritage was successful in training a computer specialist on the Academy staff in the transfer of graphic condition records in digital form. Zheng had learned this process during his working visit to the GCI in July 1999.

The next fieldwork is planned for March 2000.

The Getty Grant Program has announced a grant initiative focused on the preservation of Los Angeles's rich architectural heritage. The new initiative, Preserve L.A., will complement the Getty's recent \$1.1 million grant to the National Trust for Historic Preservation for the Save America's Treasures Preservation Planning Fund, which will support architectural conservation planning projects throughout the United States. The local initiative will provide funds to local nonprofits to support conservation planning for landmark buildings, sites, and districts within Los Angeles County. Funding will also be available on a matching basis to a select number of model projects for actual conservation work.

"Preserve L.A. grows out of the Getty's long-term commitment to the art and architecture of Los Angeles," says Grant Program Director Deborah Marrow. "In addition to providing direct financial support for our community's architectural landmarks, we hope that it will also raise awareness about the importance of local preservation efforts." Like the Getty's international support for architectural conservation, the local initiative focuses on careful planning—a strategy to ensure that priorities and methods are clearly defined before conservation work begins. The deadline for grant applications is March 31, 2000, and the first grants will be announced in June 2000. Additional information is available online at *http://www.getty.edu./grant/preservela* or from the office of the Getty Grant Program, 1200 Getty Center Drive, Suite 800, Los Angeles, California 90049-1685, USA, 310 440-7320 (phone), 310 440-7703 (fax), or preservela@getty.edu (E-mail).

The Getty Grant Program is the philanthropic arm of the J. Paul Getty Trust and a sister program of the Getty Conservation Institute.

### **Publications**

### Palace Sculptures of Abomey

History Told on Walls

By Francesca Piqué and Leslie Rainer

The Republic of Benin in West Africa is home to more than 40 ethnic groups, the largest of which is the Fon. In the early 17th century, the Fon established a society ruled by a dynasty of kings, who over the years forged the powerful kingdom of Dahomey. In their capital city of Abomey, they built a remarkable complex of palaces that became the center of the kingdom's political, social, and religious life. The palace walls were decorated with colorful low-relief sculptures, or bas-reliefs, which recount legends and battles and glorify the history of the dynasty's reign. Over the centuries, these visual stories have represented and perpetuated the history and myths of the Fon people.



Palace Sculptures of Abomey combines lavish color photographs of the bas-reliefs with a lively history of the Dahomey kingdom, complemented by period drawings, rare historical photographs, and colorful textile art. The book provides a vivid portrait of these exceptional narrative sculptures and the equally remarkable people who crafted them. Also included are a reading of the stories on the walls and details of the four-year collaboration between the Benin Ministry of Culture and Communications and the Getty Conservation Institute to conserve the basreliefs of Abomey. Final chapters describe the Historic Museum of Abomey, now housed in the palace complex, and discuss the continuing popularity of bas-reliefs in contemporary West African art.

Contributors include Jérome C. Alladaye, professor of history, National University of Benin; Rachida de Souza-Ayari, director, Department of Cultural Heritage, Republic of Benin; and Suzanne Preston Blier, professor, African art history, Harvard University.

Francesca Piqué is a conservation specialist at the Getty Conservation Institute. Leslie Rainer is a conservation consultant.

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### Infrared Spectroscopy in Conservation Science

By Michele R. Derrick, Dusan C. Stulik, and James M. Landry

This book provides practical information on the use of infrared (IR) spectroscopy for the analysis of materials found in cultural objects. Designed for scientists and students in the fields of archaeology, art conservation, microscopy, forensics, chemistry, and optics, the book discusses techniques for examining the microscopic amounts of complex, aged components in objects such as paintings, sculptures, and archaeological fragments.

Chapters include the history of infrared spectroscopy, the basic parameters of infrared absorption theory, IR instrumentation, analysis methods, sample collection and preparation, and spectra interpretation. The authors cite several case studies, such as examinations of Chumash Indian paints and the Dead Sea Scrolls.

Michele R. Derrick, a conservation science consultant, was formerly a scientist with the Getty Conservation Institute. Dusan C. Stulik is a senior scientist at the Getty Conservation Institute. James M. Landry is professor of chemistry in the Department of Chemistry and Biochemistry at Loyola Marymount University.

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### New Appointments and Assignments

Jeanne Marie Teutonico has joined the staff of the Getty Conservation Institute as special advisor to the director of the Institute, Timothy P. Whalen. She will be advising the director on a range of issues related to the work and mission of the GCI, with particular initial emphasis on the selection and design of Institute projects.

Teutonico comes to the GCI from English Heritage in London, where she was senior architectural conservator. Her other professional appointments have included coordinator of the international architectural course at ICCROM and deputy director of historic building and site services, department of conservation science, Bournemouth University. She will continue as lecturer in the graduate program in historic preservation at the University of Pennsylvania. Another recent appointment to the GCI director's staff is Kristin Kelly, formerly the Getty Museum's manager of administration. Her initial duties include advising the director on a number of staff development issues. In addition, she will review and assess several existing projects, as well as work with Whalen and Teutonico on a number of planning and strategy projects. Kelly's education is in the arts. She received her B.A. in the history of art from Bryn Mawr College and completed her Ph.D. in art history and archaeology at Columbia University.

Also joining the staff of the GCI is Wilbur Faulk. Since 1993 Faulk has served as director of security for the Getty Trust. Prior to that, he was director of security at the Getty Museum in Malibu. In 1995 Faulk received the Smithsonian Institution's Robert Burke National Award for Cultural Protection Achievement-the highest award given in the United States for achievement in the protection of cultural property. Over the past five years, he has worked extensively with the GCI on security seminars at the St. Petersburg International Center for Preservation. Faulk will assist the GCI's efforts to further national and international cultural property protection initiatives, in part by continuing his involvement in St. Petersburg and his participation on the ICOM Security Committee. He will also continue working on a book on security issues in cultural institutions.

Marta de la Torre has assumed the directorship of the Information & Communications group. While overseeing this area of the GCI, which includes the Information Center and publications, she will continue to supervise the development of the UCLA/Getty master's program in archaeological and ethnographic conservation, the GCI's research on the economics of heritage conservation, and the work of the Latin American Consortium for Preventive Conservation. De la Torre came to the Institute in 1985 and has served as director of the GCI's training program and the Agora initiative.

Neville Agnew—since early 1998 the GCI's group director of Information & Communications—is now principal project specialist in the director's office. This new assignment will permit him more time to pursue project- and science-based work, including the China Principles project and the wall paintings conservation project at the Mogao grottoes. Agnew joined the Institute in 1987; since then, he has served in a variety of capacities, including scientific director, special projects director, and associate director for programs.

#### **Millennium Edition I**

**Conservation at the Millennium** 

- Repatriation 18
- Architecture
- International Conservation 25 **Organizations**

Projects, Events, Publications, **GCI** News 28 and Staff

11

#### Essays

Introduction

4

- 8 The Scientist in Conservation
- 11 **Conservation of Monuments** and Sites
- 14 Collections
- **Conservation of Museum**

- 22 **Conservation of Historic**

Authenticity: Rock of Faith or **Quicksand Quagmire?** 





