

Conservation

The Getty Conservation Institute Newsletter ■ Volume 15, Number 1 2000

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The Getty Conservation Institute Newsletter

Volume 15, Number 1 2000

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

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

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Millennium Edition II

This is the second of two special editions of *Conservation* dedicated to creating a portrait of the conservation field as a new century begins. In this issue and in the previous one, we asked a distinguished group of colleagues to reflect on a variety of subjects, providing a perspective on the past and a consideration of the questions and challenges that may lie ahead. The essays here point to several ways to meet these challenges—through respect for the past and its meaning, inclusion of those interested and concerned with the heritage, reexamination of our professional views and practices, and reevaluation of education.

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Conservation in the New Century

By Timothy P. Whalen

Introduction

IN THIS SECOND SPECIAL ISSUE OF *Conservation*, we continue to look at topics that preoccupy the conservation field as a new century begins. In particular, we look broadly at ethics and education, the related subjects of archaeological conservation and the looting of archaeological sites, the impact of technology on conservation, and, finally, cultural tourism. As in the previous issue, the essays contributed by our invited authors focus on the complexity of conservation and the challenges that face us.

Recently the field has begun to move away from the notion of conservation as a neutral activity. Today it is more generally accepted that the act of conserving transforms heritage—and that contemporary values and beliefs dictate actions. “All conservation is a critical act, one of interpretation,” states Frank Matero in his essay on ethics. This view should not be feared or construed as negative, for if the heritage from the past is to remain relevant, we must pursue its connections to the present. “Conservation,” says Matero, “seeks to establish continuity through controlled change.”

But how much change is desirable—or even ethical? Perhaps the most obvious transformation of heritage is seen in places that are conserved and interpreted for tourism purposes—what Dean MacCannell in his essay calls the change “from a mere place to a tourist destination.” While MacCannell does not directly address the question of how tourism influences the practice of conservation, he pinpoints an interrelationship that for several decades has engaged the conservation field—and that will continue to do so.

The evolution of heritage conservation as an increasingly complex process is underscored in several essays. Frank Matero approaches this complexity from two different perspectives. He asks us to contemplate how we can best conserve a heritage whose definition is rapidly changing and expanding. Further on, he suggests that the internal complexity of conservation practice—with its interaction of science, technology, and the humanities—must

lead us to reexamine our approaches and the ways we relate to emerging stakeholders.

The relationship among groups concerned with heritage is also considered by Karen Vitelli, as she ponders how archaeologists, collectors, and authorities can better protect from looting and theft the artifacts that have come down to us from earlier generations. In her view, legal interdictions and international conventions are failing to achieve their objectives. Other solutions should now be tried. These solutions, she tells us, should create a new sense of stewardship over materials from the past, and should involve more groups in discussion and action. In his essay on conserving the archaeological record, William Lipe also concludes that broadening the base of people involved with conservation is critical in preserving sites and artifacts. “The conservation of the archaeological record,” he writes, “is not something that can just be left to the professionals.”

The shared responsibility among conservation professionals for the development of education is the central theme of Sharon Cather’s essay. Conservation’s evolving complexity is reflected in educational and training practices. The most common response to complexity has been to add more subjects to the curricula and to expect more varied competencies from students. But education, Cather reminds us, does not stop with the diploma. In conservation, it’s a lifelong endeavor.

The examination and debate advocated by many of the authors might be facilitated by technology. As Walter Henry observes, electronic communications have increased dissemination of conservation ideas as more information gets published online (the essays here, for example, will quickly become available to the world on the GCI’s Web site). Exchanges among conservation professionals are no longer limited to those occasions when we gather in one place. Discussions and worldwide conservation debates happen daily in cyberspace.

The main challenge for us as professionals and as members of society is learning how to balance different values, the interests of varied stakeholders (including tourists), technical and scientific matters, professional ethics, and accepted practices in the pursuit of conservation. The authors here point to ways to meet this challenge—through respect for the past and its meaning, inclusion of those concerned with the heritage, reexamination of our professional views and practices, and reevaluation of education.

It is a reflection of conservation’s growing maturity as a discipline that these ideas have entered its consciousness, signaling the profession’s growing readiness to participate in the larger debate about the role of culture in society. This broadening vision suggests that perhaps one hundred years from now, conservation will be as much a manner of thinking and living as it is a professional occupation.

Tim Whalen is director of the Getty Conservation Institute.

Ethics and Policy in Conservation

By Frank Matero

Just connect.
—E. M. Forster,
Howard's End

OVER THE PAST DECADE, aspects of heritage have become important issues in the discourse on place, cultural identity, and ownership of the past. Yet for all its engagement with the function, presentation, and interpretation of heritage as material culture, conservation lags behind in the larger debate, both in terms of a critical reassessment of its own principles and in dialogue with related fields, such as design and aesthetics, as well as history, anthropology, and the other social sciences. This lag is due in part to conservation's recent and somewhat insular professional development and its avoidance of a critical examination of the inherited historical and cultural narratives constructed through past motives of preservation.

Conservation's complex theoretical and methodological approach—based on art historical, anthropological, and scientific inquiry—renders it a powerful vehicle for addressing the questions of form, meaning, and effect of human works. If we accept the most basic definition of conservation as the protection of cultural works from deterioration and loss, then heritage conservation contributes to memory, itself basic to human existence. Conservation as an intellectual pursuit is predicated on the belief that knowledge, memory, and experience are tied to cultural constructs, especially to material culture. Conservation—whether of a painting, building, or landscape—helps extend these places and things into the present and establishes a form of mediation critical to the interpretive process that reinforces these aspects of human existence. The objectives of conservation also involve evaluating and interpreting cultural heritage for its preservation, safeguarding it now and for the future. In this respect, conservation itself is a way of extending and solidifying cultural identities and historical narratives over time, through the valorization and interpretation of cultural heritage.



A satiric view of “the art of restoring” as it appeared in *Fun Magazine* in 1877.

As an academic endeavor, conservation is a modern concept born out of the notion of history as something that is linear and that has come to an end. Artifacts and sites are divorced from their past by the present's historical consciousness, which dictates new motives and methods for their use and preservation. As Paul Phillipot has noted, in most contemporary professional contexts, conservation has become the designated term for “an objective, scientific approach to the past in the form of historical knowledge, not the same as the continuity guaranteed by former tradition; a modern phenomenon of maintaining living contact with cultural works of the past.”

Such motives and methods found various modes of theoretical and applied expression through the application of historical and scientific precepts during the late 19th and 20th centuries. The resulting principles attempted to define a new approach that related the aesthetic and historical values of art and architecture to the material form, to ensure the transmission of the whole work as both idea and thing. Contemporary theorists such as Vittorio Gregotti have explained conservation as an anti-Modernist/post-Modernist stance, founded on reactions to notions of progress and based on a belief in the value and legitimacy of all past artistic contributions. Yet in the end, conservation is a critical act. Decisions regarding what is conserved and how it is presented are products of contemporary values and beliefs about the past's relationship to the present.

This relationship—and the stabilizing effect that selected things and places have by connecting us to a personal or collective past—is universal. It has become all the more pronounced in the last 50 years, as rapid change and increased mobility have caused a certain anxiety and dislocation. This is evident in the resurgence of nostalgia in design, in historical theme parks, in site reconstructions, and in the romanticization of tradition and so-called traditional living. With the escalating development and commodification of heritage for recreational, economic, and political purposes, the input of conservation professionals is now all the more critical.

Conservation Principles

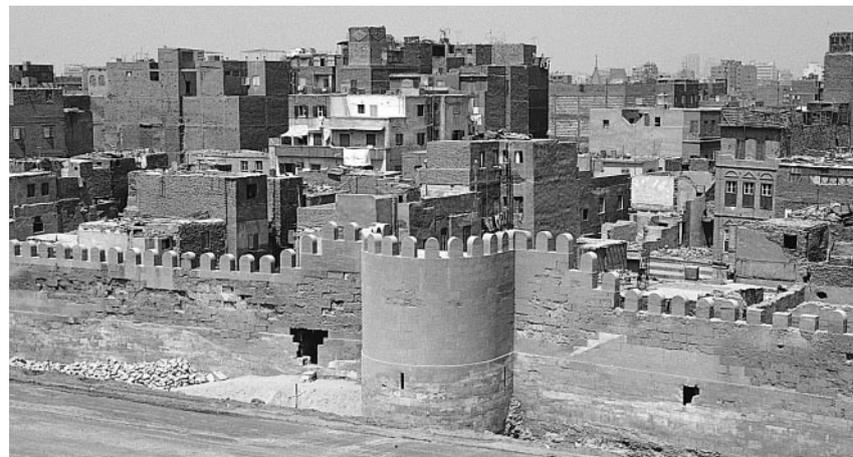
Since conservation's emergence in the 20th century as a bona fide field of academic study and professional practice, it has matured and specialized as a distinct discipline built on a synthesis of theory and methodology drawn from the humanities and sciences. As early as the first International Congress of Architects in Madrid in 1904, numerous attempts were made to codify a set of universal principles to govern interventions to built works of historic and cultural significance. Despite their differences, all these documents identify the conservation process as one governed by absolute respect for the aesthetic, historic, and physical integrity of the work, and one requiring a high sense of moral responsibility. Implicit is the notion of cultural heritage as a physical resource that is valuable and irreplaceable—an inheritance that promotes cultural continuity. This last concern has found renewed expression in recent charters focused on process and more inclusive definitions of heritage, authenticity, human rights, and values.

The notion of ethics and ethical practice has long been associated with conservation, perhaps most explicitly in the 1960s with the publication of the *Standards of Practice and Professional Relationships for Conservators* (The Murray Pease Report), adopted in 1963, and *The Code of Ethics for Art Conservators*, adopted in 1967 by the IIC-American Group. If we take ethics to mean the moral principles or rules of conduct by which a person is guided, then, when applied collectively to members of a profession, ethics defines the duties and responsibilities members have to the public, to one another, and to themselves in regard to the exercise of their profession. Implicit in such principles are notions of right and wrong and actions appropriate and inappropriate, which are based in part on criteria established by the profession. These principles, in turn, are often applied in the creation of policy or plans of action.

Implicit in the word and concept of heritage are the notions of value, birthright, and obligation. Each of these notions establishes a moral imperative in the treatment of this collective human

inheritance. In response, contemporary conservation has developed the following principles as the foundation for ethical professional practice:

- the obligation to perform research and documentation; that is, to record physical, archival, and other evidence before and after any intervention to generate and safeguard knowledge embodied as process or product;
- the obligation to respect cumulative age-value; that is, to acknowledge the site or work as a cumulative physical record of human activity embodying cultural beliefs, values, materials, and techniques, and displaying the passage of time;
- the obligation to safeguard authenticity—a culturally relative condition associated with the fabric or fabrication of a thing or place as a way of ensuring authorship or witness of a time and place;
- the obligation to do no harm, performing minimal intervention that will reestablish structural and aesthetic legibility and meaning with the least physical interference—or that will allow other options and further treatment in the future.



The Dharb al Ahmer quarter in the medieval section of Cairo. Here, the Aga Khan Trust for Culture—Historic Cities Support Programme is working with Egyptian authorities and specialists from the University of Pennsylvania on a project that combines urban revitalization with conservation, balancing tradition, continuity, and change. Photo: Frank Matero.

As summarized in the Australia ICOMOS Charter (Burra Charter), the aim of conservation is to retain or recover the cultural significance of the thing or place, and it must include provision for its security, its maintenance, and its future. In most cases this approach is based, first and foremost, on respect for the existing fabric, and it involves minimal physical intervention, especially with regard to traces of alterations related to the history and use of the thing or place. The conservation policy appropriate to a thing or place must first be determined by an understanding of its cultural significance and physical condition, which in turn should determine which uses are compatible with the formal and material reality—not the reverse.

Preservation and Conservation

Contemporary practice has evolved an entire lexicon of intervention strategies based on the degree of intervention. The result is a sophisticated, though sometimes confusing, definition of approaches that depend largely on the type and context of heritage. In certain places, including the United States, the terms *preservation* and *conservation* have come into the professional language as distinct concepts. Explicit and unique to the definition of preservation is the notion of retaining the status quo or the means by which the existing form, integrity, and materials of a work or place are maintained and deterioration is retarded. Conservation, in the same context, has been relegated to mean the whole spectrum of technology applied to safeguarding cultural heritage.

Both terms have as their fundamental objective the protection and transmission of cultural heritage. However, whereas preservation seeks to safeguard and explain by maintaining the existing physical state—or at least the illusion of no change—conservation, in its more broadly used meaning, seeks to establish continuity through controlled change. Both maintain contact with the past through the identification, transmission, and protection of that which is considered culturally valuable. Their differences in approach can be explained partly in response to negative attitudes toward past restorations in Europe and North America which, by today's standards, deprived the works of material integrity and historical and cultural authenticity—themselves culturally relative constructs. Both definitions depend on each other for meaning. A clear understanding of their usage is critical.

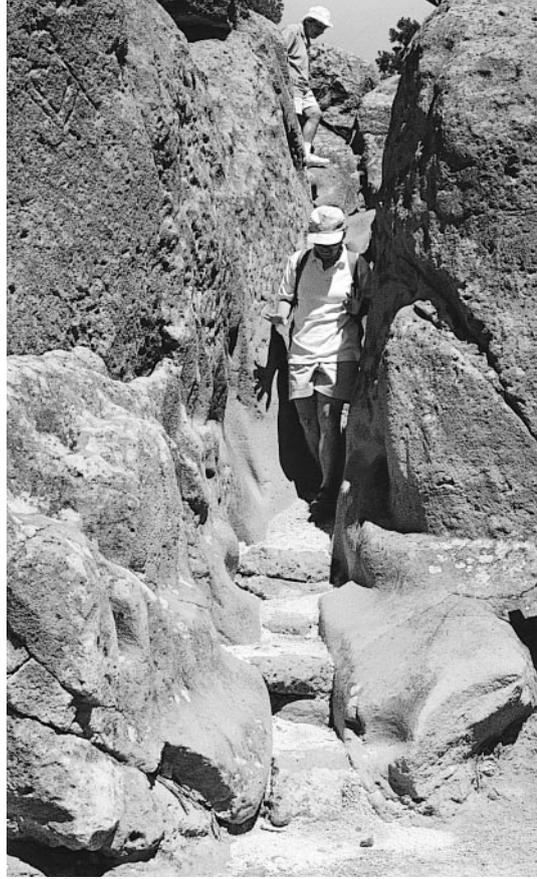
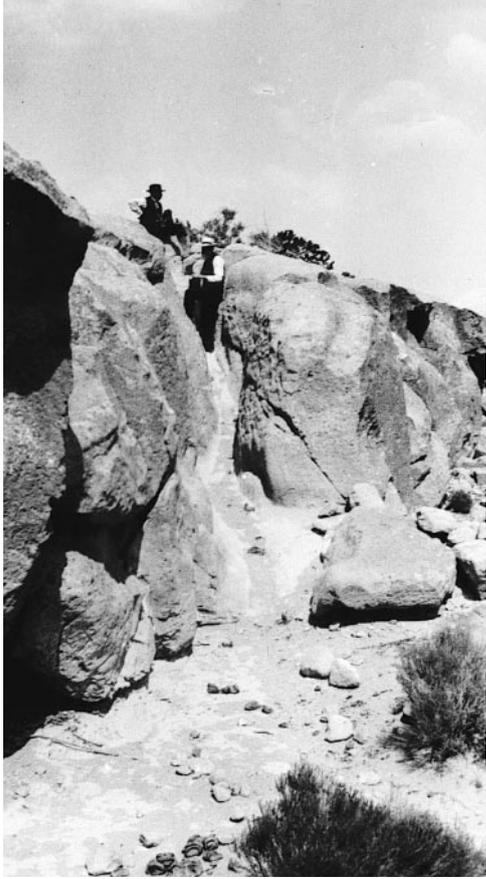
For some traditional societies, the concepts and practice of conservation are often viewed as antithetical to the role of continuing traditions, or those beliefs, actions, and objects valued by a group and considered worthy of passing on from one generation to the next. But while continuity of tradition may be critical to ensuring cultural identity, it is important to remember that tradition is as dynamic as cultural change itself. Only by recognizing the changing nature of tradition as constructed memory and cultural identities can a community responsibly manage its present and future through personal and collective interpretations of the past, rather than through fictions imposed from the outside. Conservation, like history, represents the conscious commitment to cultural continuity where living memory ends.

All conservation is a critical act, one of interpretation. We preserve with intent—and it is that intent that must be continually questioned, evaluated, and modified as necessary. By *interpretation*, I mean the relation between the visual work itself (thing or place) and seeing the work and experiencing it. As Goethe once wrote, “we see what we know.” I would add, we know what we see.

By defining interpretation as an open relationship between the work, seeing the work, and experiencing it, I am stressing vision as the major way of accessing material culture. Certainly vision dominates our immediate sensory and cognitive transactions with the physical world. Yet how reliable is the visual as a source of information that helps us to understand the original meaning of the work by those who made or used it? Conservators have long appreciated the visual and physical transformations all material works experience in an attempt to preserve them. Despite the ultimate futility, we persevere in attempting to extend and make accessible the life and meaning of an existing (past) work for the present, not for the future. Certainly our emotional and intellectual responses to things and places are based on information beyond sight. These responses usually depend on learned meaning (such as by members of a particular group with a direct relationship with the work), taste (connoisseurship), or experiences and scholarship.

This brings us to the problematic nature of culture. The concept of culture has provided a platform for the study of humans as sentient social beings since the mid-19th century, extending into the 20th century with the development of human psychology and the emphasis on the importance of the individual. Fundamental to culture and cultural relativism is the notion of value—a concept implicit in the meaning of interpretation and, therefore, by extension, of conservation. Cultural relativism asserts that since each culture has its own inherent integrity with unique values and practices, heritage must be contextualized. The role of value in the determination and preservation of cultural property has long been recognized. However, who determines that value—and how it plays out through “appropriate” methods of use, presentation, intervention, and ownership—has become a major issue for heritage today.

In conservation, this issue has been explored most commonly as “cultural appropriateness.” Professionals—intervening as cultural “outsiders” of objects and places that retain meaning for affiliated groups, such as indigenous peoples—shape conservation treatments and policies in accordance with the cultural beliefs and values of those groups. Originally relegated to the treatment of native ethnographic objects and, more recently, traditional cultural places, the circle has widened as issues of affiliated ownership and power are now applied and challenged by many different groups to all forms of cultural property. Conversely, the concepts of world heritage and universal conservation principles applicable to all heritage have also seen renewed vigor in the face of rampant relativism—not unlike the notion of a list of endangered species or the concept of universal human rights. Culturally responsive conservation and universal notions of heritage preservation, however, are not philosophically or morally opposed to one another.



Two views of the entrance to Tsankawi, a Native American cultural site in Bandelier National Monument, New Mexico. The entrance to this archaeological, ancestral, and recreational site had suffered erosion as the result of prehistoric and modern visitation (1930s image, left). The culturally appropriate conservation remedy to the problem of visitation and deterioration (seen in 1998 image, right) was achieved through consultation between conservators and Native American elders. *Photos: Courtesy the Museum of New Mexico, and Frank Matero.*

Conservation as a Discipline and Profession

Conservation emerges as a hybrid discipline dedicated to safeguarding cultural heritage by observing and analyzing the evolution, deterioration, and maintenance of material culture; conducting investigations to determine the cause, effect, and solution of problems; and directing remedial and preventive interventions focused on maintaining the integrity and quality of the existing historic fabric and its attending practices and associations.

Conservation, like law, theology, medicine, and architecture, is a learned profession; academic education plays an important role in preparation for practice. As a profession, its activities are subject to theoretical analysis and modification through experience. The theory and practice of professional work in conservation draw upon this knowledge to create new approaches so that real problems can be solved synthetically. Like other professions, there are accredited academic programs and professional organizations guided by established standards of practice and codes of ethics. Unlike other professions, however, there is still no certification or licensing.

Science and technology, often associated with conservation, require some clarification, as they are often taken to represent the goals or methods of conservation. By science, what is meant is a systematic and structured way of understanding the material world, different from the approaches of history, philosophy, or aesthetics. Technology is the application of science, or a body of methods and materials, to achieve the stated objectives. If we accept the premise that the practice of conservation began with the study of the underlying causes of deterioration, then it was in the 1930s and 1940s,

along with the development of museum conservation laboratories and specialists, that the field was born.

Yet within the understood limitations of the scientific method to generate certain kinds of data, conservation still begins and ends as an interpretation of the work whose questions reside in the humanities and the sciences. One is not only dealing with the physical aspects of human-made things and places but with complex cultural questions of beliefs, convictions, and emotions, as well as of aesthetic, material, and functional significance. Science helps to interpret, but it cannot and should not create absolute meanings or singularly represent one truth.

Today, conservation has become a major strategy in shaping and interpreting our cultural world. Every conservation measure is a form of argument that touches upon cultural values and the definition, treatment, interpretation, and use of the past. Often historical arguments for or against the identification, designation, and physical retention of cultural heritage are based on an epistemology of scholarship and facts. Scholarship and facts, however, are explanations that serve the goals of conservation and are a product of the academic subculture and of their time and place. Still, they afford a method of approach that acknowledges both historical and critical analyses of interpretation. Cultural relativism, like time itself, is something conservators must explore, if only to reject its relevance to a given problem. It is time to reenter the dialogue beyond our immediate concerns and to contribute our knowledge and expertise to larger social and global issues.

Within the contemporary discipline of conservation, it is possible to find any number of incompatible, diametrically opposed

The Dilemma of Conservation Education

By Sharon Cather

viewpoints and work methods—from the idealist one that hopes for an impossible return of the object, structure, or site to an origin that can never be established with any certainty, to the pragmatic one that permissively treats as historical values all the alterations made over time. To this must be added the recognition of cultural and community ownership and the input of those other interested groups in the decision-making processes that remain the primary responsibility of the profession.

The basic tenets of conservation are not the sole responsibility of any one group. They apply instead to all those involved in the care and management of cultural heritage, and they represent general standards of approach and methodology. Such methods are founded on a profound and exact knowledge of the various histories of the thing or place and its context, on the materiality of its physical fabric, on its cultural meanings and values over time, and on its role in—and effect on—current local and distant societies. While this approach requires the application of a variety of specialized knowledge, ideally the process must be brought back into a cultural context so that conservation can address and help define the individual and collective expressions of human endeavor by establishing and ensuring connections between the past and the present.

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Molly Lambert



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▶ AS WE PEER BACK FROM THE TURN OF A NEW CENTURY, the history of conservation education seems very short indeed—barely a few decades. It has evolved, largely erratically, partly in response to perceived needs within the profession and partly in response to the student market. Both of these forces of evolution present issues that neither can be nor should be resolved wholly within the educational context. Yet they are critical, since conservation education is not merely a reflection of current needs but also a powerful influence in shaping the future directions of conservation itself.

What are these issues? Broadly, they can be subsumed within the answer to the question: What should the “product” (or, inevitably, products) of education be? That is, what are the ranges and levels of knowledge and skills required? The answer, however complex, to this basic question generates the plethora of specific educational issues: curriculum content, structure and sequence, teachers and teaching methods, entrant profile and requirements, and learning and research contexts.

Defining a Conservation Education

To define the knowledge and skills required in conservation means defining conservation itself—its aims, approaches, and methods. But each of these is rapidly evolving. Aims have, rightly, escalated to encompass public awareness, holistic management, cultural economics, and risk assessment. Approaches have shifted decisively from remedial treatment to preventive and passive intervention, and from a focus on individual objects to sites and collections. Methods have proliferated hugely as scientific technology is more effectively harnessed, and in response to the more complex demands of passive intervention. Moreover, the professional, and hence educational, definitions of the individuals who undertake this bewildering range of activities depends, in turn, on the



Andreas Arnold of the Institut für Denkmalpflege in Zurich discussing with students the formation of black crusts on Winchester Cathedral in England. Conservation is such a multidisciplinary field that education depends heavily on participation from a diversity of specialists. Photo: Courtesy the Courtauld Institute of Art.

administrative infrastructure of conservation, on who legally—or traditionally—is responsible for what. This varies not only nationally (and even occasionally regionally) but also with the proprietary context within which the conservation is undertaken—that is, whether public or private, and whether it is a site, museum, or historic building in current use.

Finally, to this litany of preconditions for considering the present state of conservation education must be added the assertion that the acquisition of skills and knowledge is not confined to the relatively brief period of formal training leading to some qualification. Rather it is an educational *process* that continues throughout a professional career, and that process must be both accommodated within and fostered by the administrative structure in order to ensure professional standards.

How has the educational establishment responded to this challenge? Erratically, inevitably. An apparently irreconcilable diversity of educational “products” has evolved in reaction to the protean aims of conservation. Scant decades ago, a restorer cleaned and retouched, or cleaned and glued. Now, at minimum, a conservator is presumed to understand the original materials of the object and the way in which they have altered; to appreciate the cultural and social values that it—and indeed its context—may have; to assess its condition and rate of decay; to advise on preventive measures; to have the knowledge and skills to plan and execute remedial interventions with a vast range of conservation materials and methods; and to do all of this within an ethical framework. And this list conspicuously omits documentation, a real technological runaway: the 1980s debate of whether to use color or black and white has now metamorphosed into whether to use AutoCAD or GIS.

Is all of this possible? Can it be taught? Can it be *learned* by one person? Or perhaps this list of competencies is unrealistic.

Perhaps less is expected out there in the “real world.” Yet if the list of “Standards of a Competent Conservator for United Kingdom Institute of Conservation Accreditation” is consulted, then we have only just begun our enumeration. There, 46 *lengthy* descriptions of the requisite “skills, knowledge, and behavior” are grouped under seven headings, ranging from preventive conservation through management to “professional contribution.” Expectations verge on the impossible: from demonstrating how to “remove, reduce, or neutralize potential and active” deterioration, to “cost-benefit analysis,” to keeping “up-to-date with the content and scope of new legislation,” to regularly assessing the “content and effectiveness of training” provision.

What is the administrative infrastructure that requires such universal competence? A vacuum? Little wonder that educators have responded with some desperation, constantly expanding the curriculum and demanding more and more of students, who are increasingly baffled by what precisely this intensive training will eventually equip them for, and who wonder how the presently nebulous career structure will resolve itself.

Is there such a thing as career structure in conservation? In museums, perhaps. But a vast amount of conservation takes place in other contexts, where the administrative structures that define the conservation process are less developed, more ephemeral, and more likely to be project-based than long-term. This means that the definition of the competencies required is likely to be more vague and mutable, varying with the specific legal context and with the previous experience of those ultimately responsible. Hence the persistent efforts at accreditation to try to objectify the nature of competency and the avenues to recognize it.

So we have come full circle, since accreditation requires defining a conservator. This has been attempted, but not very successfully, and the reason is simple: the increasing complexity and, indeed, professionalism of conservation means that it can no longer be encompassed by a single individual or, consequently, by a single educational path. Each of the newly complex aspects of the expanded conservation process has spawned its own specialists. The most obvious are managers, conservation scientists, and “documentarists,” but there are also those who specialize in preventive conservation, risk assessment, and imaging, for example.

This situation is an artifact of the ad hoc development of conservation, in which subject matter expertise dominated, and it is partly due to the fact that conservation is not a discipline but, rather, a hybrid—or hydra—that we rightly call multidisciplinary. Because it is multidisciplinary, it does not slot neatly into the classical structure of higher education, and it is still far too small—in all senses—to form a new discipline. It therefore loses out.

It loses out particularly on funding. Since conservation training is *very* expensive, this is a serious problem. It also loses out on attracting students. Even now, a surprising number of applicants “discover” conservation remarkably late, often after a bout of job dissatisfaction. Job satisfaction—rather than career structure, adequate status, or remuneration—remains the primary lure. Even in the aftermath of the 1980s, conservation still attracts those who consider it paramount that what they do be worthwhile.

Response of Educators

During these decades of whirlwind change, in which conservation has dramatically reinvented itself, how have educators responded? In Italy and Germany, conservation training has become a virtual industry, with a handful of stellar programs in each country. In England, as well, there has been an explosion in the number of courses at every level and with every permutation of qualification on offer. There is no overall planning of this, merely what the market—the immediate student market—will bear. Moreover, there is a growing nationalist, and even regionalist (one thinks of the German *Länder*), preference for local training and a consequent overprovision and dilution of scarce resources.



Sabino Giovannoni of the *Opificio delle Pietre Dure* in Florence teaching mural painting techniques to wall painting students. Conservation education typically includes a grounding in the history of technology, involving both materials science and the craft of replicating historic techniques. *Photo: Courtesy the Courtauld Institute of Art.*

Is all this worrying? Yes, because there is no consensus on professional standards by which to assess the “products” of these training initiatives, no objective assessment of the quality of the education. Nor can the employment market (the current default mechanism) act as an efficient natural selection tool. In that niche, survival of the fittest may well not prove best for conservation. We do not let market forces determine if doctors, lawyers, or even plumbers are qualified.

Another educational response has been to offer some variety to potential employers by carving the bursting curriculum pie into

more manageable bites—with the useful spin-off of attracting yet more students. But if we train “technicians” or restrict the curriculum to “principles of conservation,” what is the mechanism to ensure that the constraints on the education provided are translated into constraints on the presumed competency of the prospective employee? Courses have reputations—they develop slowly and, importantly, erode slowly—but as a profession, surely we have outgrown reliance on word of mouth.

The proliferation and fragmentation of educational provision is reflected in the ICCROM-GCI Training Directory, with well over three hundred entries (<http://www.iccrom.org/eng/index.htm>). Just assembling and disseminating this information is an achievement, so it may seem churlish to ask for yet more, such as an electronic forum for information exchange on training issues. In addition, some comparative assessment of the training provision would be helpful; of the three hundred-odd courses listed in the directory, some are five years long, while others are one day.

While the wider profession grapples with these seemingly insoluble inherent structural challenges, educators doggedly press on, preoccupied with more immediate—and often more soluble—issues. As we plunge optimistically into the new century, it is an auspicious time to reflect on these, and this publication is an appropriate forum, given the GCI’s role in conservation education globally. The Institute’s achievements encompass not only direct training (including a contribution to continuing professional development) but also initiatives in teacher training and curriculum development, as well as a lamentably brief flirtation with developing didactic materials. The legacy of these contributions resonates throughout conservation education. But there is more to do, much of it relating to promoting more effective collaboration between educators and the conservation profession.

Toward Cooperative Solutions

The educational dilemma of producing conservators for a rapidly changing profession will not go away. Nor will the diversity of the administrative infrastructure. What, then, can we do to improve the match between educational provision and professional practice? Cooperative solutions should involve joint initiatives by the profession and the educational establishment to ensure competency. Ultimately, this must mean accreditation—accreditation that is rigorous, competency specific, and, importantly, periodically revalidated. Grasping that thorn has been painful and thus far controversial. It is likely to be some considerable time until, as a profession, we have the critical mass necessary to make a success of it.

In the meantime, we could improve the current situation by communicating better about the competencies furnished through



Left: In situ video microscopy in the Painted Chamber of Cleeve Abbey in England. Assessment by Adrian Heritage (seen here) of the potential of video microscopy led to further research on time-lapse applications. While such research by conservation students contributes substantially to the profession, it does require concerted support. Photo: Courtesy the Courtauld Institute of Art.

Right: Conservation of wall paintings at Monagri, Cyprus. Providing appropriate site-based training is a demanding aspect of the curriculum, but it offers invaluable experience. For these post-Byzantine paintings, Ioanna Kakoulli (shown here carrying out tests) undertook research on comparative cleaning methods. Photo: Courtesy the Courtauld Institute of Art.



education and those required by professional practice. Educators should contribute to this dialogue by explicitly defining their products, clearly circumscribing the range and levels of skills of graduates. Although this may seem obvious, unrealistic assumptions are often made by prospective employers. In its turn, the profession should be rigorous in defining the competencies required and in ensuring that they are met. Outside of the museum sector—where adequate control mechanisms already exist—this process of defining and screening is particularly critical.

Joint initiatives should extend to the educational process itself. These should apply to the initial period of formal training, as well as to what used to be called “midcareer training” but now is fashionable to denote as “continuing professional development.” Such initiatives are the most effective way of ensuring the desired match between educational provision and professional practice. And collaboration between educators and conservation professionals brings considerable mutual benefit.

For primary training, the most obvious areas to exploit for mutual benefit are research and practical training. Remarkably, students do a significant proportion of conservation research, but their efforts are severely hampered by lack of access to equipment and funding. As a profession, we rely heavily on this research, yet inadequately provide for it. Research internships are urgently needed. By contrast, there is a long tradition of offering museum internships for practical work—internships that have evolved from the bench-fodder days to today’s well-structured affairs. Similar provision is urgently required for site-based conservation.

Continuing professional development presents particular challenges in the face of rapid evolution. Conservators in institu-

tional contexts have some opportunities, but for those in private practice, it is particularly problematic. Although there is some course provision, it is inadequate, and it is difficult for ill-paid conservators to find the necessary time or funding. Professional training programs should be looking for ways to provide regular updating, but they lack the resources—nor is it their sole responsibility. As in all other respects, ensuring appropriate education is the joint responsibility of educators and the profession. Only through active cooperation will satisfactory solutions be found.

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Courtauld Institute of Art



Getting Caught Up: Information Technology and Conservation

By Walter Henry

HAVING BEEN ASKED to write about the impact of information technology (IT) on conservation, I find myself reflecting, rather, on why IT has not had a greater impact on our field. Computing and networking have become entwined in our daily practice, yet one can't avoid the sense that we're not getting as much out of the technology as we might—or worse, that it is not delivering on its promises.

Rather than reviewing the current state of play, I'd like to offer a few observations on where we need to go from here. Perhaps because I lack patience and expected our information environment to evolve more thoroughly than it has to date, I will undoubtedly seem more a Luddite Cassandra than the avid technology partisan I've been in the past. The common thread in these reflections is that technologies evolve more quickly than the social and psychological adaptations needed to make effective use of them.

The rate at which a notion decays from being novel and interesting to simply being self-evident, if not downright trite, is a marker of how completely expectations of rapid change now dominate our experience. To have insisted, a decade or so ago, that computers were more significant as communication tools than as computing machines would have been contentious, but today few would argue—and in the field of conservation, especially so. While computation has played an important part in scientific research and analysis, it has—with the notable exception of imaging—made relatively few significant inroads into conservation practice. In communications, however, the impact has been dramatic, especially since 1987, the year that saw the introduction of the Conservation Information Network and the Conservation DistList.

It is useful to distinguish (even if the distinction is blurry and arbitrary) between two major modes of online communication: interpersonal communications (email, online forums, two-way conferencing) and information dissemination/retrieval (databases, most Web sites, online publishing). Both modes are now important

parts of the conservation landscape, though with many users, one senses greater comfort with the former mode. To judge from numerous submissions to the Conservation DistList, far too many professionals prefer relying on direct advice from their colleagues to looking into the published literature. Despite enormous efforts that have gone into making access to *Art and Archaeology Technical Abstracts* simple and affordable and despite the DistList's frequent reminders to "Search *AATA* before you post," few participants appear to take the advice.

Conservation OnLine and Knowledge Environments

Much of my thinking with regard to technology grows out of my experience with Conservation OnLine (CoOL), a Web server for conservation and allied professionals that I initiated in 1993. CoOL was originally conceived as a site for gathering much of the large body of information that falls outside traditional print literature, and for offering print material in ways that make it more useful (e.g., full-text searching of articles, hypertext dictionaries, etc.). It has, to a very small extent, achieved a portion of that aim, capturing, for example, the message traffic for a number of conservation-related email forums and providing unpublished technical reports (previously published and otherwise), a few online books, and full-text versions of several print-based newsletters and journals.

At the same time—and not entirely by design—CoOL has taken on an odd role as online home for a number of conservation organizations, tying them together in a loose network. These organizations have individual identities (their sites are clearly autonomous), and at the same time they help compose the virtual library that is CoOL as a whole. Searches in CoOL's main indexes will return items from the participant organizations' sites, as well as from CoOL proper. I envision the physical "body" of CoOL eventually dissolving almost entirely, gradually replaced with a virtual aggregation of information about resources everywhere on the network, and supplementing those resources with local documents where there are fillable gaps. This might be achieved through remote site indexing software, though the need to gather metadata sufficient to build a sophisticated information facility complicates matters and will, in most cases, require the participation of remote sites—which itself is a good thing, since we are aiming for collaboration in information sharing. A second, less-attractive approach is that of mirroring—copying entire document webs from remote sites and making them available on CoOL.

There is another direction in which CoOL might move, one that complements the concept of CoOL-as-virtual-library. Looking at CoOL with even the most generous eye, one must

perceive that in no subject area is there more than a token offering, enough information to get started, perhaps, but not enough to make treatment decisions.

The answer, I believe, lies in what have come to be called knowledge environments (KE). A KE has been defined as an information service that: “offers structured access to content of all types relevant to a specific user population; includes opportunities for continued learning and the transfer of experiential knowledge; is marketed and sold as an integrated, value-added solution; and is marketed by a credible, authoritative source.”

Built by cooperation between technology specialists, subject domain specialists, and librarians, the KE attempts to make available—either directly or by links to remote resources—everything a researcher needs for serious work in a single subject area, organized by people with advanced subject domain knowledge in such a way as to make the knowledge useful to specific user communities. Equally important, it incorporates facilities encouraging ongoing discourse within the user community.

When I first encountered the concept of a KE, I thought that it was exactly what CoOL and similar resources should strive toward—a single locus from which the conservation professional can locate thorough and authoritative information in any format, electronic or print. To an extent, CoOL carries some of the incipient elements of a KE: for example, the inclusion of online forums, especially the integration of the Conservation DistList, fosters the development of ongoing communications within the community. What is lacking is depth and thoroughness of coverage.

In considering knowledge environments for conservation, the question of scope of coverage is a difficult one. How narrow should the focus be? While we might build KEs that coincide with existing conservation specialties, I suspect that narrower coverage will be necessary, perhaps similar in scope to those of *AATA*'s special supplements.

Building a KE is not a trivial task; funding development and maintenance will be a challenge. Existing KEs are principally subscription based, a model for which, given the limited economic resources of our field, I've not much optimism. The most likely avenue for development would seem to be project-based development of isolated components of the KE, which are later joined to form an integrated environment. (An excellent example of a working KE is URL:<http://www.stke.org/> the Signal Transduction Knowledge Environment, provided by <cite>Science</cite> [American Association for the Advancement of Science] and Stanford University.)

Distance Learning

For as long as I've been in the field, a driving theme has been the need for ongoing training opportunities for conservation professionals. While excellent opportunities for continuing education exist, there remain obstacles for both the provider and the student, especially midcareer professionals. Cost, travel, and time away from the lab are all serious considerations. Of all the applications of IT developed in the past decade or two, none have spurred my optimism more than distance learning. Sitting on the nexus between information dissemination/retrieval and interpersonal communication, distance learning leverages IT to provide instruction to conservation professionals at remote locations. It offers a practical solution to each of the problems above and provides flexibility to both teachers and students, enabling professionals to fit continuing education into their work life.

Significant distance education projects in conservation are already in place. At the University of Western Sydney, the Nepean School of Civic Engineering and Environment offers a master of applied science in material conservation, a three-year part-time program for those entering the field, available via distance learning, as well as through on-site classes. Also in Australia, at the University of New South Wales, the School of Information, Library, and Archive Studies provides courses via distance education, including preservation administration and preservation and



A two-way interactive videoconferencing system used by Boston conservator Paul Messier to teach a course via the Internet on the examination and identification of photographs for students in the Art Conservation Department at Buffalo State College. The system is an example of one use of technology for distance education in conservation. *Photo: Dan Kushel.*

conservation of audiovisual materials. In Canada, the Cultural Resource Management Program at the University of Victoria offers distance courses in heritage conservation, conserving historic structures, and museum-related topics.

Most exciting of the current distance education projects is that of Paul Messier and Irene Brückle, who put together a two-way interactive videoconferencing system and used it to teach a course via the Internet on the examination and identification of photographs for students at the Art Conservation Department at Buffalo State College. The topic calls for a great deal of student-teacher interaction and involves subtle visual discrimination, which must be conveyed between the students in Buffalo and Messier in Boston. As such, the project served as a robust proving ground for the concept of using information technology for distance education in conservation. The system appears to have been most effective and offers hope that this technology will be of great significance in conservation education.

For subjects that do not require hands-on experience or extensive real-time interaction between students and teachers and that have a reasonably static and well-defined content, Web-based tutorials seem an excellent means of teaching, especially for courses that are (or should be) repeated frequently, as online tutorials can be “replayed” without incremental cost. Topics in which theoretical aspects dominate are ideal candidates for this treatment.

Network Collaboration

By now, many conservation professionals have had some experience serving on committees or task groups conducting their work via email, and they have experienced both the benefits and the frustrations attending this mode of communication. From the earliest days of electronic mail, users have noted the awkward situations that can arise from email’s lack of those nonlinguistic components that make face-to-face communication seem so easy—the kinesic and aural cues that constitute phatic communication, the body language that signals the content of what is not being expressly said (or, in this case, written).

Despite its speed and glibness—encouraging easiness, email is not speech, nor is it quite the same as print. There is a distinct quality to electronic communications, and for the most part our psychological perspective has not yet adapted to the new mode. With our lifelong grounding in telephony and print—almost polar in their sensory and psychological foundations—we’ve developed shared expectations of how communication works, expectations that the new mode undermines. We’re developing new behaviors, maladaptive perhaps, derived from these expectations, which at best lead to wasted time and effort, at worst to failure of the effort, and

in any case to a gnawing sense that something about this mode of working just isn’t quite right.

Of the problems I’ve observed working in online task groups, the most vexing one—and perhaps the one easiest remedied—is a tendency for the group never to reach closure or consensus or, more precisely, to fail to realize when consensus has in fact been reached. This would appear to be rooted in the asynchronous nature of email and the lack of kinesic cues; one is never quite sure when the discussion is over. Similarly, there is also a tendency toward false closure, an attitude among participants that having written on a subject once, they are finished, when the essence of discourse is that it “runs about,” following point upon point before settling into any resolution.

During the period when the early HTML specifications were developed, members of the Internet Engineering Task Force (an international group of network designers, operators, vendors, and researchers concerned with the evolution and operation of the Internet) created a discursive technology intended to solve this problem, email forum software geared toward the more-or-less formal discussion of a large number of issues—in this case, specific clauses of a proposed specification and voting at various stages in the discussion. While this seemed to work well, most discussions are less structured than those. Nevertheless, the idea showed promise, and other collaborative tools, notably collaborative authoring tools, have since been developed. Most are designed for use within an intranet, but Internet-based systems are entering the market, and some may be helpful for collaboration among conservation professionals.

These technological solutions, however, beg the question. The point is that we have not yet adapted socially and psychologically to the new media. An obvious quick fix is for a leader to declare a deadline and to announce the final consensus, but in practice the oft-noted democratizing proclivity of network discourse seems to militate against that. In practice, more often than I can remember, such discussions are resolved offline, typically face-to-face or by phone, with participants asking each other, “Are we done?” One assumes that with time, our vocabulary of online conventions will grow sufficiently to make such aberrations unnecessary.

Electronic Texts

Computer communication is a supremely effective information discovery tool, but reading substantial bodies of text from a display screen is for most readers not compatible with careful, considered reading—the kind needed to transform information into knowledge. Alex Pang, a colleague at Stanford, commented that when he assigned an all-Web reading list, he noted a marked superficiality

in his students' reading. When he instituted a print-on-demand system, encouraging his students to read from hard copy, the situation improved.

This phenomenon is common, and it is probably a factor in the continuous retreat of the "paperless office." Indeed, when I watch people reading Web pages online, I notice that they tend to scroll quickly, scanning rather than reading. Ease of scrolling encourages this mode of acquisition, rewarding rapid scanning with quickly found answers, an electronic form of speed reading.

The implications for information management in technical fields are clear. I'm no fan of presentation-oriented document formats, but I concede that when presenting complex, hard-to-read materials, online services should offer print-friendly versions in—more or less—platform-independent formats such as PDF, at least until readers better adapt to online presentation. In the longer term, we must relearn to read.

Documentation

Elsewhere I have written about some of the technical challenges facing those who would construct database and document authoring systems to support conservation treatment and examination documentation. Beyond those technical issues, however, lies a far more intriguing problem. A colleague, Lisa Mibach, pointed out that conservators spend much of their time looking intently at objects, and that having to lift the eyes and hands to use a computer breaks the concentration enough to seriously interfere with the examination.

Over time, humans have learned to integrate handwriting so completely into our behavior that writing while looking does not introduce a cognitive disjuncture. But we have yet to adapt to computer input in the same way. Indeed, with the current configuration of computing devices, it would seem unlikely that we will ever fully adapt, although more recent handheld computers may be moving in the right direction.

In the past year or two, voice recognition technology has made great advances, and it is now possible to buy consumer-level dictation hardware and software that are accurate and convenient enough to suggest that it will not be many more years before conservators can dictate treatment reports at the bench and have them converted to machine-readable text in real time. When that is achieved, computer-based documentation systems will cease being mere record storehouses and will begin, at last, to facilitate the creation of richly detailed examination and treatment records.

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Wayne Vanderkuijl



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URL: http://aic.stanford.edu/conspc/emg/st_louis_meeting.html.

Resources on the Internet

Many resources relating to conservation can be found on the Internet. The National Center for Preservation Technology and Training (NCPTT) maintains a comprehensive electronic clearinghouse of preservation Internet resources on its own Web site, which provides information on other Web sites, list serves, usenet groups, and additional resources related to the field.

To search the NCPTT clearinghouse, go to:
<http://www.ncptt.nps.gov/pir/>

Conserving the In Situ Archaeological Record

By William D. Lipe

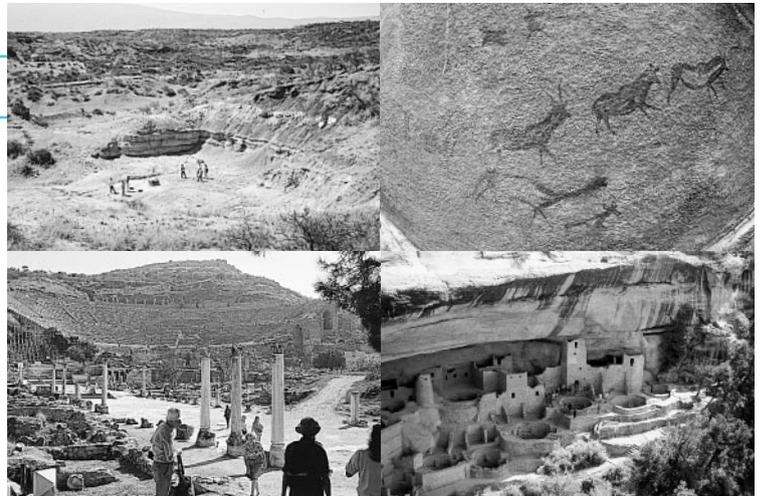
▶ IN THE 20TH CENTURY, archaeologists made great strides in learning to understand the material record of past human life. Concurrently, destruction of the archaeological record increased as population growth, economic development, and looting took a rising toll. During the past one hundred years, most countries established laws to protect at least major archaeological sites and to curtail illegal excavation and export of antiquities. Although often ineffective in practice, these laws formally recognized a national interest in archaeological conservation. By the end of the century, some nations, primarily in the developed world, had fairly effective legal and bureaucratic systems for balancing the value of in-place conservation of significant archaeological sites against economic developments that would destroy them. The creation of organizations such as ICOMOS and ICCROM and the promulgation of standards and agreements such as the World Heritage Convention built a framework within which archaeological conservation could be pursued at an international level, both complementing and reinforcing national efforts.

Hence, the past century was a time of great progress in conservation of the archaeological record. But what of the future? Below, I briefly characterize the archaeological record and the threats to it, and then consider its fate in the 21st century.

Nature and Value of the Archaeological Record

The archaeological record consists of the material remains of past human activity, left on or just under the surface of the earth. It is a peculiar kind of record, consisting of items as varied as the foundations of razed buildings, pieces of broken pottery and tools, remnants of campsites and hearths, bones of animals once used as food, elaborate tombs and simple interments, fragments of monuments to now-forgotten heroes, and images incised or painted on natural

rock surfaces. Beginning about five thousand years ago, this material record was increasingly supplemented by the written word. In many places, however, written texts have yielded only meager information until quite recent times. The archaeological record provides the primary source material for understanding most of human history—all the way back to three million years ago, when humans began to make stone tools. Some more recent portions of this record are also considered by particular groups of present-day people as their cultural heritage—the sites, monuments, and artifacts that link them to a particular place in the world and to a particular vision of their past.



The archaeological record, which extends back millions of years, provides critical information needed for understanding much of human history. The record is diverse, ranging from places like the discovery site of fossil remains of *Australopithecus boisei* in Olduvai Gorge in Tanzania and the rock art site of Chikupu in Zimbabwe, to the Roman city of Ephesus in Turkey and the cliff palace at Mesa Verde National Park in the United States. Photos: Neville Agnew (Olduvai), Guillermo Aldana (Chikupu and Ephesus), and Crow Canyon Archaeological Center (Mesa Verde).

As we press back in time, the identities of individual cultures blur and are lost, but the record continues to speak of the lives of peoples now known only by the names archaeologists give them, and of how the complex history of humanity has unfolded. As read and interpreted by archaeology, this record documents the great events of human history—the spread of our human ancestors out of Africa, the emergence of human artistic and technical abilities, the peopling of all the continents save Antarctica, the multiple inventions of agriculture, of cities, of complex polities. It also yields fascinating glimpses of people from the near and distant past whose art and manufactures we instantly recognize as a product of our common humanity but whose lives were almost unimaginably different from ours. The archaeological record tangibly links the past and present because it has preserved the actual objects and places used in ancient times. In addition to being a source of information about the past, it connects us in an immediate, physical way with real individuals and communities of long ago.

Archaeological research has produced remarkable insights into the character and history of societies, but archaeological interpretations are always provisional and often disputed. Nonetheless, the methods of archaeology provide the best prospect for deciphering the material record of human history. Although this record is often subject to multiple interpretations, it has a stubborn materiality that limits the possibilities. And for any given period of time, it is the only record we will ever have. We must study it carefully and respectfully and conserve what we can of it for the future so that new methods can be applied, new questions be asked, and old questions be revisited.

Archaeological sites have been formed wherever people have lived. The floors of oceans, lakes, and rivers also preserve sunken watercraft and other evidence of human activity. The hundreds of thousands of sites that have been recorded since the mid-19th century represent but a fraction of those that exist. Even fewer have been studied systematically, and fewer still have been actively protected. These sites are primarily the best preserved, the most aesthetically pleasing, the most monumental. The great majority of archaeological sites, however, consists of the humble leftovers of the daily life of ordinary people. Many are from periods before monumental architecture became part of the human environment. Yet these “ordinary” sites provide perspectives on the past as important as ones derived from study of the rare and spectacular. Archaeological sites compete for space with alternative human uses of an increasingly crowded globe. Maintaining a tangible link with a distant past or preserving opportunities for future archaeological research seldom rank high in the priorities of growing societies. Although sites are numerous, most are also very fragile. Several processes are accelerating their destruction.

Threats to the Material Record of the Past

The archaeological record has always been under assault from the forces of nature, but in the 20th century, human agency became the major threat. As we move into the new millennium, the pace of destruction increases exponentially. Economic development, fueled by population growth and increasing wealth, is transforming the surface of the earth. The extension and intensification of agriculture, the mining of materials and minerals, the growth of cities and suburbs, the development of reservoirs, transportation systems, and other public works, all result in the destruction of sites. Laws requiring that archaeological and historical values be considered in development planning are effective in some places and for some kinds of projects, but on a world scale, sites are lost to economic development at an increasing rate.

The unprecedented wealth generated by development is also

fueling expansion of the antiquities market. This, in turn, promotes the looting of sites in search of objects having aesthetic or antiquarian appeal or direct value as “treasure.” Such objects ordinarily represent a small fraction of the artifacts sites contain. As sites are bulldozed or rapidly hand-dug to find these few marketable items, there is wholesale destruction of objects, structures, and other remains, as well as of the stratigraphy and associated contextual information upon which archaeological interpretation depends. Today, the typical looted site is in a developing country where impoverished local people make small sums by feeding artifacts into the antiquities market. The end purchasers are the wealthy elite of the developed world, and the profits go largely to dealers, gallery owners, and middlemen.

Over the next 50 to 100 years, world population will continue to grow, though at a slower rate than in recent decades. It is projected to peak at between two and three times our present six billion. Growth in economic development and hence in wealth is harder to project, but barring a major worldwide depression, economies should continue to improve worldwide, with more nations joining the “developed” group. And more individuals worldwide can be expected to amass the wealth needed to collect antiquities. Thus, the factors responsible for the recent increase in archaeological destruction will surely intensify.

Prospects for the 21st Century

What are the prospects that any significant fraction of the world’s archaeological heritage will survive the coming century? The outcome will be determined by a complex interaction of demographic, economic, political, and cultural factors. There will be great losses, but as an intrinsically optimistic person, I can imagine some scenarios under which the rate of loss will peak and then gradually slow, leaving a diminished, but perhaps not thoroughly impoverished, archaeological record. Although the outcome will largely be determined by large-scale demographic and economic processes already under way, it is possible for archaeologists and others committed to archaeological conservation to exercise some influence, if they take the right steps and form effective alliances with those with similar or overlapping interests.

Hope can be gleaned from the fact that a number of formerly poor countries are developing robust economies and are undergoing the demographic transition associated with higher levels of wealth and education, evolving from agrarian and natural-resource-based economies to industrial or postindustrial ones. The nations that have already passed through this transition have stable or slowly growing populations and high levels of income by world standards. They have fairly effective laws protecting antiquities, and most

support good systems of archaeological parks, monuments, and museums.

Most economically developing countries already consider the archaeological record a part of their national patrimony and have laws designed to protect antiquities and at least a basic system of archaeological monuments, preserves, and museums. If they follow the existing pattern, these countries will expand their investments in archaeological conservation, research, and public access as their economies improve.

The global economy and e-commerce seem likely to become even more powerful, with possibly mixed effects on archaeological conservation. On the one hand, the global economy will facilitate the transmission of antiquities from poorer to richer sectors of the world, and e-transactions may make the trade in illegally acquired or exported objects more difficult to control. On the other hand, global economic integration provides a platform for international agreements on issues such as the environment, human rights, and labor standards. Negotiation of future international trade agreements will offer opportunities for strengthening and extending international protocols to control illegal trafficking in antiquities and reduce the effects of economic development on archaeological sites. Existing UNESCO and ICOMOS committees and standards provide a framework for these efforts.

Nongovernmental organizations all over the world pursue a variety of “causes,” including preservation of ecosystems, endangered species, and historic buildings. However, in situ conservation of the archaeological record is only weakly promoted among such interest groups, especially in the less-wealthy countries. In the United States, the success of the Archaeological Conservancy in raising private funds to buy and manage important sites shows what can be accomplished. Conservation-oriented archaeologists and like-minded public activists need to develop a worldwide network of privately and publicly funded organizations devoted to saving portions of the archaeological record through public education, by lobbying for proconservation laws and public policy, and, if necessary, by acquiring important sites. Activist individuals and organizations must also work to make archaeological conservation more prominent on the agendas of environmental and historic preservation organizations. Among other goals, there is a need to recruit members of the media and entertainment elite to spread the word that owning looted antiquities is destructive and socially irresponsible. These efforts require hard work and in some cases the negotiation of difficult alliances, but the potential for success is there.

The popularity of museum exhibits, books, television productions, magazines, Internet sites, and tours devoted to archaeological topics demonstrates that a large number of people worldwide find archaeology fascinating. These individuals make up a potentially

powerful base of support for archaeological conservation, and they are likely to increase rapidly in number as more countries develop relatively wealthy, educated, aging middle classes. It is from this group that the future activists so hopefully described above will be drawn. Yet for the most part, archaeology buffs today are treated primarily as passive observers of wonders brought forth from the earth by the anointed professionals. Those engaged in “bringing archaeology to the public” have a responsibility to clarify the link between public enjoyment of archaeological discovery and the messy and often unpleasant business of promoting archaeological conservation in legislative and bureaucratic arenas, and through persistent efforts to change public opinion. This desanitizing of archaeology may drive away some now attracted to the field, but others may feel empowered through the realization that conservation of the archaeological record is not something that can just be left to the professionals.



A Native American student assisting at a site being excavated by the Crow Canyon Archaeological Center. The Center works with a Native American Advisory Group in designing its archaeological education and research programs, and it attempts to give interested Native American students the opportunity to learn about archaeology firsthand. Collaborations such as this between archaeologists and Native Americans show that where there is mutual good faith, the interplay of multiple perspectives and interests can invigorate archaeology. Photo: Courtesy Crow Canyon Archaeological Center.

In some places, efforts to slow the pace of archaeological destruction are being mounted by indigenous peoples such as Native Americans and Australian Aborigines, as well as by other ethnic and national groups. Paradoxically, national or ethnic cultural identity movements are flourishing at the same time that a rapidly integrating world economy and its commercial popular culture are swamping local traditions. Such movements often link a concern for preservation of archaeological sites to a particular vision of group or national historical and cultural heritage. In these contexts, religious or nationalist ideology may dominate interpretation of the archaeology and cause conflicts with the institutionalized skepticism and appeals to material evidence that characterize professional archaeology. Nevertheless, in the United States, the evolving relationships between archaeologists and Native American groups show that where there is mutual good faith, the interplay of multiple perspectives and interests can invigorate archaeological research. Tensions will undoubtedly continue to arise among archaeological researchers, activist conservation organizations holding universalist views of the archaeological heritage, and various ethnic and national identity movements that take an interest in archaeology. Nonetheless, all are likely to have some influence on



As public demand grows for access to “developed” archaeological sites, those managing such sites must be prepared to invest substantially in conserving the irreplaceable structures and contexts that are exposed to the elements and tourism. Here, visitors at Hovenweep National Monument contemplate the Cajon site. *Photo: Courtesy Crow Canyon Archaeological Center.*

what portions of the archaeological record survive in the 21st century. Intellectual and political agendas can change, but if the archaeological record is destroyed, it is gone forever. Hence, there are good reasons for groups with different agendas for archaeological conservation to find common ground—or at least to minimize the energy spent in internecine conflict.

Although archaeological research affects only a small proportion of the existing sites in a given year, excavation does consume portions of the archaeological record, albeit in a way that yields systematic records, documented collections, and, one hopes, publications. Nonetheless, the archaeological record is a nonrenewable resource, and if a site has been fully excavated, it cannot be revisited with new methods or new questions in the future. New technologies such as remote sensing, as well as the use of sophisticated sampling methods, have helped archaeologists learn to use the archaeological record more frugally. In many parts of the world, the complete excavation of sites is now the exception rather than the rule. It is incumbent upon archaeologists, however, to continue to develop and apply methods that allow them to learn more from any given part of the archaeological record, leaving intact as much as is feasible for research and educational uses over a long-term future.

Archaeological parks and monuments provide the public with opportunities to make tangible contact with past cultures, and they are important vehicles both for sharing the results of scholarly research with a broader audience and for giving the public concrete reasons to value conservation of the in situ archaeological record. Over the next century, public demand for access to excavated and “developed” archaeological sites will surely grow even more rapidly than population in many areas, as levels of education and wealth increase, as retirees become proportionately more numerous, and as rates of tourism increase. Those responsible for managing such facilities must be prepared to invest substantially in conserving the irreplaceable structures and contexts that have been laid bare by excavation. It is simply not acceptable to open sites for public education and enjoyment only to see them rapidly disintegrate due

to exposure to the elements or to the impacts of visitation. Nor is it acceptable to excavate sites to meet the demands of tourism without adequate funding for analysis and reporting of the excavated contexts and materials. There are also increasing needs for research on ways of conserving earthen architecture, stone masonry, artifacts, and the other types of remains that have survived from the past; for training technicians to apply this knowledge; and for developing and applying standards for site and artifact conservation. Furthermore, research and standards related to visitor management are needed, as is research evaluating visitor responses to the archaeological materials and the interpretive messages they encounter.

It seems inevitable that population growth, economic development, and elite acquisitiveness will pose enormous threats to the in situ archaeological record throughout the world during the 21st century. The protective infrastructure created in the 20th century is in most places inadequate to cope with the magnitude of these threats, but it offers a base upon which to build. Although there surely will be huge losses, there are also some aspects of economic growth that may create contexts for at least partially effective responses. Those dedicated to archaeological conservation must redouble their efforts to strengthen protective laws and public policies, to expand public involvement in archaeological conservation, and to direct their energies toward preserving and studying archaeological sites rather than engaging in struggles among groups that approach conservation from different perspectives. Archaeologists must be conservative in their own uses of the archaeological record, so that future research can continue to build on prior work. And we must do a better job of conserving those archaeological sites and materials that are put on public display in parks and monuments, even as the demand for access to these sites rapidly increases.

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Mary Collins



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Looting and Theft of Cultural Property: Are We Making Progress?

By Karen D. Vitelli

▶ THE LAST FEW DECADES have seen concerted efforts on many fronts to protect archaeological sites from looting and development and their fruits from theft. These efforts have had some very positive side effects, but their impact on site preservation has been less than stunning.

The Upside

Thirty or so years ago, when I entered the field, archaeology resided pretty firmly within the lofty, masculine walls of academe. Beyond those walls, the public had only a vague and romantic notion of the exotic field, fed largely by Hollywood (and James Michener's *The Source*), that regularly prompted the comment, "Oh, I always dreamed of becoming an archaeologist" whenever I was introduced at social gatherings. Many archaeologists of those years built up guilt-free collections of antiquities "for teaching purposes." They consorted freely with local amateurs, who, in turn, sought out archaeologists for advice and openly shared their collections and information about newly discovered sites. Wealthy, well-educated, and passionately involved collectors often served as patrons for archaeologists, providing access to their private collections and funding for fieldwork and travel. Ford Foundation grants paid fieldwork expenses for graduate students. Life was good.

Then came the 1970 UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import and Transfer of Ownership of Cultural Property. The convention brought archaeology into public and professional discussions in a different context. A host of new phrases entered our vocabularies: cultural property, clandestine excavations, illicit export, country of origin, states parties, and the like. The national antiquities laws of the countries we worked in, which had seemed simple manifestations of bureaucratic red tape, took on larger meaning. Our research

objects were publicly defined as "cultural heritage" whose "true value can be appreciated only in relation to the fullest information regarding its origins, history, and traditional setting" (UNESCO Convention preamble). The convention told us that looting—actually, it used the even stronger term *pillage*—is a direct result of the market demand for antiquities by dealers and collectors. The battle lines for the coming decades were drawn.

Meanwhile, within the walls of academe and on the sides of trenches, archaeology was engaging new technologies, the growing environmental movement, explicit theory, and science. Handheld calculators made quantification and statistical analyses easier and far more attractive than had cumbersome slide rules. Sampling and sample size became major archaeological concerns. Archaeological context moved to the fore. The U.S. government's response to public environmental outcries led also to the concept of cultural resource management. Archaeologists began the trip into the real world of business and contract archaeology, which by the end of the century would employ more archaeologists in the United States than does academe. And the focus of archaeology moved from the wonderful and curious objects and monuments of earlier generations to broader questions about how and, more importantly, why people in the past had organized their lives as they did. Even without the UNESCO Convention, the new directions of archaeology made the split between archaeologists and collectors inevitable.

It is interesting, if academic, to imagine different ways the relationship might have developed had dealers, collectors, and archaeologists not begun their new relationship in the context of legal battles that encouraged polarized positions. Might the many archaeologists who at that time had good working relationships with

A Greek gold phiale (libation bowl) from the 4th or 3rd century B.C.E., reportedly looted in Sicily in the 1970s. Acquired by a New York collector, it was seized by U.S. Customs in 1995, following a request from Italy. In a notable legal case, the federal District Court in New York found that the phiale was imported by means of false statements and exported contrary to Italian law. On appeal, museum associations led by the American Association of Museums filed a brief arguing against the restitution of the phiale, while the Archaeological Institute of America and five other professional associations supported the Italian claim. In January 2000, the U.S. Supreme Court declined to hear the case, thereby upholding Italy's claim. The phiale was returned to Italy the following month. Photo: © Ira Block.



collectors have introduced the new approaches and goals and persuaded their amateur colleagues and patrons to participate in different and more productive collaborations? It seems to me possible. The split from collectors did not take place suddenly, and it is still not honored by all archaeologists, even though all the major professional organizations have now labeled such collaborations unethical. Many still feel that the self-righteous tone of the professional codes ignores political reality and damages the archaeological reality. In practice, many archaeologists still work with collectors, at least on the local level. I expect, and hope, that the professional organizations will rethink some aspects of this kind of collaboration and look for ways to put the genuine interest and considerable abilities and influence of some local collectors to constructive use in stewarding the archaeological heritage more effectively.

The old files from my years as editor of “The Antiquities Market” for the *Journal of Field Archaeology* (JFA) provide an interesting perspective on the early UNESCO years. Extensive correspondence and the occasional article in the journal addressed questions of theft and looting and of their relationship to the larger archaeological enterprise. Colleagues were anxious to talk with me—I was suddenly perceived as expert—about an object in their university museum that they had seen, in situ, at a foreign archaeological site years before. Or about the source and authenticity of antiquities for sale at their local mall or offered by mail. But most were reluctant, in the 1970s, to have their names mentioned in print in that context. Anonymous letters from enthusiastic readers were common.

Most of the space in early issues was devoted to “Market Alerts”—the report of thefts from archaeological museums and storerooms. Theft was not a controversial issue—although its reporting represented a major departure from earlier practice. Museums and excavation storage facilities had rarely made public the news and details of thefts, lest they publicize the inadequacy of their security systems and perhaps frighten away potential donors. The JFA “Market Alerts” actually helped secure the recovery of some items, encouraged museums to make theft information public, and may have helped the Art Theft Archive at the International Foundation for Art Research get off the ground. They drew attention to and helped gain improvements in security systems. Perhaps most significantly, they made palpable the reality and extent of the problem. Archaeologists were stunned by thefts of familiar pieces from sites and museums they knew well: Famagusta in Cyprus; Arezzo, Naples, Florence, Pompeii, and Perugia (and almost every other museum in Italy); Naxos and the Amphiareion in Greece; Aphrodisias, Gordion, and Istanbul in Turkey; Aswan, Giza, and Douch in Egypt; Moundville in Alabama; university museums in Pennsylvania and New York; and the National Museum in Lima, Peru. The theft of cultural items was no longer an abstraction—

not someone else’s problem.

Archaeologists were shocked and angry. Many addressed that anger by looking for a scapegoat. They found one in their former friends and collaborators, the collectors. It was the collectors—who would pay any amount of money for their personal satisfaction, with no concern for the source of the objects—that created the problem. If collectors simply refused to buy stolen and looted objects, theft and looting would cease. Attacks on collectors became more frequent and loud.

The collectors, in turn, were shocked and angered by the archaeologists’ turnaround. What had happened to the kudos recently awarded for “saving” wonderful pieces? To the mutual admiration for and appreciation of those objects? To praise for a collector’s sharp eye and clever intuition, not to mention the open checkbooks that made possible much of the archaeological endeavor? Few collectors consider themselves the “real” looters or accept any responsibility for that ancient occupation. They returned the attacks and then sought out other—and more powerful—allies.

Fortunately, some archaeologists, who also saw the link between collecting and looting, looked for other causes and cures for the apparently expanding market in antiquities and the concomitant looting of sites. They looked at the way they had learned and now taught archaeology. They considered the message conveyed by their “teaching collections,” whose source and true value went unexplained. They noticed at public lectures the way archaeologists played to the intake of breath that marked the audience response to



A two-thousand-year-old Hopewell Indian burial mound—on private property in Indiana—being unearthed in 1988. This photograph was part of the public record in the federal prosecution that followed this looting of the site. The case involved the first convictions for violation of the U.S. Archaeological Resource Protection Act’s prohibition against interstate trafficking in antiquities obtained in violation of state or local laws. These convictions, upheld by the U.S. Supreme Court, strengthen law enforcement’s ability to protect archaeological resources, even those on private property. Photo source: U.S. Department of Justice.

the most stunning objects. They wondered why so many archaeological sites are looted while the excavators are in the field (or as soon as they leave)—almost certainly by local people whom the archaeologists know. They spoke with lawmakers about pending legislation and came away struck by how little that group of concerned citizens knew and understood about archaeology. They began to realize the import of leaving popular writing to non-archaeologists. With help from the 1990 Native American Graves Protection and Repatriation Act, they came to accept that while archaeologists may be self-proclaimed stewards of the archaeological record, they were not its *only* legitimate stewards—and that their approach to stewardship had its flaws.

Such self-critical evaluation is changing the face of archaeology. The discipline is beginning exciting and enriching new partnerships with groups from all backgrounds. These collaborative ventures—with Native Americans, inner-city teens, local businesses, international ecotourism and development groups, and others—have potential for a genuine and positive impact on a host of real-world social and economic problems, including looting and theft.

The Downside

What effect has all this soul-searching and outreach had on looting? It is hard to be sure, for we have no statistics on the extent of looting in the past or the present—but the indicators are not encouraging. From Cambodia to Mali, from the highlands of Peru to southern Indiana, from the Three Gorges in China to the graveyards of New Orleans—not to mention the ocean floor and all of Italy—media accounts report almost daily on massive looting and destruction.

A study by Christopher Chippindale and David Gill, soon to be published in the *American Journal of Archaeology*, looks at the recent history of objects published in the catalogues of a number of recent, significant collections and exhibitions of classical antiquities. Nearly 75 percent of the more than 1,300 objects in those collections have “surfaced” without documented provenance and therefore were most probably looted since 1974. That is, they have appeared and have been purchased since—and in spite of—the UNESCO convention and other national and international laws, treaties, and conventions, during the years that archaeologists and others have been making a concerted public effort to prevent precisely this.

Brooks S. Mason, writing in the January 2000 *Art Newspaper* (“Unfazed by Protesters”), reports that the collective clientele of just seven U.S. antiquities dealers includes over two hundred clients, each of whom spends *more than \$50,000 a year* on antiquities. The same article suggests that huge profits from a booming



Two views of the 12th-century temple of Banteay Chhmar in Cambodia, taken in August 1998. Three months later—in what some experts have called one of the largest-scale thefts of Cambodian antiquities—the site was extensively looted. One hundred seventeen artifacts from the temple subsequently turned up in Thailand, where they were seized by authorities. Officials from both countries are now negotiating the return of the items to Cambodia. Photos: © John McDermott.



Cultural Tourism

By Dean MacCannell

stock market, along with major museum exhibits of antiquities and the taste of interior decorators, are behind the collecting enthusiasm. The protests of the conservation community are dismissed as “a dying dinosaur issue.” That collectors are said to be more concerned with “provenance” than “legality” would seem to confirm the accusations of archaeologists that today’s collectors care more about status and protecting investments than about cultural heritage preservation, national and indigenous rights, or international relations. And now the Internet is democratizing the collecting of what are purported to be genuine antiquities by making them widely and easily available at prices to suit every budget.

It certainly appears that current approaches to protecting cultural heritage are not effective. That conclusion has prompted a number of nonarchaeologists to propose the creation of a legal market, usually by designating some portion of archaeological sites for speedy excavation specifically to feed that market. All the proposals I have seen demonstrate yet again a serious lack of understanding of archaeological procedures and goals, and would, in my opinion, create more problems and even more opportunities for fraud and deception than currently exist. I think any failure of current approaches results less from their nature than from the relatively small scale of the resources available to develop them. Conservation-minded individuals and groups are currently outnumbered and easily outspent by those with a more personal agenda. In the long run, I think the new collaborative and public education programs of archaeologists and others are the most likely to produce lasting, positive results. The only question is whether we have a long run to work with, given the current ravages and multiple threats to this nonrenewable resource.

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Michael Lindsay



AS TOURISM BECOMES THE CENTRAL DRIVE, the unifying trait, in urban and regional development, it transforms itself and the world around it in ways that undermine and subvert the original motive for cultural travel—and even the original basis for culture. Accordingly, we must question every idea we have about cultural tourism and its effects. We must especially question belief in the continued beneficial effect of tourism on cultural and other conservation efforts.

It has been assumed by many that tourists—hungry to see historically significant architecture, pristine nature, or authentic native ceremonies, rituals, and dances—will automatically contribute money and rationale to the preservation of historical and cultural artifacts, endangered cultural expression, and ecologically fragile natural environments. This notion is wrapped in sufficient common sense that it easily can be taken for granted. Recently, however, it has been subject to authoritative criticism. One of the strongest intellects in tourism studies, Marie-François Lanfant, comments:

The discovery of heritage, by procedures such as restoration, reconstitution, and reinvestment with affect, in some sense breaks the very chain of significance which first invested it with authenticity, in that on subsequent occasions it is retouched and elevated to a new status. The object of heritage is reconstructed through this process of marking, and thereby it certifies the identity of a place for the benefit of anonymous visitors. Tradition, memory, heritage: these are not stable realities. It is as if the tourists have been invited to take part in a fantastic movement in which . . . collective memory is constructed through the circulation of tourists.

Architectural critic Michael Sorkin has commented along the same lines:

Today, the profession of urban design is almost wholly preoccupied with reproduction, with the creation of urbane disguises. Whether in its master incarnation at the ersatz Main Street of Disneyland, in the phony historic festivity of a Rouse marketplace, or the gentrified architecture of the Lower East Side, this elaborate apparatus is at pains to assert its ties to the kind of city life it is in the process of obliterating. Here is urban renewal with a sinister twist, an architecture of deception which, in its happy-face familiarity, constantly distances itself from the most fundamental realities.

Several years ago, I was involved in a film project that provided detailed documentation of the contradiction at the heart of cultural tourism. It was the case of Torremolinos, Spain, presented in segment three of the BBC miniseries *The Tourist* (directed by Mary Dickson and Christopher Bruce). Over the past fifty years, Torremolinos, on the Costa del Sol, changed from a mere place to a tourist destination. Its transformation is characteristic of places where the local and the global are linked through tourism.

Torremolinos, initially a place of work—the beach where small fishing boats were hauled out, nets repaired, today’s successes and failures discussed, and tomorrow’s activities planned—was reframed as a potential “work display” for tourists. The original tourists were to be German workers rewarded by Hitler’s “Strength through Joy” program. The entire scene was to become an object of touristic consumption, an example of “the picturesque” with a message: traditional work is “natural,” is “beautiful,” is “picturesque.” In the actual course of history, Torremolinos did not

become a “Strength through Joy” program destination. Instead, as often happens, some famous people, or “beautiful people,” members of the international elite leisure class, “discovered” “unspoiled” Torremolinos. After initial contact with the wealthy pretourists, it was no longer necessary for any fishing or associated activities to take place, as long as some of the boats, nets, and fishermen remained photogenically arrayed as a reminder of their former purpose. Eventually the picturesque elements were selectively integrated into the decor of the beach bars and discos, which today still retain a traditional fishing village theme. Thus work was transformed into entertainment for others.

During the 1960s and 1970s, Torremolinos overreached as it reproduced itself and the markers of its heritage. Planned for German tourists and now overdeveloped, the place caters to “cheap and cheerful” packaged tours for British working-class vacationers who want the Spanish sand, sun, sea, and tokens of its former culture—without giving up their beer and chips, the enjoyments of home. Torremolinos has become a mélange of markers of Spanish fishing village traditions, working-class fantasies of jet set luxury, and Spanish versions of British fish and chips cuisine. The Spanish fishermen, or their children, are now integrated into the global economy as service workers for transnational tourists.

Elsewhere I have commented that it is harrowing to suggest that this kind of transformation is the creative cutting edge of world culture in the making. But such a suggestion seems inevitable, in that everywhere we look, local practices and traditions are hollowed out to make a place for the culture of tourism. This is happening even, or especially, in those places where the tourists originally came because they were attracted by the local culture, heritage, and traditions. And, as Sorkin’s comment makes clear,



Fishermen bringing their boat ashore in a rural area of Haiti mostly untouched by tourism. As such, it remains authentically “picturesque,” as opposed to Fisherman’s Wharf in San Francisco, which has been transformed over time from a place primarily for fishermen to a tourist site with a fishing theme. *Photos: Dean MacCannell (Haiti), Juliet Flower MacCannell (San Francisco).*



Icons of heritage—the Arc de Triomphe and Eiffel Tower of Paris, the Brooklyn Bridge and Statue of Liberty of New York, and the Rialto Bridge and Doges' Palace of Venice—all here replicated by Las Vegas casinos. The symbolic appropriation of treasured places by the city's developers for commercial purposes is not limited to cultural monuments. A reported \$21 million is being spent to construct a two-story-deep, 110-foot-long replica of the Grand Canyon—inside a Las Vegas shopping mall. *Photos: Melena Gergen.*



this type of transformation is by no means restricted to development for tourism that occurs at the edges of the global economy. It also happens in New York and in Orange County, California.

It is evident that we cannot continue to study cultural tourism while holding on to empiricist assumptions that culture is somehow prior to and separate from tourism and tourists. Development for tourism has become the primary engine driving the growth of a new kind of metastatic anticulture that rapidly reproduces and replaces the culture that we once believed tourists were coming to see. This is evident on a small scale in new museum practices that substitute the display of artifacts with electronic entertainments featuring images of the artifacts as game characters. It is evident on a larger scale in the casino copies of older cultural destinations—The Paris Experience, New York, San Francisco, Luxor, Venice, Bellagio—as Las Vegas positions itself to become the symbolic capital of the 21st century. It is also evident in urban and regional redevelopment plans everywhere, in education, and in other cultural programming—all of which are becoming variations on a theme park. While this may be the only game in town economically, it is not a very human thing. It marks a moment when the people, via treachery or other means, have been made to give up on themselves as consumers of their own heritage, believing they must accept cultural assembly line work, making reproductions of their heritage and culture for anonymous others.

Is it possible to begin to undo the damage to culture that is being wrought by cultural tourism? Probably not by turning back the tide of tourists, though certainly some will adopt this strategy. Nor can one critic, curator, or conservator acting alone shift the current direction of cultural tourism. The thing is simply too big. What is needed are: (1) development of strong cultural theory, (2) education programs that create deeper understanding of the function and value of cultural heritage, and (3) reinvention of the museum, restored heritage site, monument, memorial, and every

other representation of heritage, tradition, and collective memory. Let me suggest some general principles that might guide the development of such a program and indicate my willingness to work with others who share the same goal.

Minimally, tourist destinations should ethically demand that their visitors become implicated in an authentic reengagement with cultural heritage conceived as a gift that everyone can possess equally but no one can own. It is impossible to overestimate the difficulty of this demand, because the drive to distance ourselves from our own humanity is so strong. This drive is precisely what makes the obliteration of culture by cultural tourism and commercial tourism development so easy. To counter it, critics and curators must be honest about the origin and essence of cultural gifts. Cultural gifts are things passed on to the living by the dead and by their most creative contemporaries: useful and other objects, practical and high arts, and formulas for conduct, music, dance, poetry, and narrative. But what exactly is exchanged if no one can actually own them? The gifts are not the objects themselves but their symbolic meaning.

Does symbolic meaning involve reverential awe or a gee-whiz factor? Perhaps a little—but this should not be overdone. Appreciation of cultural heritage should never be predicated only on the emotional impact of virtuoso cultural display. This approach leads immediately to the commercialization of nostalgia, sentimentality, and the kind of tourism development that buries culture and heritage. It is only when cultural heritage is received with a specific kind of attitude of respect and admiration that the grounds are established for symbolic exchange. What needs to be cultivated in tourists is respect for the gap between themselves and those who created their cultural heritage, a gap that can be narrowed but never completely closed. They must attempt to grasp the signification of cultural material for those who created it in the first place, knowing that they will never be able to understand it completely.



Stories can be retold, and the reteller can remember the circumstances of first hearing the story, and even the impact it had on his or her life. But when a story is retold, the one thing that cannot be conveyed is its full significance for the person who told it in the first place. The stories that stick with us are the ones we just don't quite "get"—the ones that must be retold over and over, precisely because no retelling is capable of exhausting their meaning. Tourists must somehow be taught how to act and made to feel welcome on this most hallowed ground of cultural tradition, even as it inevitably involves "not quite understanding."

Another way of saying this is that the only way a tourist can take in culture authentically is by assuming the subject position of a child. Tourists must learn that heritage is not something that is *in* a story, an old building, an often repeated traditional formula, or folk or high art. Rather, it is in a certain *attitude toward* the story or artifact, and especially toward the hero of the story or the maker of the artifact. It is this attitude that can be shared by those presenting the heritage event or object, and the visitors/audience/tourists. It is an attitude that renders the *importance* of the story or artifact as probably beyond our grasp. It is only when heritage is understood as probably beyond the grasp that it can renew itself by inspiring a second reach. Otherwise, people will slumber in ersatz cultural reproduction. "Importance beyond the grasp" is the surplus value of cultural heritage, a surplus value that can only accrue to an authentic human community composed of the living and the dead and their honored guests, and probably their plants, animals, spirits, and the places they inhabit as well. And it is precisely this surplus value and the possibility of sharing it that is obliterated by commercial cultural tourism development.

What tourism developers are calling "heritage" is a mask for the intensity and the pain—and the possibility of failure—that is inherent in all creation. It is a pretense that every object and sentiment from the past can be routinely reproduced; that the biggest

break with the past that has ever been engineered is not a break at all; that Main Street at Disneyland is a mere repetition and continuation. We will not be able to stop the destruction of culture in the name of "cultural tourism" until we, as tourists, refuse to allow representations of cultural heritage to continue to function as a mask for the pain of origins.

What is suppressed by commercial tourism development always involves the *beautiful* and *death*. And it involves *metaphysical embarrassment* about the proximity of beauty and death in our cultural heritage and traditions. There may be psychoanalytic reasons why we voluntarily pay so dearly for the cover-up and delusion as cultural tourism blocks our access to cultural origins. The only antidote is to embrace heritage as a challenge to the living by the dead to keep on living, to try to fill the real gap or void of death, even though we know this is not possible—a challenge that must be met with full awareness of the impossibility of telling the same story twice, the impossibility of fully honoring our ancestors and our creative contemporaries and their accomplishments.

Representations of cultural heritage should also serve as a reminder that full speech and authentic meaning are constantly leaking out of human interaction. And the only way to plug those leaks is a certain type of artfulness that in its first enunciation would never be seen as "traditional"—but which very quickly moves to fill the void opened by tradition, and which is powerful enough to open a new void of its own.

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Josefa Vaughan



Andean Textile Dyes

Ran Boytner



in October of 1998, the UNESCO Chair on Earthen Architecture was formally inaugurated. Centered at CRATERre-EAG, the UNESCO Chair is a vehicle for collaboration with universities in developing countries, aimed at instituting formal education programs related to earthen architecture construction and conservation. The Terra partners are charged with spurring and coordinating the development of curricula and faculty for earthen architecture conservation within this consortium.

An important aim of PAT99 was to synthesize past efforts and to begin to codify the body of knowledge that has amassed through these years of training activities, in preparation for working with universities. By both capturing this cumulative experience and exploring new and innovative approaches to education in this area, PAT99 served as a critical testing ground for improved teaching methodologies and materials that can be shared within the consortium and beyond.

When we think of ancient South America, we may think primarily of the Incas. However, this empire, known to its subjects as Tawantisuyu, existed for only 150 years before the arrival of the Spanish. Many other cultures flourished in South America before the Incas. While each culture was unique, there were some traits shared by all the cultures of the Andean region.

An important shared tradition was the appreciation and significance of textiles. Textiles were used not only for clothing but to announce political status, social nexus, ideological affiliation, and cultural identity. Textiles, the single most important commodity of the ancient Andes, were used for payment. A special class of weavers was responsible for some of the most complex and elaborate textiles ever made. Many of these textiles are in collections around the world, where their artistry is a source of fascination and a subject of research.

While study of these textiles has focused on form and structure, one of their outstanding features is their brilliant, vibrant colors. Great importance was attached to the dyeing of thread and the making of dyestuffs. Until recently, however, little has been done to understand these processes fully—an understanding important for proper conservation, restoration, and description of these textiles.

Over the past six years, the UCLA Institute of Archaeology and the GCI have collaborated on research to resolve problems in Andean dyestuff identification.

The research has two aims: to better understand the cultural meaning of textiles and the relationship between people and their environment through the identification of dyestuffs; and to develop easy-to-use methods to identify ancient Andean dyes, increasing the conservation knowledge necessary for the appropriate display and treatment of the textiles.

In the 60 years before the current research began, fewer than 300 ancient Andean dyed cloth samples had been analyzed. Since the UCLA-GCI work started in 1993, the team has analyzed an additional 600 dye samples. Team members have examined and evaluated a number of analytical techniques and recommended specific techniques to use with threads dyed with different colors. The research has also identified two types of red dyes previously unknown in Andean textiles.

To date, team members have presented seven papers at international conferences and written five articles for peer-reviewed journals. The research (which has also been presented to numerous scholars in the field) is an example of a fruitful collaboration between archaeology and conservation science that can advance knowledge of the achievements of cultures of the ancient New World.

For more information about the textile research, please contact the Getty Conservation Institute Museum Research Laboratory.

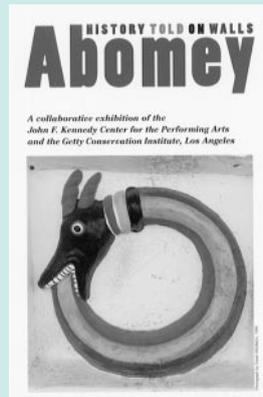
Abomey Exhibition at Kennedy Center

The John F. Kennedy Center for the Performing Arts in Washington, D.C., and the Getty Conservation Institute collaborated on *Abomey: History Told on Walls*, an exhibition at the Kennedy Center, February 10–March 8, 2000.

The exhibition focused on the 250-year-old tradition of polychrome earthen bas-relief art in Benin, West Africa, and on a GCI project to conserve the earliest surviving examples of this art form. From 1993 through 1997, the Republic of Benin's Ministry of Culture and Communication and the GCI collaborated to conserve 50 heavily damaged bas-reliefs that once adorned the Salle des Bijoux, or Hall of Jewels, part of the palace of King Glélé in Abomey.

In the early 17th century, the powerful kings of Dahomey built a complex of earthen palaces in their capital city, Abomey. The palace walls were decorated with colorful low-relief sculptures, or bas-reliefs, recounting legends and battles to glorify the dynasty's reign. The GCI project involved the conservation of the oldest surviving royal bas-reliefs and included documentation, training of Benin museum professionals, treatment and exhibit of the bas-reliefs, and development of a long-term maintenance plan. The project culminated in an international conference on the past, present, and future of the royal palaces and sites of Abomey.

The Kennedy Center exhibition illustrated the history of the conservation



project and displayed examples of the richness of bas-reliefs in Benin. It also included demonstrations of bas-relief creation by renowned Benin artist Cyprien Tokoudagba.

The exhibition was part of the Kennedy Center African Odyssey—a festival of music, dance, theater, and graphic arts from Africa and the African Diaspora that has received support from the American Express Company. This is the second collaboration between the GCI and the Kennedy Center; in 1998, the two institutions created the exhibition *The Painted Rocks of Africa: Other World Visions of the San*. This exhibition, also mounted for the Center's African Odyssey, depicted varied rock art in Southern Africa.

The Abomey conservation project is described in the recent GCI–Getty Museum publication, *Palace Sculptures of Abomey: History Told on Walls*, by Francesca Piqué and Leslie H. Rainer. The book combines color photographs of the Abomey bas-reliefs with a history of the Dahomey kingdom, complemented by period drawings and historical photographs. The book is available at www.getty.edu/publications. Also available is *History Told on Walls*, the GCI video documentary on the royal bas-reliefs of Abomey that won the Prix Coup de Coeur at the 1998 International Audio-visual Festival/Museums and Heritage and the Gold Award for documentaries at the 1997 Houston International Film Festival.

Meeting with Canadian Conservation Institute

During the week of January 17, 2000, representatives from the Canadian Conservation Institute (CCI) and the GCI met in Los Angeles to examine opportunities for further collaboration and a pooling of resources in conducting conservation science research.

Much of the meeting focused on the area of museum environment research, where collaboration between the CCI and the GCI is already occurring. A working group composed of Stefan Michalski and Jean Tetreault (CCI), and Jim Druzik and Cecily Grzywacz (GCI) met to discuss their participation on a technical committee of the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) that is responsible for a major revision of chapter 20, entitled "Museums, Libraries, and Archives," in the *ASHRAE Application* volume. The chapter has the potential for being the single most important reference source for mechanical engineers responsible for HVAC systems in new museum construction and in the retrofitting of older buildings. The working group also looked at ways to create greater symbiosis between the CCI's work on mathematical modeling of volatile compounds in enclosures and the GCI's work on the efficacy of pollutant absorbents in museum and display case applications. Another working group generally reviewed issues related to potential collaboration in laser cleaning. This group included Greg Young and Carole Dignard (CCI) and Dusan

Giora Solar

Stulik, Valerie Dorge, and Herant Khanjian (GCI), as well as Meg Abraham from the Los Angeles County Museum of Art and Mark Gilberg from the National Center for Preservation Training and Technology.

In addition to these meetings, Alberto de Tagle, GCI Scientific Group director, and Charlie Costain, CCI director of conservation and scientific services, discussed opportunities for staff exchanges, training options, and the frequency of future meetings between their staffs.

Following all the meetings, Costain said that the staff discussions “served a very concrete role in advancing our overall level of cooperation, with specific advances on a couple of key projects.”

CCI and GCI have had collaborative projects in the past, but over the last 10 years, exchange between the two laboratories has consisted only of personal contact between staff members. Given the restrictions on budgets that affect the entire conservation profession, it seemed to both groups that renewed efforts should be made to explore the mutually beneficial leveraging of resources.

Giora Solar, the Getty Conservation Institute’s director of field projects since 1995, resigned from his position at the Institute, effective March 2000, to return to Israel, where he will be pursuing fieldwork in the Mediterranean region.

During his time at the GCI, Solar oversaw work on a number of Institute projects, including the conservation of the bas-reliefs of the Royal Palaces of Abomey in Benin, the conservation of the St. Vitus mosaic in Prague, the mosaics in situ research and training project in the Mediterranean region, and the documentation of the Yanhuitlán retablo in Mexico and the Tel-Dan Gate in Israel. Prior to his appointment at the GCI, Solar was director of the Conservation Section of the Israel Antiquities Authority.

Jeanne Marie Teutonico, special advisor to the director of the GCI, will assume oversight for the Field Projects Group until a new director for the group is appointed.

Opportunities at the GCI

The Getty Conservation Institute has begun the process of searching for candidates to fill several managerial positions. These positions include:

- Group Director for education;
- Group Director for field projects;
- Manager of the electronic conservation literature database (currently known and published as *Art and Archaeology Technical Abstracts*).

For additional information on these positions—as well as other openings at the GCI—visit the “Opportunities” section of the Getty Web site: <http://www.getty.edu>.



Alberto de Tagle (GCI), Tim Whalen (GCI), and Charlie Costain (CCI). Photo: James Druzik

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