## Heritage, Conservation, and Archaeology: An Introduction

By Frank G. Matero

Heritage and conservation have become important themes in current discussions on place, cultural identity, and the preservation of the past. Archaeological sites have long been a part of heritage and its display, certainly before the use of the term "heritage" and the formal study of tourism. However, current concerns with their escalating destruction can be attributed to the perception among the public and professionals alike that archaeological sites, like the natural environment, represent finite nonrenewable resources deteriorating at an increasing rate. This deterioration is because of a wide array of causes, ranging from neglect and poor management to increased visitation and vandalism, from inappropriate past treatments to deferred maintenance (Figures 1 and 2). No doubt the recent pressures of economic benefits from tourist activities in conjunction with increasing communication and mobility have caused accelerated damage to many sites unprepared for development and visitation.



Figure 1. Landscape erosion from uncontrolled visitation at Tsankawi, Bandelier National Monument.

To add to these problems, few archaeological projects have incorporated site conservation as a viable strategy in addressing these issues either before or during excavation (Figure 3). This has been in part because of archaeology's neglect of the long history and tradition of conservation theory and practice and the general misperception of conservation as an exclusively off-site, post excavation



Figure 2. Site damage and attrition from weathering and exposure, Gordion, Turkey.

activity associated with technical issues and remedial solutions. On the other hand, specialists in conservation and heritage management have been largely absent in the recent and rapidly expanding discussions on the meaning, use, and ownership of heritage for political and economic purposes. Both professions have avoided a critical examination of their own historical and cultural narratives pertaining to the construction of sites through excavation, analysis, conservation, and display.

The primary objective of conservation is to protect cultural heritage from loss and damage. Conservators accomplish this through both preventive and remedial types of intervention. In so doing, conservation embraces the technical means by which heritage may be studied, displayed, and made accessible to the public. In this way, the conservation of archaeological sites is like other heritage conservation. Implicit in conservation's objectives is the basic requirement to remove or mitigate the causes of deterioration. For archaeological sites, this has a direct and immediate effect on visual legibility and indirectly conditions our perceptions and notions of authenticity. Among the repertoire of conservation techniques applied to archaeological sites are structural stabilization, reconstruction, reburial, protective shelters, and a myriad of fabric-based conservation methods. Each solution affects the way archaeological information is preserved



Figure 3. Emergency stabilization of structures and paintings during excavation, Çatalhőyük, Turkey.

and how the site is experienced and understood, resulting in a push and pull of competing scientific, associative, and aesthetic values (Figures 4 and 5).

The practices of archaeology and conservation appear by their very nature to be oppositional. Excavation, as one common method by which archaeologists study a site, is a subtractive process that is both destructive and irreversible. In the revealing of a site, structure, or object, excavation is not a benign reversal of site formational processes but rather a traumatic invasion of a site's physico-chemical equilibrium, resulting in the unavoidable deterioration of associated materials. Conservation, on the other hand, is predicated on the safeguarding of physical fabric from loss and depletion, based on the belief that material culture possesses important scientific and aesthetic information as well as the power to inspire memory and emotional responses. In the first case, the informational value embodied in the materiality of objects and sites has been expressed in conservation rhetoric through the concept of integrity. Integrity can manifest in many states as purity (i.e., free from corruption or adulteration) or completeness of form, composition, or context. It has come to be an expression of authenticity in that it conveys some truthfulness of the original in time and space, a quality constructed partly in response to the interventions perpetrated by us in our effort to preserve. Whereas archaeology decontextualizes the site by representing it ex situ, i.e., in site reports and museum exhibits, whereas historic preservation represents and interprets the site in situ.

But archaeological sites are also places. If we are to identify and understand the nature and implications of certain physical relationships with locales established through past human thought and experience, we must do it through the study of place. Places are contexts for human

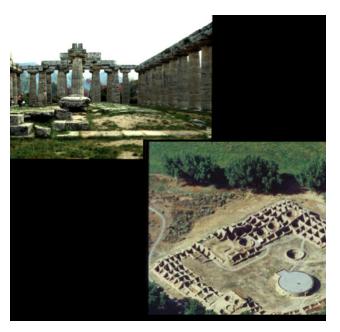


Figure 4. Anastylosis at Paestum, Italy, versus reconstruction at Aztec Ruins, U.S..

experience, constructed in movement, memory, encounter, and association. While the act of remembering is acutely human, the associations specific places have at any given time will change.

In this last respect, conservation itself can become a way of reifying cultural identities and historical narratives over time through interpretation. In the end, all

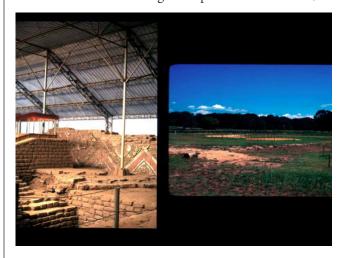


Figure 5. Protective shelters (Peru) versus interpreted site reburial (U.S.)  $\,$ 

conservation is a critical act in that the decisions regarding what is conserved, and who and how it is presented, are a product of contemporary values and beliefs about the past's relationship (and use) to the present. Nevertheless, technical intervention—that is, what is removed, what is

added, what is modified—is the concrete expression of a critical judgment thus formed in the course of this process. What, then, does it mean to conserve and display an archaeological site, especially when what is seen was never meant to be displayed as such, or at least in the fragmented manner viewed?

## Making Sites

Archaeological sites are made, not found. They are constructed through time. Display as intervention is an interface that mediates and therefore transforms what is shown into heritage, and conservation's approaches and techniques have always been a part of that process. Beginning with the Sixth International Congress of Architects in Madrid in 1904 and later with the creation of the Charter of Athens following the International Congress of Restoration of Monuments (1931), numerous attempts have been made to identify and codify a set of universal principles to guide the conservation and interpretation of structures and sites of historic and cultural significance. Despite their various emphases and differences, all these documents identify the conservation process as one governed by absolute respect for the aesthetic, historic, and physical integrity of the structure or place and requiring a high sense of moral responsibility. Implicit in these principles is the notion of cultural heritage as a physical resource that is at once valuable and irreplaceable and an inheritance that promotes cultural continuity in a dynamic

Out of this dilemma, our current definition of conservation has emerged as a field of specialization concerned primarily with the material well-being of cultural property and the conditions of aging and survival, focusing on the qualitative and quantitative processes of change and deterioration. Conservation advocates minimal but opportune interventions conducted with traditional skills as well as experimentally advanced techniques. In current practice, it has tended to avoid the renewal of form and materials; however, the level of physical intervention possible can vary considerably even under the current doctrinal guidelines. This includes even the most invasive methods such as reconstruction and the installation or replication of missing or damaged components. Such interventions, common on archaeological sites, are often based on the desire or need for greater visual legibility and structural reintegration (Figure 6). These interventions become even more critical if they sustain or improve the future performance or life of the site or structure in its environment.

Obviously, for archaeological sites, changing or controlling the environment by reburial, building a protective enclosure or shelter on site, or relocating selected components such as murals or sculpture, often indoors,



Figure 6. Visual and structural reintegration at Mission San Juan Capistrano, U.S.

are options that allow maximum physical protection and thus privilege the scientific value inherent in the physical fabric. However, such interventions significantly affect the meaning and associative and aesthetic values, an aspect already discussed as significant for many such sites. Conversely, interventions developed to address only the material condition of objects, structures, and places of cultural significance without consideration of associated cultural beliefs and rituals can sometimes denature or compromise their power, "spirit," or social values. In this regard, cultural and community context and dialogue between professionals and stakeholders are crucial.

## PAST EFFORTS

One of the first coordinated attempts to codify international principles and procedures of archaeological site conservation was formulated in the Athens Charter of 1931 where measures such as accurate documentation, protective backfilling, and international interdisciplinary collaboration were clearly articulated. In 1956 further advances were made at the General Conference on International Principles Applicable to Archaeological Excavations adopted by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in New Delhi where the role of a centralized state administration in administering, coordinating, and protecting excavated and unexcavated archaeological sites was advocated.

Other charters such as the ICOMOS (Venice) Charter of 1964 extended these earlier recommendations through explicit recommendations that included the avoidance of reconstructions of archaeological features except in cases in which the original components were available but dismembered and the use of distinguishable modern techniques for the conservation of historic monuments. The Australia ICOMOS (Burra) Charter of 1979 expanded the definition of "archaeological site"

to include the notion of place, challenging Eurocentric definitions of value, significance, authenticity, and integrity to include context and traditional use, an idea important for culturally affiliated indigenous groups. Finally, in 1990, the ICOMOS (ICAHM) Charter for the Protection and Management of the Archaeological Heritage was adopted in Lausanne, Switzerland, formalizing the international recognition of many archaeological sites as living cultural landscapes and the responsibility of the archaeologist in the conservation process.

In addition to these various international attempts to address the issues of archaeological site conservation through the creation of charters and other doctrinal guidelines, a conference to discuss the realities of such standards was held in Cyprus in 1983 under the auspices of ICCROM and UNESCO. In the context of the conference subject, that is, archaeological sites and finds, conservation was defined as traditionally concerned with the preservation of the physical fabric in a way that allows maximum information to be retrieved by further study and analysis, whereas restoration involves the representation of objects, structures, or sites so that they can be more visually "accessible" and therefore readily understood by both scholars and the public.

From the scholar's position, the maximum scientific and historical information will be obtained through recording, sampling, and analysis immediately on exposure or excavation. With each passing year, except under unique circumstances, sensitive physical information will be lost over time. It is true that when archaeologists return to existing previously excavated sites, they may collect new information not previously identified, but this is often the result of new research inquiries on existing finds and archived field notes. Exposed sites, depending on the nature of the materials, the environment, and the state of closure of the site, will yield limited, certainly diminished archaeometric information, especially for fragile materials or features such as macro- and microstratigraphy, surface finishes, impressions, and residue analysis. Comprehensive sampling programs, instrumental recording, and reburial maximize the preservation of the physical record both indirectly and directly. Sites with architectural remains and landscape features deemed important to present for public viewing require quite different strategies for conservation and display. Here the record of approaches is far older and more varied, both in method and in result (e.g., Arch of Titus [Figure 7]), Palace of Knossos, Casa Grande (Arizona), Pompeii, and the Stoa of Attalo

Not to distinguish between the specificity of what is to be conserved on site, or retrieved for that matter, given the impossibility of doing so, makes for a confused and often compromised archaeological program and interpreted site. Too often conservation is asked to address the dual requirements of an archaeological site as document and

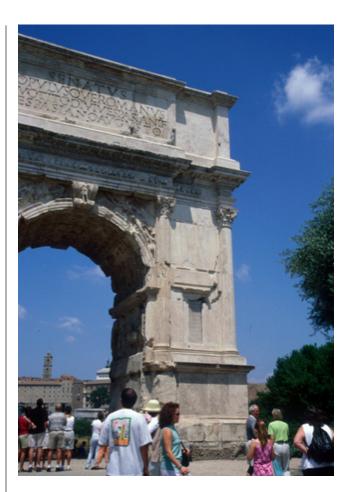


Figure 7. Early nineteenth-century conservation reconciling form and fabric at Arch of Titus, Rome

place without explicit definition and identification of what is actually to be preserved. The results have often been compromised physical evidence through natural deterioration—or worse, through failed treatments meant to do the impossible. On the other end, the need to display has sometimes resulted in confused and discordant landscapes that deny the entire story of the site and the natural and sublime state of fragmentation all ruin sites possess.

This last point is especially important on the subject of interpretation and display. In an effort to address the economic benefits from tourist development, many archaeological sites have been directly and heavily manipulated to respond to didactic and recreational programs deemed necessary for visual understanding by the public. In many cases this has resulted in a loss of place, accompanied sometimes by accelerated damage to those sites unprepared for development and visitation. To balance this growing trend of seeing archaeological sites as predominantly outdoor museums, shaped by current museological attitudes and methods of display, it would be useful to approach such sites instead as cultural

landscapes with ecological concerns. A more balanced combination of approaches could also mediate the often difficult but powerful overlay of subsequent histories visible on archaeological sites, including destruction, reuse, abandonment, rediscovery, and even past interpretations.

## Conclusions

Like all disciplines and fields, archaeological conservation has been shaped by its historical habit and by contemporary concerns. Important in its development has been the shifting, even expanding notion of site conservation to include the stabilization and protection of the whole site rather than simply in situ artifact conservation or the removal of site (architectural) features. The public interpretation of archaeological sites has long been associated with the stabilization and display of ruins. Implicit in site stabilization and display is the aesthetic value many ruin sites possess based on a longlived European tradition of cultivating a taste for the picturesque. With the scientific investigation and study of many archaeological sites beginning in the late nineteenth century, both the aesthetic and the informational value of these sites was promoted during excavation-stabilization. In contemporary practice, options for archaeological site conservation have included reconstruction, reassembly (anastylosis), in situ preservation and protection including shelters and/or fabric consolidation, ex situ preservation through removal, and excavation or reburial with or without site interpretation.

Despite the level of intervention, that is, whether interpretation as a ruin is achieved through anastylosis or reconstruction, specific sites, namely, those possessing monumental masonry remains, have tended to establish an idealized approach for the interpretation of archaeological sites in general. However, many sites such as earthen tells, at once challenge these ingrained notions of ordered chaos and arranged masonry by virtue of their fragile materials, temporal and spatial disposition, and sometimes conflicting relationships among foreign and local professionals and traditional communities. Moreover, changing notions of "site" have expanded the realm of what is to be interpreted and preserved, resulting in both archaeological inquiry and legal protection at the regional level. These aspects of site conservation and interpretation become all the more difficult when considered in conjunction with the demands of tourism and site and regional development for the larger physical and political contexts.

Archaeological sites, like all places of human activity, are constructed. Despite their fragmentation, they are complex creations that depend on the legibility and authenticity of their components for public meaning and appreciation. How legibility and authenticity of such structures and places are realized and ensured must

be carefully considered and understood for effective conservation. Certainly conservators, archaeologists, and cultural resource managers need to know well the theoretical concepts and the history of those concepts pertaining to conservation; they need to know something of the historical and cultural context of structures and sites, archaic or past building technologies, and current technical solutions. They need to familiarize themselves with the political, economic, and cultural issues of resource management and the implications of their work for local communities, including issues of appropriate technology, tradition, and sustainability.

The basic tenets of conservation are not the sole responsibility of any one professional group. They apply instead to all those involved in the conservation of cultural property and represent general standards of approach and methodology. From the broadest perspective, archaeology and conservation should be seen as a conjoined enterprise. For both, physical evidence has to be studied and interpreted. Such interpretations 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 its role and effect on current affiliates and the public in general. This implies the application of a variety of specialized technical knowledge, but ideally the process must be brought back into a cultural context so that the archaeology and conservation project become synonymous.

FRANK G. MATERO is professor of architecture, chairman of the Graduate Program in Historic Preservation, and director of the Architectural Conservation Laboratory at the University of Pennsylvania. He is formerly director of the Center for Preservation Research at Columbia University (1981–1990) and lecturer at the International Center for the Study of the Preservation and the Restoration of Cultural Property in Rome (UNESCO-ICCROM) and the Polytechnic University of Puerto Rico.