

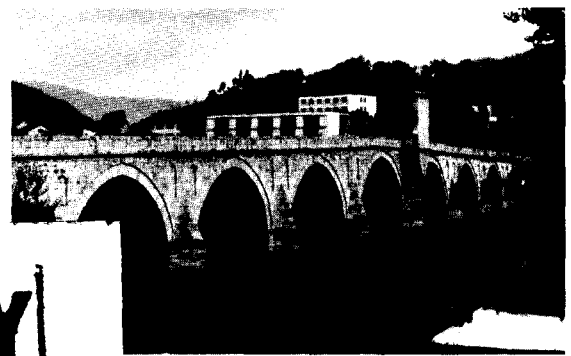
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The Management of Cultural Property in World Bank-Assisted Projects

Archaeological, Historical, Religious,
and Natural Unique Sites

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September 1987

Robert Goodland and Maryla Webb



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Robert Goodland and Maryla Webb

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Abstract

"Cultural property" (a United Nation's term) denotes sites or artifacts of archaeological (prehistoric), paleontological, historic, religious, and unique natural value; it encompasses remains left by previous human inhabitants as well as unique natural environmental features. Worldwide, cultural property is rapidly, irreversibly, and unnecessarily being depleted because of rapid population growth and poorly planned economic development. This loss represents a permanent diminution of the international and national patrimony. During the past decade, many development projects financed by the World Bank have included cultural property concerns (35 of these are described in detail in Part II). Therefore, the Bank has adopted a general policy to help preserve cultural property and avoid its elimination. Other specific Bank policies apply to particular situations. When potential projects are being identified, pertinent authorities and experts are consulted and/or reconnaissance surveys are made to assess the cultural property elements of the proposed project site. If cultural property is present, relevant government authorities and other experts are called upon to help design mitigatory measures. Nations are best served if economic progress and the preservation of cultural property are carefully planned so as to be mutually enhancing.

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PART I

THEORETICAL BACKGROUND AND BANK POLICY

1. INTRODUCTION

"Cultural property" is the United Nation's term which denotes sites of archaeological (prehistoric), paleontological, historic, religious, and unique natural value (Figure 1). Cultural property, therefore, encompasses both remains left by previous human inhabitants, such as middens, shrines, and battlegrounds, and unique natural environmental features, such as canyons and waterfalls. Technical terms and abbreviations are defined in Annex A.

The Need to Preserve Cultural Property

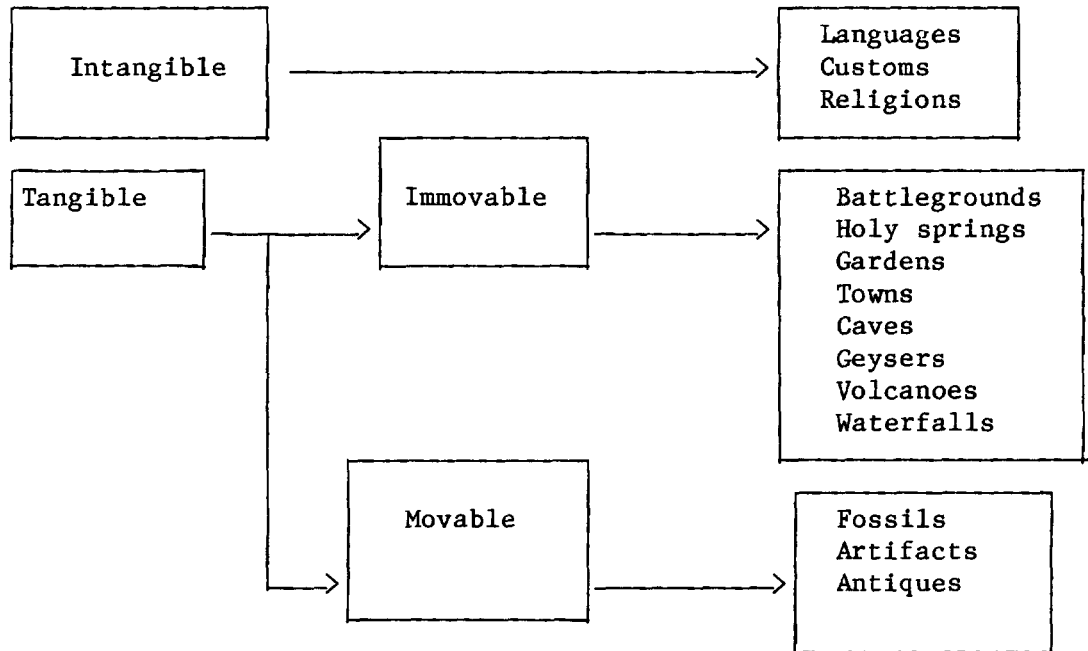
The world's cultural legacy consists of rich archaeological and paleontological deposits that illuminate past life on earth. Unique historical structures tell us how our ancestors lived and worked, while important religious sites -- from majestic cathedrals to more humble wooden shrines -- are symbols of our struggle to understand the meaning of life and our relationship to our creator. Natural wonders have inspired beholders through millenia and are also part of the world's cultural heritage. As products of this legacy, we all share the responsibility to preserve its most important traces.

Much of our responsibility to preserve cultural property stems from the fact that the present generation, like no past generation, is uniquely able to destroy much of that legacy within the lifetime of our children. Exponential population growth, coupled with powerful technologies and industrialization, is causing a serious cultural crisis, akin to the crisis of decreasing biological diversity. The loss of cultural property is particularly acute in areas rich in preserved cultural artifacts, such as the Middle East. Around the world, but particularly in these areas, irreplaceable cultural sites are damaged daily. The agents most often responsible are construction activities related to large public works, such as dams and reservoirs, large irrigation or other agricultural works, transportation corridors (highways, airports, and railroads), drilling or mining, and urban development. With every destroyed site, an opportunity is lost forever for future generations to be enriched by their cultural history.

Although the conservation of cultural property cannot be given absolute priority in all cases, much current destruction is unnecessary. Plans for new developments are often allowed to proceed to the point of no return before cultural property is considered. Most governments and developers do not yet prevent the loss of the cultural heritage because of several misconceptions. The first misconception is that the preservation or salvage of cultural property and societal progress are mutually incompatible or in direct conflict. It can be argued, however, that the preservation of cultural property is beneficial and necessary to progress. Too often a society's progress is measured simply in monetary terms rather than on the basis of the well-being of its people. Well-being is usually advanced only if a balance is struck between monetary and cultural considerations. Moreover, the preservation rather than the destruction of cultural property is more likely to generate economic benefits. Tourism, for example, represents a considerable percentage of income and foreign exchange earnings in many countries. Investigations of past development successes and failures are helping the Bank to design more effective development projects today (Chapter 3).

Figure 1: TWO CLASSIFICATIONS OF CULTURAL PROPERTY

Classification 1



Classification 2

- | | |
|-----------------------------------|--|
| 1. Archeological
(Prehistoric) | Middens, shards
(mainly before the adoption of writing) |
| 2. Historic | Battlegrounds, towns, buildings (mainly after
the adoption of writing) |
| 3. Religious | Tribal sacred sites, temples, burial
grounds, Holy springs or wells |
| 4. Natural | Geological → Canyons, caves, waterfalls, geysers, volcanoes
Paleontological → Fossils
Ecological → Unique and/or relatively undisturbed
wildlands (for both flora and fauna)* |

*Ecological sites are not usually considered cultural property unless they are magnificent or unique (for example, the giant redwood forests of northern California). Unique natural properties are not included under the classification of cultural property by UNESCO's World Heritage Convention, even though they are covered by the Convention, but are defined separately (Annex C). Ecological property is discussed in the Bank policy, "Wildlands: Their Protection and Management in Economic Development" and amplified in the technical publication (World Bank 1987) of the same name.

The second misconception is that consideration of cultural property complicates and delays development projects. On the contrary, project supervisors and contractors can avoid complications and delays by considering cultural property early in the project design and by maintaining close contact with pertinent authorities and expertise, such as a country's department of antiquities. If archaeologists are notified well in advance, they can complete their investigation of a site before construction begins.

Concern about the loss of the world's cultural property is increasing, along with sophistication about its study and preservation. Archaeologists in the early part of this century were little more than treasure hunters, while today they and their colleagues in allied disciplines are usually proficient in the many sciences necessary for conservation, preservation, salvage, and management, e.g., stratigraphy, geology, geochemistry, natural history, sociology, and ancient history.

The growing body of national legislation and international conventions testify to the concern of a growing number of individuals. The first international convention concerning the protection of cultural property was adopted by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in 1954. Because priceless pieces of art and other cultural objects were destroyed, stolen, or lost during World War II, UNESCO's member nations adopted the "Convention for the Protection of Cultural Property in the Event of Armed Conflict." Thirteen international conventions and recommendations have been adopted since that time, as well as several regional conventions (Annex C). The national legislation protecting cultural property is now voluminous and is reviewed by UNESCO in The Protection of Movable Cultural Property (3 Vols. UNESCO 1984a, 1984b, forthcoming).

The Role of the World Bank

Large public works, such as highways and dams, financed and planned by the international development community, are a major factor in the loss of cultural property. It is important, therefore, that the agencies and institutions that finance and execute development projects become familiar with the issues and values associated with cultural property sites. They must also be equipped with the technical, legal, and institutional information necessary for the careful planning and cooperation that must take place if preservation of the cultural heritage and economic progress are to conform. Most bilateral and multilateral international development agencies, however, have yet to systematically address this issue.

During the past decade, many development projects financed by the World Bank^{1/} (described in Part II) have included varying cultural

^{1/} The World Bank, hereafter referred to as "the Bank," is taken to include the International Development Association (IDA) and the International Finance Corporation (IFC).

Table 1: MOVABLE CULTURAL PROPERTY

1. Rare collections and specimens of fauna, flora, minerals, and anatomy, and objects of paleontological interest;
2. Property relating to history, including the history of science and technology and military and social history' to the lives of national leaders, thinkers, scientists, and artists, and to events of national importance;
3. Products of archaeological excavations (including regular and clandestine) or of archaeological discoveries;
4. Elements of artistic or historical monuments or archaeological sites that have been dismembered;
5. Antiquities more than 100 years old, such as inscriptions, coins, and engraved seals;
6. Objects of ethnological interest;
7. Property of artistic interest, such as:
 - 7.1 pictures, paintings, and drawings produced entirely by hand on any support and in any material (excluding industrial designs and manufactured articles decorated by hand);
 - 7.2 original works of statuary art and sculpture in any material;
 - 7.3 original engravings, prints, and lithographs; and
 - 7.4 original artistic assemblages and montages in any material;
8. Rare manuscripts and incunabula, old books, documents, and publications of special interest (historical, artistic, scientific, literary, etc.), singly or in collections;
9. Postage, revenue, and similar stamps, singly or in collections;
10. Archives, including sound, photographic, and cinematographic archives; and
11. Articles of furniture more than 100 years old and old musical instruments.

Source: Properties are as defined in the U.S. Convention on Cultural Property Implementation Act (PL. 97-446).

property concerns. When certain issues, such as cultural property, consistently recur in its projects, the Bank often sets an official policy to guide staff. These guidelines are not rigid, since circumstances often call for some flexibility. It is understood, however, that these policies are formulated only after much study, are promulgated for good reason, and should be contravened only with solid justification. Systematic procedures are often developed and promulgated in conjunction with the policy in order to facilitate adherence to the policy by Bank staff. Official Bank policy documents are confidential and for internal use only, although external versions of policies of some general interest are occasionally prepared and released. These external versions are essentially identical to the internal ones except that reference to internal documents and memoranda is deleted.

In September 1986, the World Bank adopted an official general policy on the management of cultural property in the development projects that it finances. This policy states that the Bank will help to preserve cultural property and seek to avoid its elimination. Other specific policies apply to particular situations. Where the "natural unique" category of cultural property contains natural habitat, rare or endangered living species, or other sources of biological diversity (for example, the Galapagos Islands), then the Bank's policy on "Wildlands: Their Protection and Management in Economic Development" will also apply. Where the cultural property in question is a tribal sacred site, then the Bank's policy on "Tribal People in Bank-Financed Projects" is applicable. The preservation and handling of cultural property encountered in the Bank's work is an important subset of the broad environmental concerns addressed in the Bank policy, "Environmental Aspects of Bank Work."

The present volume reviews the Bank's experience with cultural property, mainly archaeological and historical sites, encountered during its operations and builds on the pioneering work of Lee (1984, 1985) in human ecology in Bank operations. It then codifies this experience and outlines Bank policy and procedures for any future Bank-financed projects that may affect cultural property. The focus is primarily on tangible and immovable cultural property, rather than on intangible (custom and languages) or readily movable (artifacts, antiques, and small fossils) cultural property (Table 1). A further purpose is to introduce this poorly known subject to Bank staff so that they can incorporate these policies and procedures in the design of relevant development projects. Other international development agencies may also find this information useful for developing their own policies and procedures or for providing the background, information, and references needed to address cultural property concerns in their own projects.

2. CATEGORIES AND ISSUES OF CULTURAL PROPERTY

Archaeological Sites

An archaeological site is a place where material remains give evidence of past human life and activities. These remains can be immovable (middens, cave drawings) or movable (household, artistic, or hunting artifacts) and can lie above or below the ground. Because the humans who once inhabited an archaeological (as opposed to an historical) site often had no written language, the practice of archaeology can be crucial in reconstructing ancestral history.

The Practice of Archaeology. Archaeology, one of the subdisciplines of anthropology, strives to understand historical peoples and cultures through the systematic study of material remains (artifacts) of their life and activities. Because the aim of archaeology is to understand past human cultures, the purpose of excavation is not simply to recover evidence of past human life, but rather to use that evidence to infer the human activities and the behavior that produced the remains. In essence, archaeology assumes that human behavior is expressed in patterned activities, and that the form and location of artifacts is a product of these activities. This assumption provides the basis on which the archaeologist can reconstruct the patterns and processes of human behavior and can develop some concept of the vanished culture.

Language, an example of intangible cultural property, conveys concepts and the basis for their understanding directly to the listener or reader. The archaeological record comprises material objects arranged in certain nonlinguistic ways. Artifacts on their own convey little unless their relations to one another can be discerned. The archaeologist acts as intermediary and interpreter between the unknown past and the potential listener or reader. The archaeologist analyzes the raw materials from which the uncovered artifacts were produced and subsequently modified, the function of the artifacts, and their relation to other artifacts, to the humans who fashioned them, and to the physical environment in which they were found. From the data so developed, the archaeologist hypothesizes about the the human society that produced the artifact inventory. The types of information that can be gathered include subsistence practices, areas of activity, technological competence, types of community organization, and migration and trade patterns. In communicating the results of such research, the archaeologist treats these material data much as an unknown language whose syntax must be decoded and translated into the concepts and construct of living languages. Through such contextual study, the mute past may speak to the present -- and to the future.

The archaeological record that the archaeologist must interpret is rarely in the form of large and impressive ruins. Thousands of archaeological sites all over the world occur in which the inhabitants either built no large structures or used materials that have long since decayed. Most of these sites were later covered by soil and vegetation, particularly in areas of heavy rainfall, and they are difficult to discern unless the ground has been cleared and excavated to reveal the presence of artifacts from the earlier habitation. These obscure sites, often with few material remains, can be as scientifically valuable as sites with a rich and extensive artifact inventory. A site marking the beginning of a

culture's use of tools, for example, may have few artifacts, but its scientific importance may equal or exceed that of a well-known monumental site.

Because most archaeological sites are obscure, they often are disrupted by plough, shovel, or bulldozer. When the spatial relation of artifacts is altered, either inadvertently in this manner or by "grave robbers," the association between the items in the artifact inventory is permanently broken, and the possibility of translating physical data into an accurate and meaningful picture of past human activity is destroyed. This is true even for ancient fields and agricultural works such as terraces, irrigation systems, and raised fields. Unfortunately, the scientific information in many archaeological sites all over the world is being destroyed through this kind of alteration.

National Policies and Institutions. Most nations do not have well-defined policies for dealing with archaeological material. Many however, legislate or regulate the excavation of subsurface objects considered part of the nation's cultural heritage or national patrimony (Annex B). Many have signed treaties to protect their archaeological sites or treasures (Annex C). Some nations even provide for the state's expropriation of any land on or under which such objects are found. The problem with many such laws is that they are all-encompassing general prohibitions that often lack specific provisions for enforcement. Also, many of these laws do not prohibit the commercial sale of artifacts once they have been excavated. By allowing the sale of archaeological objects once they have been excavated, these laws encourage the illegal excavation they propose to contain. In addition, few laws provide for the rescue or salvage of archaeological material. This omission is complicated in most countries by the existence of hundreds or thousands of archaeological sites whose number and diversity make enforcement difficult, if not impossible. Even so, laws banning the sale or export of artifacts have slowed the rate of pillage. A major problem with many national preservation laws, besides their unenforceability, is that they do not apply directly to the construction and land-use projects of government agencies or that they do not require that archaeological sites be identified before such projects are begun. If the sites are not identified early, it is impossible to consider them in planning, even if the government agency involved is inclined to do so. Furthermore, most governments are not technically or financially equipped to deal with requests for emergency assistance when a significant site or artifact is encountered. In summary, most borrowers of World Bank investment loans for specific economic development projects do not have well-defined policies, procedures, or the institutional capacity for dealing effectively with the need to preserve the archaeological record.

Historical Sites

A historical site is a place where significant past events have occurred or an area containing property employed in, or monuments commemorating, such events. Historical property is any manuscript, printed item, audiovisual record, or man-made object whose conservation is of historical interest. A monument is often defined by law as any immovable property useful in illuminating or interpreting past events (Williams 1978). It can, therefore, encompass monuments in the traditional sense (that is, a large stone statue or other artifact serving no function except

to commemorate a person, event, or idea), sites where significant historical events occurred, buildings, or whole districts.

Specialists usually differentiate historical sites from archaeological sites by the advent of writing (Deetz 1967). If a written history exists of the area in question, the site is considered an historical site. If the remains were left at a time when writing did not exist or by a culture that did not possess writing, the site is considered an archaeological site.

Nonspecialists often differentiate an historical site from an archaeological site by its visibility and state of preservation. Most of the structures and artifacts on archaeological property lie below the ground and must be excavated, whereas most of the structures and artifacts on a historical site lie above the ground. Although not always reliable or accepted, this latter distinction is useful for the purposes of this paper because the two types of property must be treated differently when encountered in development projects.

Religious Sites

A religious site has great spiritual or cultural value to a people. It can be a place where a man-made or natural structure is located or where a religious event occurred; it can be a place that holds some significance in the cosmology of a people. Religious sites often overlap with archaeological sites in that the site may contain remains that are important chiefly to the religions of earlier societies and that are useful in interpreting and understanding those religions.

When the site is of significance to a dominant world or institutional religion, it is usually well-recognized and accorded due respect. Such sites include the Vatican, the ancient city of Jerusalem, and Mecca. When the site is of religious significance to a tribal minority, however, the sacredness of the area often may not be appreciated by the dominant society, or it may be suspect and not treated appropriately.

Sites of religious or cultural significance to a tribal minority may also be difficult to recognize because they may have no features that would enable the uninitiated to distinguish them from "profane" or secular property. (To many tribal cultures, the idea that any part of the natural community of earth is a mere physical fact is an alien concept. There is no dichotomy between areas that have been sanctified by some holy occurrence and "other" areas that have no inherent spiritual value and therefore do not require moral treatment.) Tribal sacred sites can encompass diverse places, from a small field where sacred herbs grow to an entire mountain range.

Many problems confront a decisionmaker when faced with the issue of sacred property:

- (a) Cross-cultural empathy is difficult to muster, particularly when the religious belief system is part of a worldview so divergent that meaningful communication is made almost impossible. Decisionmakers then need "translators," who are

familiar enough with both cultures to use typologies and analogs to express alien concepts.

- (b) Widely divergent worldviews and religious belief systems also make sacred property difficult to define universally, delineate, classify, or rank in importance. Development conflicts arise over property with different meanings to different sectors of the society. Whose interest and interpretation gets top priority is a moral and philosophical, as well as a political, decision. Property considered sacred by a minority religion or the politically weak is often not treated with the same respect as would be accorded property held sacred by the politically and economically powerful.
- (c) Merely revealing the location of the sacred site often is considered a desecration and may inadvertently lead to its destruction. For example, in 1967 in western Australia, a Caucasian staked a claim to a deposit of colorful Weebo stones. An Aborigine informed the claimant that the stones and the site were sacred. But by the time the government stepped in and conserved the area as a sacred site, souvenir hunters had stolen nearly all of the Weebo stones. A native court was reported to have sentenced an Aboriginal to death for revealing the sacredness of the stones (Pilling 1981).
- (d) An institutional, legal, or even intellectual framework for dealing with the issue of sacred property is rudimentary in most countries. To the extent religious property is indistinguishable from, or overlaps with, other important archaeological or historical cultural property, then the legal, institutional, and intellectual framework is often more developed.

Sites of Natural Uniqueness

The planet, during its stages of creation and subsequent development, gave rise to many unique natural features. Natural sites that might be considered cultural property are usually the more spectacular of these planetary features -- certain mountains, islands, canyons, volcanoes, geysers, solfataras (volcanic areas), waterfalls, glaciers, and unusual or unique floral and faunal areas, such as the Great Barrier Reef of Australia, the giant redwood forests of northern California, and the Giant Panda-inhabited bamboo forest of China.

Sites of natural uniqueness are strictly distinguished from other wildlands by their magnificence, uniqueness, or great value to a culture. These terms are highly subjective, however, and the preservation of this type of cultural property may overlap with the general conservation of natural areas.

3. THE IMPORTANCE OF PRESERVING CULTURAL PROPERTY

Economic development should preserve and encourage the study of cultural property for five main reasons. First, the destruction of a site is irreversible. The stock of sites comprising a country's cultural heritage is unique and nonrenewable; once destroyed or otherwise desecrated, the sites cannot be replaced. Their value and the information they contain are lost forever. Their loss or degradation represents not only a diminution of national patrimony but also a loss for humanity. Many outstanding cultural and natural properties have been recognized by the UN World Heritage Committee as "World Heritage Sites" (see Annex C), thus becoming officially recognized as significant to humankind and protected by international treaty.

The second reason is that a knowledge and understanding of a people's past can help present inhabitants to develop and sustain national identity and to appreciate the value of their own culture and heritage. This knowledge and understanding enriches the lives of a nation's citizens and enables them to manage contemporary problems more successfully. Third, each site has its own intrinsic value in the scientific study of the nature and development of the earth, its life, and civilization. Often only an experienced scientist will be able to recognize an important archaeological, historical, religious, or natural site. Archaeological sites, for example, with few material remains can be as scientifically valuable as sites with a rich artifact inventory. The fourth reason is that development of cultural properties can have significant benefits for a nation's tourism industry. Surveys taken by the American Express Company have indicated that up to 50 percent of tourists make their destination decisions in large part because of their interest in visiting archaeological, historical, and natural attractions.

The fifth, and possibly most relevant, reason to address cultural property concerns is that its preservation and study can be very useful in the successful design of present and future economic development projects. The preservation and study of unique natural sites can improve our understanding of how physical and biological systems function. Similarly, the preservation and study of unique archaeological sites can inform us about previous development mistakes and successes. For example, the thousand-year-old irrigation systems of Sri Lanka greatly aided in the design of the modern system and helped prevent errors. Knowledge of how the Mayan terraces, ancient raised fields, and irrigation works enabled that civilization to thrive in regions now considered marginal could greatly assist in devising sustainable agroecological development there. Similarly, the results of a UNESCO-backed study of 2,000-year old techniques that enabled farms to flourish in Libya in Roman times may help (re)establish successful farms in parts of dryland North Africa (George 1986). The corollary is equally important. Archaeological studies can help us to understand why societies or civilizations changed, failed, or disappeared. Sedimentation of Mesopotamian irrigation works and the complete deforestation of Easter Island are cases in point.

4. THE BANK'S INVOLVEMENT WITH CULTURAL PROPERTY

The World Bank has over a decade of experience with cultural property concerns. This section reviews the Bank's record in this regard, describes positive trends, and identifies lessons learned.

The Existing Record

The Bank has been involved with cultural property in about 30 projects, which are listed by region in Table 2, arranged chronologically in Table 3, and described in detail in Part II. Eleven projects were in the Europe, Middle East and North Africa region; eight were in Latin America; six were in sub-Saharan Africa; three were in East Asia and the Pacific; and five were in South Asia. Six of the total were tourism projects, in which the preservation of archaeological, religious, or historical remains was an integral part of the project. In a few projects, preservation of national treasures of touristic interest was the central project activity receiving most of the funding. More frequently, however, the cultural property element of a project involved the financing of a quick archaeological study conducted before the prospective loss of the site; such a study represents only a very minor percentage of the project's budget. This type of component was found almost exclusively in hydroprojects in which a reservoir would flood a large area. In each case, initial surveys led to the discovery of archaeological sites in the affected area.

Positive Trends

Examining the cultural components of Bank-assisted projects reveals several positive trends. First, the incorporation of cultural material as a central aspect of a tourism project (as in Honduras - Tourism Development or Jordan - Tourism) reflects the ability of the Bank and its borrowers to recognize and capitalize on the importance of cultural phenomena. This process promotes and ensures the survival of an historical monument by linking its future to the future of the country. These factors show the Bank's and the borrower's interest in, and willingness to promote, the cultural, historical, and artistic characteristics of the country. Success of such projects also helps to promote the view that cultural property is a potential source of income through tourism.

Second, in projects where a cultural survey was included as part of an environmental assessment, the effect of the project on potential cultural sites was determined early. Third, although the archaeological components of Bank-financed projects have not always been carried out according to ideal archaeological standards (that is, complete, careful excavation and preservation), they have at least been realistic. If the site was to be destroyed, time was allowed to survey and excavate. It is commendable that many of these projects also incorporated preservation, restoration, interpretation, and promotion of the archaeological artifacts and findings. Fourth, the use of local (in-country) experts working with international specialists was effective. This practice allowed for the local people's involvement and expedited the overall project. Finally, all the projects examined exhibited a sense of urgency; this recognition of the immediate loss of a nonrenewable cultural resource reflected positively on project design.

Table 2: BANK-ASSISTED PROJECTS INVOLVING CULTURAL PROPERTY, BY REGION

Region	Number	Country	Project
Africa	6	Kenya	Power V, Kiambere Hydroelectric Power
		Lesotho	Highlands Water
		Senegal	Petite Cote Tourism (Goree Island)
		Swaziland	Third Power
		Tanzania	Kidatu Hydroelectric (Stage II)
		Uganda	Murchison Falls Power
Asia	8	Fiji	Monasavu Wailoa Hydroelectric (Power I)
		India	Narmada Irrigation and Hydro
		Korea, Rep. of	Kyongju Tourism
		Nepal	Kathmandu Valley Tourism
		Pakistan	Kalabagh Dam
		Pakistan	Lahore Urban Development
		Papua New Guinea	Yonki Hydroelectric
		Sri Lanka	Mahaweli Ganga Development
Europe, Middle East and North Africa	12	Egypt	Luxor Tourism
		Egypt	New Lands Development
		Egypt	South Hussaniya (Lake Manzala)
		Jordan	Jordan Valley Irrigation (Maqarin Dam) Stage II
		Jordan	Tourism
		Turkey	Ceyhan Aslantas Multipurpose
		Turkey	Karakaya Hydropower
		Turkey	Kayraktepe Hydropower
		Turkey	Sir Hydropower
		Turkey	South Antalya Tourism
Yemen Arab Rep.	Marib-Safir Road		
Yugoslavia	Visegrad Hydropower		
Latin America and the Caribbean	9	Brazil	Carajas Iron Ore
		Brazil	Northwest Region Highway (Polonoroeste)
		Brazil	Recife Metropolitan Region Development
		Guatemala	Chixoy Power
		Honduras	El Cajon Hydroelectric
		Honduras	Copan Tourism
		Nicaragua	Earthquake Recon- struction
		Panama	Colon Urban Development
Suriname	Kabalebo Hydroelectric		

Note: For more detail about the projects and sites, see Part II.

Table 3: BANK-ASSISTED PROJECTS INVOLVING CULTURAL PROPERTY,
BY DATE OF THE SITE

Date	Cultural Property and Bank Project
10,000 BC	Abrigo do Sol: Brazil Northwest Region (Polonoroeste)
10,000 BC	Paleolithic and early Iron Age site: Tanzania Kidatu Hydroelectric, Stage II
10,000 BC	Paleolithic: Jordan Valley Irrigation (Maqarin Dam), Stage II
3500 BC	Ur Civilization monuments: Turkey Karakaya Hydropower
2000 BC	Hittite ruins, Karatepe: Turkey Ceyhan Aslantas Multipurpose
1550 - 1085 BC	Pharaonic tombs, West Bank monuments, Karnak Lake: Egypt Luxor Tourism
1200 BC	Pakistan Kalabagh Dam
1300 BC	Tanis site: Egypt South Hussaniya (Lake Manzala)
200 BC - 742 AD	Petra and Jerash: Jordan Tourism
200 BC	Phaselis: Turkey South Antalya Tourism
100 BC	Pre-Maya and Mayan temples: Honduras El Cajon Hydro
100 BC	Mayan stelae and stone structures: Honduras Copan Tourism (first date in Mayan chronology is 3372)

300-900 AD	Classical Mayan sites: Guatemala Chixoy Power
300 AD	Nicaragua ceramics: Nicaragua Earthquake Reconstruction
600 AD	Abu Mena Coptic Shrine: Egypt New Lands Development
634 AD	Kyongju City, Observatory, Silla Dynasty: Korea Kyongju Tourism
1000 AD	Petroglyphs: Suriname Kabalebo Hydroelectric Power
1000 AD	Burial cave: Brazil Carajas Iron Ore
1571-1577 AD	Drina Bridge: Yugoslavia Visegrad Hydropower
1575 AD	Fort San Lorenzo: Panama Colon Urban Development
1700 AD	Walled City of Lahore: Pakistan Lahore Urban
1700 AD	Goree Island: Senegal Petite Cote Tourism
1780 AD	Yavu house mounds, Ra pottery: Fiji Monasavu Wailoa Hydroelectric, Power I

Note: The list is selective. Many sites have multiple dates; many dates are unreliably rough estimates; the earlier date is usually selected here. For more detail about the projects and sites, see Part II.)

Lessons Learned

It is premature to comment on the success or failure of cultural rescue work undertaken in Bank-financed projects. A few of the projects reviewed are not yet implemented, and archaeological work in most of the other projects has not been completed. At this stage, several problems have been identified. First, cultural property rescue has not been integrated into project design in a systematic, routine manner. Above all, the extremely small number of projects that have recognized the need to examine (or have even acknowledged) cultural phenomena shows that the issue is not just one of developing an adequate policy or set of guidelines for dealing with these sites. Clearly, Bank staff, borrowers, economic development agents, project designers, and consultants need an increased awareness of cultural property in project design.

Second, adequate reconnaissance surveys of cultural property were not conducted routinely or sufficiently early. Because any project that involves large-scale earth movements (such as for highways, cities, ports, canals, industry, sewerage and water supply, and agriculture, as well as reservoirs) can affect cultural sites, it is not clear why the need for cultural rescue was identified mostly in the preparation of hydroprojects. Third, research for this paper was made difficult by the inconsistency of the storage and retrieval systems for project data. No two Regional Information Centers catalog and file cultural information in the same manner. In many cases where a survey was undertaken, the report is not available; all that can be found is a notation in a supervision report. Some degree of uniformity is essential for efficiency. Cultural property impact assessments should be completed and submitted even if nothing of significance is found. In this way, it will be possible when carrying out monitoring and evaluation functions to tell whether the site was surveyed or studied and what, if anything, of cultural interest was uncovered.

Finally, many of the projects that incorporated an archaeological study manifested these problems:

- (a) Failure to budget adequate funds in the loan or credit agreement required for the archaeological necessities;
- (b) Lack of effective communication between the archaeologist and other technical staff;
- (c) Occasional conflict among institutions in the borrowing country about responsibility for the projects' archaeological necessities;
- (d) Failure of archaeologists to complete their work on time or to comply with terms of contract.

The same type of problems will be associated with other types of cultural property unless guidelines are followed (see below, and the Bank Policy, "Management of Cultural Property in Bank-financed Projects").

5. POLICY GUIDANCE

The World Bank's general policy regarding cultural properties, as set out in an internal policy document, is to assist in their preservation, and to seek to avoid their elimination.

Specifically,

(a) The Bank normally declines to finance projects that will significantly damage nonreplicable cultural property, and will assist only those projects that are sited or designed so as to prevent such damage.

(b) The Bank will assist in the protection and enhancement of cultural properties encountered in Bank-financed projects, rather than leaving that protection to chance. In some cases, the project is best relocated in order that sites and structures can be preserved, studied, and restored intact in situ. In other cases, structures can be relocated, preserved, studied and restored on alternate sites. Often, scientific study, selective salvage, and museum preservation of cultural property before site destruction are sufficient. Most such projects should include the training and strengthening of institutions entrusted with safeguarding a nation's cultural patrimony. Such activities should be directly included in the scope of the project, rather than being postponed for some possible future action, and the costs are to be internalized in computing overall project costs.

(c) Deviations from this policy may be justified only where expected project benefits are great, and the loss of or damage to cultural property is judged by competent authorities to be unavoidable, minor, or otherwise acceptable. Specific details of the justification should be discussed in project documents.

(d) This policy pertains to any project in which the Bank is involved, irrespective of whether the Bank is itself financing the part of the project that may affect cultural property.

The qualities valued in many cultural properties are inherent in the properties themselves. An area may be valued specifically because it has remained relatively unmodified by human activities for millenia, because it has qualities that are appealing to the pantheon of a society, or because an important cultural event occurred there. In some cases, an archaeological or paleontological site may be so important to science that it is best to allow present and future scientists to examine it in depth. In such cases, only the relocation or redesign of the development project will fully preserve the valued qualities of the site. Development benefits are not entirely lost by such a shift in focus, for prolonged scientific investigation will bring some income to the local economy.

In considering a development activity that will directly affect a valuable and immovable cultural property, every effort should be made to relocate the project or to pursue other avenues for solving the development need. Some sites are so extraordinarily valuable that only the most compelling reasons should require their destruction or degradation. If the

relocation of the project is not possible, then the site should be incorporated into the development scheme in such a way as to maintain all or some substantial part of its valued qualities.

Occasionally, the value of the cultural property may not be inherent in the property itself but in some movable, man-made structure or in the information that can be gained from study of the site. Often, a site can be developed after archaeological study and excavation without a loss to the cultural patrimony. A historical building or a religious shrine may sometimes be moved to a new, suitable location without harming the valued qualities. In these cases, decisions must be made about the relative merits of relocating the project, phasing the project to allow for scientific study, redesigning the project so as to incorporate the structure, or relocating the structure.

Types of Projects Needing Cultural Property Components

Any project that includes large-scale earth movements or environmental changes (such as flooding) is a candidate for a cultural property component. Such projects are the most likely to disturb cultural property because they alter large areas of land. Agriculture, transport, mining, and reservoir projects are candidates. Even small projects that change the landscape or demolish buildings (for example, urban or industrial development projects) may also need cultural property components. Tourism projects may accommodate cultural property components because they offer an opportunity to assess, restore, and preserve important cultural sites.

Types of Cultural Property Components

Project Design or Siting Change. Except for training and institution building, all of the following cultural property components involve preservation of cultural property and therefore may require the relocation or redesign of a proposed development project. Changes that are minor in individual projects can cumulatively result in major alleviation of the international problem of cultural property loss. For example, the relocation of Yugoslavia's Visegrad Hydro dam 2.1 kilometers upstream of the Mehmed Pasha Sokolovic bridge (1571-1577 A.D.) saved it from destruction. India's Omkareswar dam was also relocated 0.5 kilometers upstream in order to avoid inundation of the important Jyotirlinga pilgrimage shrine (Datable to 1024 AD).

Archaeological or Paleontological Study or Salvage. Often the chief value of cultural property lies in the scientific information that can be gleaned from its study. In this case, a useful cultural property component is the scientific study of an area. Because the procedures of archaeological and paleontological study normally are precise and demanding, development projects are best located away from an important archaeological or paleontological site so as to afford scientists time to study the site adequately. When it is not possible, despite best efforts, to locate the project away from a site, a second-best alternative is to phase the project so as to allow time for a telescoped scientific investigation, termed salvage, or rescue. Salvage or rescue work follows the above sequence, but the process is more rapid, and the focus is directed on the more important data.

The primary goal of salvage or rescue archaeology is rapidly to secure and interpret the important data that would otherwise be lost as a result of construction of land-use projects. Salvage archaeology entails great care because the material and the data in an archaeological site are irreplaceable, and no two archaeological sites, even if adjacent, are exactly the same. The archaeologist, when excavating, is in essence (and paradoxically) destroying both the context and the site while compiling an archive of information, data, and artifacts to document this context for posterity. Excavation is only the first step. Equally important is the classification, analysis, interpretation, and publication of the excavated materials in order to develop or enhance knowledge of the past behaviors of previously unknown predecessors of contemporary societies.

How much archaeological salvage is "enough?" This dilemma can be partially resolved by convening an international committee of experts to review an archaeological reconnaissance. An early part of the process is to determine which data are essential, what items ought to be recovered and studied, and the manner of investigation. If more than one site is involved, the problem becomes more complex. The archaeologist then needs to ascertain the previous patterns of livelihood and settlement, to search for relationships between settlements and the subsistence possibilities of the local habitat (water source, arable land, wild foods, or other natural resources), and to seek evidence for links with larger networks (such as long-distance trade or religious ideas). Such goals can only be achieved if surveying, mapping, sampling, and excavation strategies are integrated into a program in which the retrieval of data is systematic and scientific. Some institutions with expertise in salvage archaeology are listed in Annex D.

In broad terms, salvage or rescue archaeology deals with the following sequence of activities:

- (a) A regional reconnaissance survey; mapping and sampling of all sites; literature survey; contacts with farmers, other archaeologists, local inhabitants, and nongovernmental organizations; in some cases, convening of an "archaeological hearing" to canvass diverse views;
- (b) Evaluation of sites in or near the project area to determine their relative scientific importance and potential for preservation, possibly including a test-pit to help date surface collections; evaluation may become a form of triage in which (i) some sites can be abandoned with no further study and no significant loss to the nation, (ii) some sites are studied or recorded and then abandoned, and (iii) some sites merit special protection or removal;
- (c) Determination of the impact of the proposed economic development project on such sites;
- (d) Preservation of significant sites in place, to the extent project design allows or can be modified to allow it;
- (e) Excavation and retrieval of data from significant sites likely to be affected (a classification scheme for a uniform data collection format can be found in Schneider and Dittmar [1981]);
- (f) Maintenance, preservation, and study of significant sites and representative artifacts (for example, curated in the National Museum, the project museum, or local university); and

- (g) preparation, publication, and dissemination of scientific reports (guidelines concerning dissemination of archaeological results may be found in Cleere [1982]).

These activities are best followed in sequence. Proper identification and evaluation of sites (or site complexes or networks), for instance, depend on adequate mapping and sampling of all important features. Such a program should be closely coordinated with the timing of implementation of the economic development project to enable the archaeologist to finish all necessary mitigatory work before physical alteration of a particular site begins. Most scientists are willing to work under deadlines, acknowledging that it is better to do limited excavation to gain some information than to foreclose the possibility of inquiry entirely. Two or three years' lead time is typically required for salvage or rescue work.

Restoration and Preservation of Historical or Religious Structures. If an important cultural structure is encountered in a Bank-financed project, one of the most useful cultural property components is the restoration and preservation of the structure. Tourism-related projects may utilize this type of component, although it is by no means restricted to them. In many cases, it may be desirable to support the restoration and preservation of cultural property encountered in other types of projects, even when the component does not directly benefit the rest of the project but will help preserve the national or international patrimony that would otherwise be lost. If a development project cannot be sited, despite best efforts, so as to avoid and preserve important historical and religious structures, relocation of the structures may be necessary. For example, several shrines in the Indian states of Madhya Pradesh and Gujarat will be relocated in order to save them from inundation by the Narmada Irrigation and Hydropower project.

Preservation of Tribal Sacred Sites. A cultural property component might also include protection of a tribal sacred site. Such a site is a place of great spiritual or cultural value to a tribal or traditional society. It should be treated with the same respect accorded sites of significance to a dominant or world religion. Tribal sacred sites can encompass places as diverse as a small spring near which sacred plants grow or an entire mountain range. More specific policy guidance can be obtained from the internal Bank policy document, "Tribal People in Bank-Financed Projects," and the companion paper, Tribal Peoples and Economic Development (World Bank 1982).

Preservation of Sites of Natural Uniqueness. Natural sites considered cultural property include the more spectacular natural features of the planet--certain mountains, islands, canyons, volcanoes, geysers, waterfalls, glaciers, and unusual or unique wildlands. A cultural property component might entail the preservation of one of these types of sites. Since the preservation of this type of cultural property would be little different from the preservation of natural areas or wildlands in general, guidelines and procedures are provided in the Bank policy and the companion publication both entitled "Wildlands: Their Protection and Management in Economic Development."

Training and Institution Building. Another useful cultural property component is training and institution building. Many Bank member countries have limited expertise in the technical or legal aspects of preserving cultural property. Relevant government agencies, if they even exist within larger ministries, are often inadequately funded, trained, or staffed to deal with the needs for preservation, maintenance, and study of cultural property.

Countries whose development projects continually encounter major archaeological phenomena may improve the safeguarding of the nation's patrimony by creating an Office of Archaeology (or Historical or Cultural Preservation) within the implementing ministries (for example, Ministry of Civil Works or Ministry of Highways). This office can be created by training one or two staff members a year and by supporting the central government's archaeological agency, Ministry of Culture, or National Museum system. Failing that, support to the relevant university archaeology department can be very useful.

6. PROCEDURAL GUIDANCE DURING THE PROJECT CYCLE

The management of cultural property of a country is the responsibility of its government. Regional operations staff, however, are responsible for raising cultural property issues with borrowing governments at the earliest stages of project identification as well as informing them of World Bank policy. Responsibility for implementing cultural property projects or components also rests primarily with regional operations staff, including the Environment Division within each Region, with advice and operational support provided by the Environment Department (ENV) in the Sector Policy and Research Office (PRE). Much of this is detailed in the policy document, "Environmental Aspects of Bank Work." At identification, projects being considered are reviewed by regional staff in conjunction with ENV to identify, as early as possible, the need to avoid damaging cultural property or to enhance, preserve, or salvage such property as part of the project. To determine what is known about the cultural property aspects of a proposed project site, Bank staff should consult the concerned government agencies (Annex D), nongovernmental organizations (Annex E), or university departments. ENV maintains contacts with such entities and will assist upon request. In this manner, it will often be possible to learn quickly whether a proposed project site contains archaeological or paleontological artifacts, important historical or religious structures, a sacred site, or a site of natural uniqueness. If there is any question of cultural property in the project area, a brief preproject reconnaissance survey should be undertaken in the field by a specialist, e.g., an archaeologist or paleontologist from the National Museum, Ministry of Culture, National University, or similar institution. This brief survey should indicate the nature and extent of any cultural property in the general project region. The results of any consultations and surveys should be recorded on the form provided in Annex F and filed in an accessible manner. The results of this exercise should be mentioned in the Project Brief and any discoveries of cultural property reported to the responsible government authority.

During preparation, project staff (or their consultants) may assist the borrower or project sponsor in carrying out the cultural property studies. It is particularly important to gather information to help decisionmakers determine whether to redesign or relocate a project, namely, the qualities that make the site culturally valuable and any pertinent political, legal, or scientific issues. ENV can recommend consultants or other specialists who can investigate cultural property issues, carry out necessary archaeological studies, oversee the restoration or conservation of historical structures, or help design other appropriate cultural property project components (Annex E). When the necessary studies are completed, the Project Brief should highlight the results of the cultural property study. If the decision is made that damage or destruction of cultural property is acceptable, the Brief should explain the justification, together with the mitigatory measures prescribed.

As part of appraisal, project staff assess the planned cultural property and other environmental measures. The Staff Appraisal Report specifically describes any planned cultural property measures, including budgets and agency responsibilities. The project authority needs to

designate a coordinator to be responsible for all cultural property aspects and to act as a liaison with the Ministry of Culture or the National Museum. While ENV is available for consultation and assistance at any stage of the project cycle, it is also responsible for reviewing projects at the Yellow Cover stage. In addition to the Staff Appraisal Report, the Memorandum of the President also presents any significant environmental--including cultural property--issues and mitigatory measures. Once cultural property measures are identified as necessary, timely action should be ensured by conditionality, such as loan effectiveness or disbursement.

Supervision missions should routinely review implementation of the cultural property component with the borrower. Such aspects are handled in the same manner as as for environmental issues in general. Because any earth moving may damage an archaeological site, all bulldozer operators should be encouraged to stop as soon as they detect any unusual feature, at which time the project authorities should call in relevant specialists.

7. SUMMARY AND CONCLUSIONS

Culturally significant areas and important archaeological sites are found all over the world. Clearly, it is not feasible to preserve every area or structure or to recover, document, and maintain detailed information on every archaeological find. The single-sheet "Cultural Property Survey Form" (Annex F) that describes the area's salient cultural aspects, however, is easily coded and stored. The need to systematically survey and record findings cannot be overemphasized.

The procedural guidelines for the survey, salvage, excavation, or preservation of an archaeological site or culturally significant area are simple:

- (a) Never destroy before a professional survey is done;
- (b) Always survey, even if it is thought that nothing of cultural significance is present;
- (c) Treat every cultural site and artifact as a finite resource that can never be replaced;
- (d) Report all cultural discoveries to the responsible authorities;
- (e) Never dig an archaeological site or attempt to rehabilitate or preserve an important historical building or religious shrine without professional assistance.

The guidelines and the suggestions outlined in this report, combined with an effort to work with the host country in the future of its cultural resources, should allow for the proper treatment and salvage of a significant number of the cultural sites encountered in future projects. Adherence to these principles and policies will ensure successful cooperation of the Bank, the borrower, archaeologists, and cultural experts to preserve at least a sample of the country's cultural patrimony. Not only will this cooperation promote preservation of important historical and religious structures, scenic or sacred natural areas, and valuable scientific information, it will also improve the economic development process, assist developing nations, and serve to enhance the quality of the Bank's and the borrower's investments.

PART II

BANK-ASSISTED PROJECTS WITH CULTURAL PROPERTY COMPONENTS

BRAZIL

Project: Carajas Iron Ore.

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: LN 2196-BR; signed August 13, 1982.

Total Project Cost: US\$3.036 billion.

Cost of Cultural Component: Not specified.

General Project Description: A large, open-cast iron ore mine in the Amazon jungle; some improvements on site; an 890-km railroad (completed 1985); a new port near Sao Luis de Maranhao.

Cultural Property Component: The Museu Goeldi of Belem carried out an archaeological reconnaissance that revealed several important sites, including a burial cave. A second phase is studying the sites and is salvaging archaeological materials and specimens. A museum is being constructed on site, but most material will be preserved in Belem.

BRAZIL

Project: Northwest Region Development and Programs (Polonoroeste).

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: LNs 2061-BR, 2062-BR, 2116-BR, 2353-BR and 2060-BR;
signed December 15, 1981, same, May 12, 1982, November 3,
1983 and December 14, 1983.

Total Project Cost: US\$178.4 million (as of June 1984).

Cost of Cultural Component: No expenditure.

General Project Description: Upgrading of highway (BR364), with
land-settlement, agriculture, environmental, tribal, and health components.

Cultural Property Component: A nationally important site "Abrigo do Sol"
was identified before appraisal. This is a long line of caves at the
bottom of a rock escarpment. Evidence of long occupancy: 9,000-12,000
years old from C¹⁴ dating. One C¹⁴ dating suggested 14,000 years which
makes this possibly one of the oldest archaeological finds in South
America. The site is located just south of Vilhena on the Galera river
(tributary of the Guapore) (National Geographic 155 (1) p. 60, 1979
January). The site was reconnoitered by Dr. Eurico Miller before project
preparation. Current status unknown.

BRAZIL

Project: Recife Metropolitan Region Development.

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: LN 2170-BR; signed June 28, 1982.

Total Project Cost: US\$387.8 million.

Cost of Cultural Component: US\$5.16 million; 1.5% of total.

General Project Description: Urban infrastructure improvement of services and strengthening of metropolitan planning and management.

Cultural Property Component: Archeological study and the preparation of an integrated environmental land plan for the island of Itamaraca. Upgrading of transport infrastructure of access to beaches and monuments such as Igarrasu and Vila Velha, 16th century church on the island of Itamaraca; construction of camping facilities on the edge of the Fort Orage and of beach facilities Balneario. Restoring of Vila Velha, of the Convent of San Antonio and of the Posada of Sagrado Corazon.

EGYPT

Project: New Lands Development.

Stage I
(24,000 fd).

Status: Active.

Stage: Implementation; completion expected December 1987.

Loan/Credit: CR 1083-EG; signed February 2, 1981.

Total Project Cost: US\$193.0 million.

General Project Description: This project assisted with the reclamation of 24,000 feddans of calcareous soils in the West Nubariya (desert) area, principally with irrigation and drainage. It has taken place in two phases - Phase I (7,000 fd.) and Phase II (17,000 fd.). It also assisted with the settlement of 4,000 smallholders in 20 villages and provided infrastructure, social services, bilharzia control, and housing.

Stage II
(12,000 fd).

Status: Inactive.

Last Stage: Feasibility.

Estimated Cost of Cultural Component: US\$370,000.



Fig. 2. Artifacts at Abu Mena.
In Situ Statues, Pottery, and Ampules.



Fig. 3. Eastern Chamber of Abu Mena.
View towards the South Wall.

Cultural Property Component: The Phase II area of this development project contains "Abu Mena," a large and well-preserved Roman site (Figs. 2 and 3). The site is thought to have been the most important early Christian pilgrimage site in Egypt during the late Roman period, having received international recognition as the tomb of Saint Menas. UNESCO has placed the site on the "World Heritage List." Protective works and measures will be required to prevent damage to the ruins from the rising groundwater and from the settlers themselves.

Remarks: For economic and other reasons, it was decided to include the cultural property component in Stage II. The Egyptians are still implementing Stage II, although it is no longer in the World Bank lending program.

EGYPT

Project: Luxor Tourism.

Project Status: Active.

Project Stage: Implementation; completion expected December 1987.

Loan/Credit: LN 909-EG; signed June 13, 1979.

Total Project Cost: US\$59 million.

Cost of Cultural Component: US\$8.85 million; 15% of total.

General Project Description: Tourism project involving infrastructural improvements, hotel construction, renovations to the Egyptian Museum in Cairo, and protection/preservation of archaeological monuments.

Cultural Property Component: This tourism project includes infrastructure improvements in the city of Luxor and at the archaeological sites on the west bank of the Nile. Work on the West Bank consists of paving of access roads and parking areas, site cleaning, and consolidation of walkways at three of the main mortuary temples, Rameses II (Fig. 4), Rameses III, and Seti I. The project also includes protective works in seven tombs in the Valley of the Kings. These tombs receive the greatest visitor flows and are as a result most vulnerable to deterioration. The major deterioration is due to tourist activities in the tombs and to biological agents (fungi, algae) growing on rock paintings. A pilot system of hardened glass tunnels is being installed in the 3,500-year-old tomb of Nakt to protect the murals and reliefs from tourists, as well as humidity, dust, water, and air pollution. The system, developed in Sweden, consists of modular elements with built-in ventilation and air-conditioning. Other improvements include a visitors' center, audio-visuals, walkways, parking areas, better lighting to reduce fading of paintings, repairs to three minor temples, cleaning of the sacred lake at Karnak, upgrading of the Luxor Hotel and surrounding areas, and renovation of the Egyptian Museum in Cairo.

Remarks: The project shows comprehensive understanding and concern for the maintenance of the unique historic and cultural assets of Egypt.



Fig. 4. Abu Simbel, Mortuary Temple of Rameses II.

EGYPT

Project: South Hussaniya (Lake Manzala).

Project Status: Inactive.

Last Project Stage: Pre-appraisal.

Estimated Total Project Cost: US\$425 million.

Cost of Cultural Component: Not specified; borne by the Borrower.

General Project Description: Irrigation, drainage, settlements (10,000 families) water supply, etc., in order to reclaim about 73,000 feddans (ca. 30,000 ha) of heavy deltaic soils.

Cultural Property Component: The project area includes the Tanis archaeological site, about 700 feddans in area, dating from 1300-1100 BC (21st - 23rd dynasty). Excavation, which started in 1935, still continues by a joint Franco-Egyptian team. The proposed project will improve accessibility for tourists.

Remarks: Although the World Bank is no longer financing, the Egyptians have found other donors and are continuing with the Project.

FIJI

Project: Monasavu Wailoa Hydroelectric Power I.

Project Status: Completed December 1983.

Loan/Credit: LNs 1596-FIJ and 1859-FIJ; signed November 30, 1978 and July 29, 1980.

Total Project Cost: US\$155.7 million.

Cost of Cultural Component: No expenditure.

General Project Description: The integrated project, incorporating two Bank loans, included construction of a 85-m high dam, a water conductor system and the installation of four 20-MW generators.

Cultural Property Component: Presence of many sites of varying sizes that contain Yavu (house mounds) and scattered Ra-style pottery, which indicates occupation within the last 200 years by a large population. This artifact inventory indicates that there is the possibility of many as yet undiscovered occupation sites. Of the sites found, several have already been disturbed either by prior logging tracts or drill holes, helicopter platforms, temporary accommodations, toilet pits, and surveyors' lines. This is unfortunate and the loss is permanent. With minor alterations of proposed roads, the remaining sites can be protected from damage or destruction and can be properly surveyed and excavated, and valuable information can be obtained. Much can be interpreted about the history and culture of the country from these measures. Although the sites are fairly recent (projected dates of 1700-1900 A.D.), they exhibit impressive use of stone to line structures and caves and as a fortification of ditches and in defensive points. The presence of burial caves is important. The sites do not seem to be directly threatened by the flooding but rather are being destroyed by the secondary work, such as the housing of workers, truck routes, landing pads, and latrines.

Remarks: An example of site loss due to precautions taken too late which could serve as a future guide of what will happen if surveys are not done first. Ultimate site loss is permanent and irreversible.

GUATEMALA

Project: Chixoy Power.

Project Status: Active.

Project Stage: Implementation; completion expected by end of 1987. The Chixoy hydro plant started commercial operation in March 1986.

Loan/Credit: LN 1605-GU; signed July 21, 1978.
Supplemental loan LN 1605-GU; signed March 22, 1985.

Total Project Cost: US\$890.7 million (as of June 30, 1986).

Cost of Cultural Component: Not specified.

General Project Description: Construction of 108-m high rockfill dam and a powerhouse with five 60-MW generating units on the Chixoy River, upstream of the Usumacinta confluence; construction of 69KV transmission facilities and a 230KV transmission line to Guatemala City; consulting services.

Cultural Property Component: Agreement dated January 1977 was reached between INDE and the Instituto de Antropologia e Historia on a program to safeguard archaeological treasures that might be found in the Chixoy project area: stone ball courts, stelae, pyramids, burial sites, temples, 300-900 AD Classical Maya; 1200-1524 Maya-Quiche.

HONDURAS

Project: Copan Tourism.

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: LN 1673-HO; signed June 25, 1979.

Total Project Cost: US\$39.5 million.

Cost of Cultural component: US\$1.9 million; 4.8% of total.

General Project Description: Tourism project including airfield construction, development of Copan archaeological park, and increased employment.

Cultural Property Component: Copan is a Mayan center in ruins before the project, but with great potential for tourism. The work includes construction of a visitors' center, training of guides, extension of the park, expansion of the museum, and completion of an ongoing six-year program for exploration, consolidation, restoration, and preservation of monuments (Fig. 5). The work will enhance the archaeological site and make it more appealing to visitors interested in culture and history. The Mesoamerican archaeological sites exert broad public appeal and generate much capital.



Fig. 5. Stone Cacuras at Copan.

HONDURAS

Project: El Cajon Hydroelectric.

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: Ln 1805-HO; signed March 27, 1980.

Estimated Total Project Cost: US\$493.19 million.

Cost of Cultural Component: US\$1.45 million; 0.3% of total.

General Project Description: Development and construction of a 292-MW hydroelectric power facility.

Cultural Property Component: Early archaeological reconnaissance formed part of the environmental assessment study, which located many archaeological sites. Salvage archaeology began and yielded more than 120 prehistoric pre-Columbian settlements. Conditions were favorable: little erosion or modern agricultural destruction. Most of the sites were small, but several were larger in size. All the sites will be flooded after closure of the dam, thus the emphasis was to excavate and salvage as much as possible. These sites are significant because so little is known archaeologically about Honduras. The sites could be the result of a crossroads of trade and the interaction of several prehistoric groups of people; they could indicate a major sociopolitical system. The artifacts were primarily ceramics and worked stone. Time allotted was adequate, especially due to construction delays. This enabled significant excavation to take place, and recovered specimens and data are now being processed for interpretation. Excavation of the "Iglesia Compound" site revealed one of the largest in situ collections of ritualistically deposited carved jade materials ever recovered in the New World.

INDIA

Project: Narmada (Madhya Pradesh) Irrigation and Hydropower.

Project Status: Active.

Project Stage: Appraisal, due to Board in the fall of 1988.

General Project Description: A series of three major hydropower dams and two irrigation projects along the lower Narmada river.

Cultural Property Component: The Archaeological Survey of India has been contracted by the Government of Madhya Pradesh to survey the entire Narmada Valley (MP), with special attention to the area to be inundated by any of the various reservoirs. One dam (Omkareswar Dam) has been relocated and redesigned 1/2 km upstream in order to avoid the area of the inundation of the important Jyotirlinga pilgrimage shrine on Mandhata Island at Omkareswar (Datable to 1024 AD). Several lesser shrines will be relocated both in Madhya Pradesh and in Gujarat. A pilgrimage path along the Narmada River will also be relocated.

Comment: There are two Bank/IDA projects under appraisal, Narmada Sagar Dam and Power Project and Narmada Sagar Area Development Project (for resettlement of displaced people and environmental compensatory measures). The irrigation component and the Omkareswar and Maheshwar dams and hydro-power stations are not being planned at present.

JORDAN

Project: Jordan Valley Irrigation - (Maqarin Dam) Stage II.

Project Status: Inactive.

Last Project Stage: Pre-appraisal.

General Project Description: Construction of a 148-m dam with about 400 million cubic meter storage capacity, a 22-MW hydro power plant, and an irrigation system in True. Nothing in files since 1980.

Cultural Property Component: Salvage plan was being developed. Early survey showed 32 archaeological sites dated from lower paleolithic to late Islamic. Excavation divided into two phases: phase I includes all sites endangered by the dam, the excavation and salvage of nonrenewable archaeological materials from ancient human occupation areas. Since the work is, or was at that time, considered urgent, only the most important sites will be excavated, especially the prehistoric sites. Phase II includes the excavation of sites not in immediate danger by the dam. The valley reflects important periods in the history in Jordan, and some of the sites represent periods for which there are gaps in the cultural history.

JORDAN

Project: Tourism.

Project Status: Completed, June 1982.

Loan/Credit: CR 639-JO; signed August 12, 1976.

Total project cost: US\$16.2 million.

Cost of Cultural Component: US\$1.103 million; 6.8% of total.

General Project Description: Development of an antiquities-based tourism project for Jordan including associated infrastructure, construction of a hotel and visitors' center, flood protection of archaeological sites and the monuments at Petra and Jerash. Jordan's paucity of natural resources means that development of services such as tourism become important.

Cultural Property Component: Jordan's rich archaeological history is exploited in this project. The archaeological component includes conservation and restoration at the historic sites of Petra and Jerash (Figs. 6 and 7), and resettlement of Bedouin families residing in the Petra Basin monuments. The emphasis is prevention of deterioration of sandstone tombs and buildings due to salt carried by rain and wind. The archaeologists and restorers used Portland cement to repair damages which



Fig. 6. Hadrian's Arch at Jerash.

Just before the entrance into Jerash stand the remains of the arch that commemorated the Emperor Hadrian's visit to the Graeco-Roman city. Sometimes called "The Pompeii of the Middle East," Jerash is one of Jordan's great attractions, with column-lined streets, a forum, temples to Zeus and Artemis, baths, reservoirs, and a coliseum.



Fig. 7. The Treasury at Petra.

This is the crowning monument to Rome's occupation of Petra, the Nabataean stronghold in the south Jordan mountains. The city, which had been rock-cut by its Nabataean founders into the tombs and monuments of a death cult, was re-sculpted by Rome into a Graeco-Roman architectural marvel. Most ornate of all was the Treasury, so called because its finial dome is believed to contain a Pharoah's hidden gold.

caused color mismatch and is not traditional to the period of the buildings. A self-guided tour was prepared which includes all the sites; the paths around the sites have been improved; and a sound and light program has been added to Jerash. Petra was capital of the Nabateans from at least 200 BC to 106 AD, following which it became an important Roman provincial center. Jerash was an important center from at least 200 BC (and possibly much longer: 6000 BC is mentioned) until the 742 AD earthquake.

Remarks: Project illustrates problems occurring when there is little communication between archaeologists and restorers, particularly when works are carried out too quickly and with limited supervision by responsible departments. This allowed the use of nontraditional materials in the restoration. Problems of machines for excavations, roads built too close to the monuments, and encroachment of dwellings all constitute typical problems to address.

KENYA

Project: Power V, Kiambere Hydroelectric Power.

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: LN 2359-KE; signed June 28, 1984

Total Project Cost: US\$467.8 million.

Cost of Cultural Component: Not specified; borne by the Borrower.

General Project Description: Construction of a 100-m high rock and earthfill dam and a saddle dam with a concrete lined spillway, an intake, and an underground powerhouse with two 70-MW turbines.

Cultural Property Component: An archaeological survey conducted in the project area during the pre-construction environmental impact study uncovered at least five important sites of great interest and importance to the study of Kenyan prehistory as they represent previously unsuspected facies of Neolithic culture in East Africa (Fig. 8). Prior to this survey, no archaeological investigations had been conducted in the project area. A research program and protective measures were provided and executed. Archaeological salvage was proposed for four sites as they would be lost by inundation. The fifth area, a rock gong (a boulder wedged in such a way that it can vibrate and produce a clear ringing tone when struck with a hard object), was preserved intact.

Numerous traditional sites and shrines also existed in the project area. Local people strongly valued these sites and feared the repercussion of damage, inundation or desecration of any of these sites. Each site of importance was identified before construction and protected so as to assure continued access by local people.

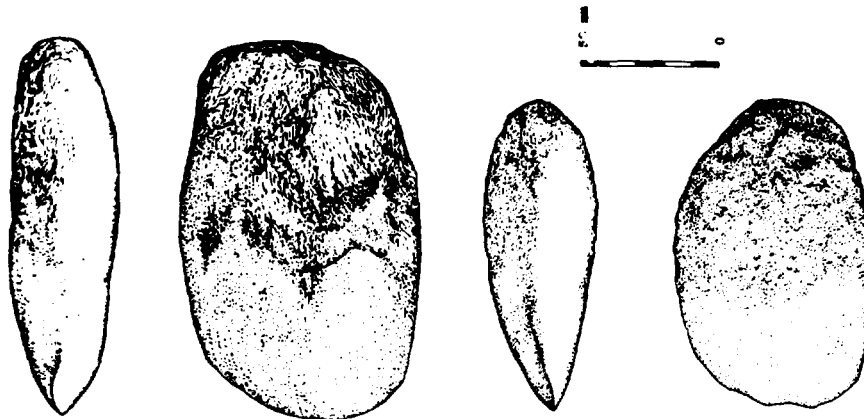


Fig. 8. Neolithic Ground Stone Axes Collected during the Pre-construction Environmental Impact Study.

REPUBLIC OF KOREA

Project: Kyongju Tourism.

Project Status: Completed June 1980; completion mission August 1980;
Project Performance Audit Report June 1985.

Loan/Credit: LN 953-K0; signed January 4, 1974.

Total Project Cost: US\$55.6 million (as of June 12, 1981).

Cost of Cultural Component: Not specified.

General Project Description: Tourism project with construction of hotels, sewage and water systems.

Cultural Property Component: The preservation of the city of Kyongju, which was the capital of the Silla dynasty approximately 1,000 years ago. The site contains major cultural remains of the Silla and Yi dynasties, both artistic and religious, including an observatory built in 634 AD (the oldest in Asia), royal tombs, shrines, temples (Fig. 9), pagodas, and the Bulguk temple with a 25 ft. gold Buddha from the 8th century. Nearby is Sokkuram cave, with a valuable stone Buddha and friezes, and Mt. Namsan, with 55 temple sites and royal tombs. The remains were all in a state of decay despite their cultural importance. The component includes restoration and preservation and museum has been built. The great interest Koreans evidence in their history has led to the promulgation of new national preservation laws.



Fig. 9 Pulguk-sa Temple. Built in the mid-8th century, today Pulguk-sa is Korea's most often-visited temple.

LESOTHO

Project: Lesotho Highlands Water Engineering.

Project Status: Active.

Project Stage: Consideration by Executive Directors in December 1986.

Estimated Total Project Cost: US\$51 million.

Cost of Cultural Component: Heritage study about US\$75,000.

General Project Description: Construction and operation of water conveyance scheme permitting export of water to the Republic of South Africa, together with hydropower generation for domestic consumption. Construction in four phases over 30 years of five to six dams as well as up to 120 kilometres of tunnel.

Cultural Property Component: Cave paintings, cave middens, rock shelters, and possibly fossilized animal footprints. GOL's Protection and Preservation Commission reconnoitered part of the project area during the project feasibility stage. A cultural heritage study which would identify sites and provide the basis for salvage or protection of the priority sites is included in the engineering project and will develop the design of the works of the first phase. The first phase construction project will then provide for the salvage or protection of the priority sites identified by the cultural heritage study as being affected by the implementation of the project.

NEPAL

Project: Kathmandu Valley Tourism.

Project Status: Civil works completed October 1974; Hotel opened for guests October 1977; Project Performance Audit Report - June 1979.

Loan/Credit: CR 291-NEP; signed March 22, 1972.

Total Project Cost: US\$5.3 million.

Cost of Cultural Component: US\$493,250; 9.3% of total.

General Project Description: The project entails "the remodelling and extension of the existing 90 room Hotel de l'Annapurna into a 241-room hotel of first-class international standards, and the construction of a new second-class hotel of 120 rooms, to be called the Yak & Yeti Hotel." The hotels will be situated in the city of Kathmandu near the ancient cities of the Kathmandu Valley.

Cultural Property Component: Conservation projects include the construction and equipping of a conservation laboratory at the National Museum, Kathmandu, and the training of a Nepalese conservation staff by international experts to the point where a self-generating Nepalese conservation capability has been created; second, the restoration of the Hanuman Dhoka Palace complex in the Durbar Square, Kathmandu, to serve as a demonstration and on-site training, historic preservation project for Nepalese architect-restorers, material conservationists, and craftsmen, also to the level where such work can be carried out in future entirely by the Nepalese themselves.

NICARAGUA

Project: Earthquake Reconstruction.

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: CR 389-NI; signed June 6, 1973.

Total Project Cost: US\$20 million.

Cost of Cultural Component: US\$14,100; less than 1% of total.

General Project Description: Earthquake reconstruction in Managua.

Cultural Property Component: Salvage archaeology of a ceramic site on Lake Nicaragua that was revealed after the earthquake. Ceramics varied from elaborately to modestly decorated and may have indicated the largest habitation area of prehistoric times. As they were considered so important from the scientific and cultural points of view, a salvage archaeology was judged necessary before reconstruction of the area. However, the work was to be conducted so as not to interfere with the project. Details of the establishment of civilization in what is now Nicaragua was a major unknown, and these sites and their material remains enabled archaeologists to link the present to the past in a continuum. This is especially vital for Nicaragua since vandalism and pillage of cultural monuments and sites is a major problem. This project is believed to be the first in which Bank funds were provided for an archeological component. Although valuable work was conducted while avoiding delays with the reconstruction, the location of salvaged materials remains uncertain.

PAKISTAN

Project: Kalabagh Dam.

Project Status: Active.

Project Stage: Appraisal tentatively scheduled for 1988.

Estimated Total Project Cost: US\$4.0 billion (1985 est.).

Cost of Cultural Component: Not specified.

Brief Project Description: A major, 81-m high dam across the Indus river, 120 miles downstream from the Tarbela Dam to generate 3,600-MW (ultimate), and to control floods. Resettlement of up to 100,000 people from the 9,375 million cubic meter reservoir (useful storage).

Cultural Property Component: The 12,000-year-old town of Makhad (population 4,500) will be inundated. Prof. Dani, Islamabad, is designing salvage with UNDP assistance.

PAKISTAN

Project: Lahore, Urban Development.

Project Status: Active.

Project Stage: Implementation; completion expected December 1987.

Loan/Credit: CR 1348-PK; signed May 24, 1983.

Total Project Cost: US\$24 million.

Cost of Cultural Component: US\$4.7 million; 19.5% of total.

General Project Description: Urban development of City of Lahore: the planning and management of the city after urban renewal.

Cultural Property Component: Upgrading of the Walled City of Lahore (Fig. 10), the major historic city of Pakistan. First the seat of Hindu rulers, it then became a fortified city under rule of the Turks and Afghans. With the ascendancy of the Mughals in the 17th and 18th centuries, it became a regional center. In the 19th century it came under British rule. The major area of historic and cultural material, the Walled City, was in danger of collapse due to physical weakness and extreme overcrowding. This area, built in the 11th century in the Islamic tradition, contains much of architectural importance. Mounds of previous structures form its foundations which have become weak due to leakage of water. Poverty and overcrowding exacerbate the danger. This component includes the renovation and strengthening of the foundations and the provision of loans for house reconstruction. The site is the heart of Pakistan's cultural heritage and inspires strong ties.



Fig. 10. The Historic City of Lahore.

PANAMA

Project: Colon Urban Development.

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: LN 1878-PA; signed August 7, 1980.

Total Project Cost: US\$133 million.

Cost of Cultural Component: US\$0.5 million; 0.38% of total.

General Project Description: Assisting government to promote a balanced provision of jobs and services, and efforts toward poverty alleviation.

Cultural Property Component: Restoration of Fort San Lorenzo (Fig. 11), established in 1575. This includes a museum, restoration of walls, dehumidifying of vaults, and removal of vegetation.



Fig. 11. Fort San Lorenzo.

PAPUA NEW GUINEA

Project: Yonki Hydroelectric.

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: LN 2722-PNG; signed March 16, 1987.

Estimated Project Cost: US\$99.6 million.

Cost of Cultural Component: Not specified; borne by the Borrower.

General Project Description: Increase the generating capacity of Ramu I hydroelectric station through construction of a 60-m high dam above the existing station and installation of two 15-MW turbo generators in spare bays. The dam will create a reservoir covering 2,100 ha at an elevation of 1,258 m RL in the Eastern Highlands. There is potential for the later construction of two more hydrostations lower down in the Ramu Gorge giving a final total system capacity of 250-MW.

Cultural Property Component: The Ramu River Valley in the Yonki area contains 1,600 ha of flights of prehistoric, man-made terraces. The terraces predate the introduction of the sweet potato (Impomoea batatas) and were likely used to grow taro (Colocasia esculenta). Since taro is a water-dependent cultigen, the terraces were probably created to retain the soil moisture more effectively than the adjacent hillslopes. "They constitute a totally new find in Papua New Guinean archaeology and are of great significance both in the context of the Highlands of Papua New Guinea and of wider Melanesia and the Pacific."

About 6% of these terraces will be inundated by the reservoir, and another 0.5% - 4% of the terraces may be affected by quarries. In cooperation with the University in Lae, ELCOM (The Electricity Commission) engaged expertise to excavate and study the terraces, the archeological salvage and preservation component was designed before appraisal.

SENEGAL

Project: Petite Cote Tourism (Goree Island).

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: LN 1412-SE & LN 1413-SE; both signed June 7, 1977.

Total Project Cost: US\$17.9 million (as of February 1982).

Cost of Cultural Component: US\$1.52 million; 8.7% of total.

General Project Description: Development of a tourism project in Senegal including a component of Goree Island renovation.

Cultural Property Component: Goree Island has had a rich history. In the 17th century it was a significant link in the slave trade between West Africa and North America; it has been successively occupied by Portuguese, Dutch, English, and French since the 15th century. Goree Island was important during the French colonization of Senegal, and it retains much of its 18th century colonial flavor, especially in its architecture. Many of the buildings are in a state of disrepair. The island will be a major part of the tourist trade from the mainland of Senegal due to its historical and cultural importance. The project included repair of deteriorating streets as well as extension of the Hotel Relais de l'Espadon (Fig. 12) and



Fig. 12. The Hotel, Relais de L'Espandon, on Goree.
It was built as a governors mansion but
has mainly been used as a hotel.



Fig. 13. Maison des Esclaves (The House of Slaves).

This well-known tourist spot boasts the "door of no return." Built in the 1770's to hold captured slaves before they were "exported," the slave house was restored in 1966 as a museum.

rehabilitation of the ferry landing. The maritime museum and slave houses are major tourist attractions. The entire island is a cultural symbol of the days of slavery, piracy, and coastal trade by sailing ships (Fig. 13) and has been given recognition as a World Heritage Site (Annex C).

SRI LANKA

Project: Mahaweli Ganga Development III.

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: CR 1166-CE; signed November 5, 1981.

Expected Completion Date: December 31, 1988 (revised).

Total Project Cost: US\$195 million (revised).

Cost of Cultural Component: Not specified.

General Project Description: This major development project consists of hydropower and irrigation works in the catchment basin of Sri Lanka's largest river, the Mahaweli Ganga. The Bank is financing the construction of three parts of this scheme, of which one is completed (Mahaweli Ganga II, CR. 701-CE); one is ongoing (Cr. 1166-CE); and one is not yet effective (Mahaweli Ganga IV).

Cultural Property Component: Since construction of the modern irrigation system for the dry zone of the Mahaweli Valley started, extensive remains have been uncovered of ancient settlements, including previous irrigation systems. In some instances, modern designers were able to benefit from the remains to improve the siting of water tanks (reservoirs) and the alignment of irrigation canals. Government has taken the necessary steps to preserve these remains.

SURINAME

Project: Kabalebo Hydroelectric Power.

Project Status: Inactive.

Last Project Stage: Appraisal, February 1981.

General Project Description: Creation of a 1,250-km² reservoir to generate 300-MW on the Kabalebo River at Devis Falls near the Corantijn River frontier with Guyana. Project was appraised in February 1981, but on indefinite hold due to political instability.

Cultural Property Component: Several important petroglyphs were identified during the archaeological survey portion of the feasibility study. The project provided for the excision and removal to Paramaribo (National Museum) of the most significant petroglyphs. Position as of 1982: A significant archaeological component was planned but the government has not given the hydroproject itself any priority; no work is being done at present.

SWAZILAND

Project: Third Power.

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: LN 2009-SN; signed September 21, 1981.

Total Project Cost: US\$68.9 million.

Cost of Cultural Component: No expenditure.

General Project Description: Construction of a rockfill dam, a tunnel and a powerhouse with two 10-MW hydroelectric units; health and ecological studies; resettlement.

Cultural Property Component: The design of the dam was to have decreased the water flow to the scenically attractive Mantenga Falls, an important tourist attraction. An offer by the Swaziland Electricity Board to build a seal wall to spread the remaining flow was rejected by the Swaziland National Trust Commission. The dam was built as planned, but apparently has not significantly damaged the scenic beauty of the falls.

TANZANIA

Project: Kidatu Hydroelectric, Stage II.

Project Status: Completed April 1981; Project Completion Report-November 1982.

Loan/Credit: LN 1306-TA; signed August 12, 1976.

Total Project Cost: US\$109.0 million.

Cost of Cultural Component: Approx. US\$25,217; 0.2% of total.

General Project Description: Construction of concrete buttressed dam at Mtera site and the installation of two hydro units at existing powerhouses.

Cultural Property Component: The area is located in the Rift Valley, a rich area for paleolithic archaeological sites. Early surveys found late paleolithic and early Iron Age sites. The consultants recommended salvage excavation of all sites in danger of flooding and all sites above the water line due to the risks of environmental changes. Survey and sampling of stone artifacts suggest a continuous occupation for the last 300,000 years. Because many of the artifacts are comparable to those from Olduvai Gorge, archaeologists were able to determine that the Mtera sites are contemporaneous with other major African sites. Specimens recovered suggest the likelihood of trade or intragroup contact.

TURKEY

Project: Ceyhan Aslantas Multipurpose.

Project Status: Completed; Project Completion Report - June 1985.

Loan/Credit: LN 0883-TU and CR 0360-TU; both signed March 22, 1973.

Total Project Cost: US\$446.9 million.

Cost of Cultural Component: No expenditure.

General Project Description: Provision of irrigation and drainage for 97,000 ha, flood protection for 35,000 ha, and generation of 500 GWH of electric energy (138-MW) from a hydro component with reservoir.

Cultural Property Component: The important Hittite stones at Karatepe are well protected and are about 20 m above maximum flood elevation of the reservoir. Access to the ruins has been improved by the construction of the dam access road. As forecast at appraisal, the Crusaders' castle at Kumkale was submerged. The Project Completion Report notes that it was rapidly disintegrating and was one of many in the region. No archaeological salvage was noted.

TURKEY

Project: Karakaya Hydropower.

Project Status: Active.

Project Stage: Implementation; completion expected December 1988.

Loan/Credit: LN 1844-TU; signed May 21, 1980.

Total Project Cost: US\$1,274 million (as of March 1986).

Cost of Cultural Component: Not specified.

General Project Description: Second step in long-range development of the Euphrates River power resources. Construction of a 173-m high arch-gravity dam with an adjoining 1,800 MW powerhouse and a 9,600 million cubic meter live storage reservoir on the Euphrates River.

Cultural Property Component: Information at appraisal indicated that there were no significant archaeological sites in the area to be flooded. Since then, the Bank has been informed that there are several sites which are being actively explored, some dating back to the 4th Millenium BC (Ur civilization), including the Sapor cuneiform rock inscriptions. The Bank has informed the Turkish Government that it would be prepared to make available an amount of US\$200,000 out of the existing or supplemental loans to help identify and recover valuable archaeological artifacts.

TURKEY

Project: Kayraktepe Hydropower.

Project Status: Active.

Project Stage: Implementation; completion expected December 1993.

Loan/Credit: LN 2655-TU; signed March 3, 1986.

Total Project Cost: US\$542.3 million.

Cost of Cultural Component: Not specified.

General Project Description: Construction of a 420-MW hydropower plant and a 199-m high rock-fill dam on the Göksu River with a reservoir storage volume of 4,800 million cubic meters, also providing flood protection for the city of Silifke.

Cultural Property Component: A study of the reservoir area carried out by the Cukurova University, Adana, has identified three sites of possible archaeological significance in the reservoir area. These are the mounds of Maltepe, Cingantepe, and the historical site at Attepe. It has been agreed that these sites will be examined in detail and excavation may be made as appropriate.

TURKEY

Project: Sir Hydropower.

Project Status: Active.

Project Stage: Implementation; completion expected January 1991.

Loan/Credit: LN 2750-TU; signed September 2, 1986.

Estimated Total Project Cost: US\$241 million.

Cost of Cultural Component: Not specified.

General Project Description: Construction of a 283-MW hydropower plant and a 120-m high concrete arch dam on the Ceyhan river, impounding 1,120 million cubic meters of storage.

Cultural Property Component: According to the information obtained from Directorate of Kahramanmaras Museum and the Env. Rep. on Sir and Duzkesme Dam Projects, there are six sites that have archaeological or historical value in the reservoir area. These are the Hopaz man-made hill (Ancient); Ceyhan bridge (Ottoman); Korsulu bridge (Ottoman); Gene bridge (Ottoman); hot spring (bath); and the Kilise Gedici man-made hill. Among these sites the most important one is the Hopaz man-made hill. A preliminary investigation conducted by the Directorate of the Kahramanmaras Museum indicated the presence of remnants from prehistoric to Roman times at this site. Therefore, excavation of the site has been started and will be completed before flooding.

The Ceyhan and Gene bridges, displaying the characteristics of typical Ottoman architecture, are the next most important structures. Museum quality photographic records of these bridges have been made and registered with the Directory of Culture and Tourism which will determine any future steps.

The hot spring is still used by people or nearby villages for bathing and for heat cures. The possibilities of maintaining this positive function of the hot spring is still being considered.

TURKEY

Project: South Antalya Tourism.

Project Status: Completed December 1985.

Loan/Credit: LN 1310-TU; signed July 9, 1976.

Total Project Cost: US\$46.2 million.

Cost of Cultural Component: US\$3.186 million; 6.9% of total.

General Project Description: Construction of tourism infrastructure along Turkish coast including the ancient cities of Phaselis, Olympos, and Idyros, which date from 2nd century B.C. to Byzantine times.

Cultural Property Component: This area of Turkey is rich in historic and prehistoric sites; it includes some of the oldest cities of Western civilization. The inclusion of these cities in the tourism project is a positive measure because it ensures their preservation and use into the future. The work includes site clearance, excavations, road access, construction of a small visitors' center, and protection and development of the area as an archaeological site. The work also includes underwater archaeology off the city of Phaselis. The tourism project included these sites as major assets to the project. The General Directorate of Ancient Monuments and Museums of the Ministry of Culture supervised the project.

UGANDA

Project: Proposed Murchison Falls Power (prior to 1972 known as Uganda/Kenya Power Cooperation); from 1972-1974 known as Power(2)).

Project Status: Inactive.

Last Project Stage: Identification.

General Project Description: Construction of a large hydroelectric project (600-MW) at Murchison Falls on the Nile.

Cultural Property Component: Murchison Falls (Fig. 14) has been called one of the "wonders of the world" because the Nile forces itself through a narrow gorge about 18 feet wide and "rages down a spout for a fall of 130 feet" (The London Times, 1970). The hydroelectric scheme would have drawn off nine-tenths of the water, conveyed it to an underground power station, then discharged it at the foot of the Falls. In addition, a labor force of 1,000 would have constructed the project in the spectacular Murchison Falls National Park, a 3,840 sq. km. park created in 1952. Following President Obote's 1968 announcement about the scheme, however, the President of the World Bank, received many letters "from prominent people in the USA and Europe urging the Bank not to damage the amenities of the game park or lessen its appeal to tourists" (from Bank files). Partly due to these (and other) objections, the project was deferred. Discussions of the siting of the next hydroelectric power development is at a standstill, since Uganda has a surplus of power at the present time.

The falls have been judged so valuable that they have been classified in the UN's highest category "World Heritage Site" (See Annex C). Uganda has applied to UNESCO for membership to be covered by the World Heritage Convention.



Fig. 14. Murchison Falls.
The Victoria Nile escapes from a 55-m wide bottleneck.

YEMEN ARAB REPUBLIC

Project: Marib-Safir Road.

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: CR 1726-YAR; signed September 5, 1986.

Estimated Total Project Cost: US\$10 million.

Cost of Cultural Component: Not specified; borne by the Borrower.

General Project Description: Construction to paved standard of the Marib-Safir road (62.5 km). The road connects the paved road network at Marib with the oil field and refinery at Safir.

Cultural Property Component: The road will make more accessible several ancient monuments, including a pre-Islamic temple, palace, and the Marib Dam. Safeguarding measures are under study, and discussions are being conducted with the responsible ministries to develop a comprehensive program. As a first step, the Government is constructing fences to protect these monuments.

YUGOSLAVIA

Project: Visegrad Hydropower.

Project Status: Active.

Project Stage: Implementation.

Loan/Credit: LN 2527-YU; signed April 30, 1985.

Total Project Cost: US\$284 million.

Cost of Cultural Component: Zero-cost design change.

General Project Description: A 300-MW hydroproject on the Drina river that will form a 9-hectare reservoir at maximum level.

Cultural Property Component: The 328-m long Mehmed Pasha Sokolovic bridge (Fig. 15), designed by Ottoman Court Architect Kodja Sinan (1489-1587), the "Michelangelo of the Orient," built between 1571 and 1577 AD, and later immortalized by Yugoslavia's premier literature Nobelist (1961) Ivo Andric (1892-1975) in his book The Bridge on the Drina (1945) is being preserved by relocating the dam site 2.1 km upstream of the bridge. Precautions include protection of the bridge fabric by means of concrete-filled steel pilings under water level. The hydroproject's construction bridge is being designed so it will remain after the project as the main vehicular bridge. The historic bridge will then be restricted to pedestrians.

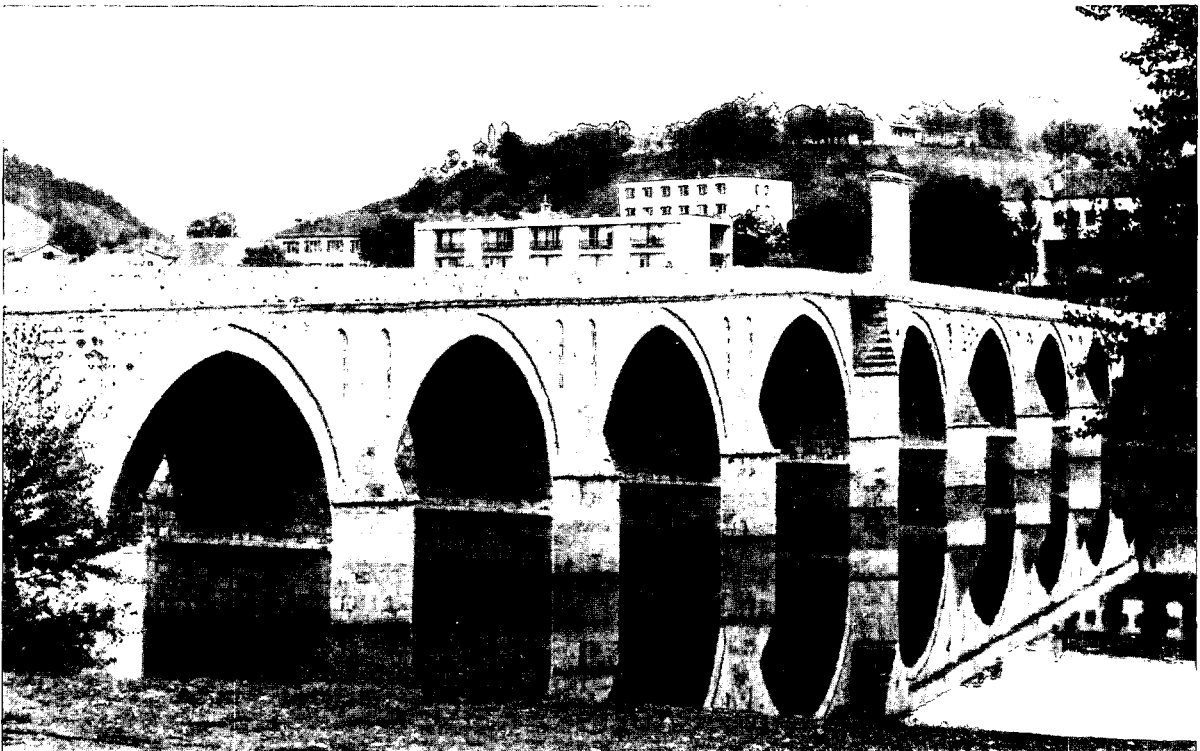


Fig. 15. Mehmed Pasha Sokolovic Bridge on the River Drina.

ANNEX A

GLOSSARY OF TECHNICAL TERMS AND ABBREVIATIONS

Technical Terms

Anthropogenic	Relating to, or created by, humans.
Anthropology	The study of humankind, including human and cultural evolution, history, language, and behavior.
Archaeology	A subdiscipline of anthropology (q.v.) that seeks to understand or interpret human behavior from the products of previous human behavior, rather than from observation of today's human behavior in process.
Archaeological material	Material of cultural significance at least 250 years old, and normally discovered as a result of scientific excavation, clandestine or accidental digging, or exploration on land or under water (legal definition used in the United States for import restrictions).
Archaeological reconnaissance	Inspection of a geographical area to locate archaeological sites; the area is often that which may be influenced by a proposed development project (such reconnaissance is usually brief in duration: a matter of weeks rather than months depending on the density and complexity of sites, topography, vegetation, and accessibility).
Archaeological survey	Systematic fieldwork (q.v.) recording the archaeological sites in an area; generally includes dimensioning and mapping the major sites and some exploratory excavation.
Artifact	Object produced by human activity.
Antique	Artifact with an age criterion that in some countries is 100 years BP, or pre-1700 AD, or other.
Burial mound	Artificial elevation of soil with evidence of burial or inhumation.
Carbon - 14 dating	Method of dating organic (plant or animal) remains (for example, charcoal, bone, leather, shell, wood) based on the rate of decay of the C ¹⁴ isotope, which starts at the death of the organism; ranges back to 50,000 BP and possibly more.
Culture	In archaeology, a recurrent assemblage of sites and artifacts; in anthropology, the term has wider significance including behavior and beliefs as well as physical objects.

Cultural property	UNESCO (1970) definition: Property that on religious or secular grounds, is specifically designated by each State as being of importance for archaeology, prehistory, history, literature, art, or science (see also Table 2) archaeological (paleontological), historical, cultural (artistic, traditional, or ethnographic), or natural (geological) objects of interest to the country (and includes antiques, q.v.); can be <u>movable</u> (fossils and artifacts) or <u>immovable</u> (battlegrounds, holy springs, gardens, parks, towns, caves, canyons, geysers and waterfalls), <u>intangible</u> cultural property includes languages.
Dendrochronology	Method of dating using a scale generated from counting (annual) growth rings of timber.
Ethnological material	Material that is the product of a tribal or nonindustrial society and important to the cultural heritage of a people because of its distinctive characteristics, comparative rarity, or contribution to the knowledge of the origins, development, or history of that people (legal definition used in the United States for import restrictions).
Excavation	Intense and systematic digging of an archaeological site; the more detailed work, which follows the reconnaissance and survey stages (q.v.).
Fieldwork	Any form of archaeological research carried out beyond the confines of the museum or office: includes surveying, reconnaissance, and excavating.
Historic town	Group of buildings (groups of separate or connected buildings that, because of their architecture, homogeneity, or place in the landscape, are of outstanding universal value from the point of view of history, art, or science).
Midden	Rubbish deposit or accumulation, usually formed near a kitchen.
Paleolithic	The Old Stone Age, from the first toolmakers (2.5 million years ago) to the end of the Pleistocene (10,000 years ago); characterized by the use of chipped stone tools and by hunting and gathering.
Paleontology	The study of extinct organisms; relies heavily on the fossil record.
Petroglyph	An engraved design on rock; colored or not.
Pictograph	A design painted on rock.

Potsherd	Any fragment of broken pottery.
Prehistoric	Before the adoption of writing or written records.
Rescue archaeology	Carefully planned, programmatic, nonemergency data recovery from prehistoric and historical sites scheduled to be destroyed, modified, or significantly compromised by construction activities.
Rock alignment	Blocks of stone arranged intentionally, often in a line or circle.
Salvage archaeology	Emergency collection of archaeological materials and data from prehistoric and historical sites scheduled to be affected adversely by construction or inundation (not to be confused with rescue archaeology, q.v.).
Sherds (or shards)	Fragments of an artifact of fired mud or clay (see potsherd).
Shell midden	Archaeological site composed primarily of marine or freshwater shell.
Site	In archaeology, a spatial concentration of material evidence of human activity.
Stratigraphy	Study of sequences of sediments, soils, ashes, middens, (q.v.), structures, or rocks; the basis for reconstructing the history of an archaeological site.
Wildland	Natural land and water areas in a state virtually unmodified by human activity.

Abbreviations

BP	Before (the) Present
ICAN	International Cultural Assistance Network (Dr. Allan Bassing, Smithsonian Institution, Renwick Gallery)
ICCROM	International Centre for the Study of the Preservation and Restoration of Cultural Property, Rome
ICOM	International Council of Museums, Paris
ICOMOS	International Council on Monuments and Sites, Paris
IDA	International Development Association, Washington, D.C.
IFC	International Finance Corporation, Washington, D.C.

IUCN	International Union for the Conservation of Nature and Natural Resources, Gland, Switzerland
MDB	Multilateral Development Bank
NGO	Nongovernmental Organization
NPS	National Park Service (United States)
NTHP/US	National Trust for Historic Preservation in the U.S.
OAS	Organization of American States, Washington, D.C.
USAID	United States Agency for International Development
USDI	United States Department of Interior
UNDP	United Nations Development Programme, New York
UNESCO	United Nations Educational, Scientific, and Cultural Organization, Paris
USGPO	United States Government Printing Office
USIA	United States Information Agency

ANNEX B

LEGISLATION

This annex was originally intended to contain samples of national legislation concerning the protection of cultural property. However, Bonnie Burnham's comprehensive Handbook of National Legislations (1974), Prutt and O'Keefe's Law and the Cultural Heritage (1983), and the two sequelae published by UNESCO, The Protection of Movable Cultural Property (1984a, 1984b), have codified such material in detail for most countries with relevant legislation. Moreover, UNESCO may publish a third volume containing countries missing from the first two. Therefore, readers may want to consult these references (listed in "Literature Cited") directly.

Important U.S. legislation (H. R. 4568) has been written which clarifies and strengthens the authorities of the U.S. Secretary of the Interior and the Advisory Council on Historic Preservation to assist in the conservation of cultural (and natural) resources throughout the world. The bill was authored by Representative John F. Seiberling (D-Ohio).

ANNEX C

INTERNATIONAL CONVENTIONS AND RECOMMENDATIONS

UNESCO 1970 CONVENTION ON THE MEANS OF PROHIBITING AND PREVENTING THE
ILLICIT IMPORT, EXPORT AND TRANSFER OF OWNERSHIP OF CULTURAL PROPERTY

Objectives

To curb the illegal movement of cultural property and thereby reduce the incentives for pillage. The 1970 Convention arose from a growing international concern that the high demand for cultural objects in the art market had generated rampant pillaging, particularly in countries with few resources to protect their cultural heritage. Pillaging has robbed these objects of their provenance, often resulting in mutilation and often destroying forever vital traces of their place in the history of humankind.

Provisions

- (a) Parties to set up within their territories one or more national services, where such services do not already exist, for the protection of the cultural heritage;
- (b) Parties to introduce an appropriate certificate ... to prohibit the exportation of cultural property from their territory unless accompanied by the export certificate;
- (c) Parties to undertake to take the necessary measures, consistent with national legislation, to prevent museums and similar institutions within their territories from acquiring cultural property originating in another State Party which has been illegally exported...
- (d) Parties to undertake to impose penalties or administrative sanctions on any person responsible for infringing the prohibitions ...
- (e) Parties to undertake to restrict by education, information and vigilance, movement of cultural property illegally removed from any State Party to this convention ... to endeavor by educational means to create and develop in the public mind a realization of the value of cultural property and the threat to the cultural heritage created by theft, clandestine excavations and illicit exports.

Membership

Open for ratification or acceptance by all States members of UNESCO, and by other States upon invitation. Instruments of ratification or acceptance to be deposited with the Director-General of UNESCO.

Date of adoption	17.11.1970
Place of adoption	Paris
Date of entry into force	24.4.72
Languages	English, French, Russian, Spanish
Depository	UNESCO

Parties and dates of entry into force

<u>States</u>	<u>Date of entry into force</u>
Algeria	24. 9.1974
Argentina	11. 4.1973
Bolivia	4. 1.1977
Brazil	16. 5.1973
Bulgaria	24. 4.1972
Cameroon	24. 8.1972
Canada	28. 6.1978
Central African Republic	1. 5.1972
Cuba	30. 4.1980
Cyprus	19. 1.1980
Czechoslovakia	14. 5.1977
Democratic Kampuchea	26.12.1972
Democratic People's Republic of Korea	13. 8.1983
Dominican Republic	7. 6.1973
Ecuador	24. 4.1972
Egypt	5. 7.1973
El Salvador	20. 5.1978
German Democratic Republic	16. 4.1974
Greece	5. 9.1981
Guatemala	14. 4.1985
Guinea	18. 6.1979
Honduras	19. 6.1979
Hungary	23. 1.1979
India	24. 4.1977
Iran	27. 4.1975
Iraq	12. 5.1973
Italy	2. 1.1979
Jordan	15. 6.1974
Korea, Republic of	14. 5.1983
Kuwait	22. 9.1972
Libya	9. 4.1973
Mauritania	27. 7.1977
Mauritius	27. 5.1978
Mexico	4. 1.1973
Nepal	23. 9.1976
Nicaragua	19. 7.1977
Niger	16. 1.1973
Nigeria	24. 4.1972
Oman	2. 9.1978
Pakistan	30. 7.1981
Panama	13.11.1973
Peru	24. 1.1980
Poland	30. 4.1974
Portugal	9. 3.1986
Qatar	20. 7.1977
Saudi Arabia	8.12.1976
Senegal	9. 3.1985
Spain	10. 4.1986
Sri Lanka	7. 7.1981
Syrian Arab Republic	21. 5.1975
Tunisia	10. 6.1975
Turkey	21. 7.1981
United Republic of Tanzania	2.11.1977
United States of America	2.12.1983
Uruguay	9.11.1977
Yugoslavia	3. 1.1973
Zaire	23.12.1974
Zambia	21. 9.1985

Source: UNESCO 1983.

EUROPEAN CONVENTION ON THE PROTECTION
OF THE ARCHAEOLOGICAL HERITAGE

Objectives

To apply stringent scientific methods to archaeological research and discoveries to preserve their full historical significance; to prevent illicit excavation; and through education to give archaeological excavations their full scientific significance.

Provisions

- (a) Parties to delimit and protect sites and areas of archaeological interest (art. 2);
- (b) Parties to prohibit illicit excavation, to entrust excavation only to qualified persons and to ensure control and conservation of finds (art. 3);
- (c) Parties to establish national inventories and scientific catalogues of publicly and, where possible, privately owned archaeological objects (art. 4);
- (d) Circulation of objects for scientific, cultural and educational purposes to be promoted (art. 5).

Membership

Open to signature by member States of the Council of Europe. Instruments of ratification or acceptance to be deposited with the Secretary-General of the Council of Europe.

Date of adoption	6.5.1969
Place of adoption	London
Date of entry into force	20.11.1970
Languages	English, French
Depository	Council of Europe

Parties and dates of entry into force

Austria	28. 5.1974
Belgium	20.11.1970
Cyprus	24. 2.1971
Denmark	20.11.1970
France	4.10.1972
Germany, Federal Republic of	22. 4.1975
Greece	21.10.1981
Holy See	18. 8.1972
Italy	17.12.1974
Liechtenstein	15. 4.1976
Luxembourg	8. 6.1972
Malta	1. 8.1971
Portugal	7.10.1982
Spain	1. 6.1975
Sweden	18. 6.1975
Switzerland	20.11.1970
United Kingdom	9. 3.1973

Source: UNESCO 1983.

CONVENTION ON THE PROTECTION OF THE ARCHAEOLOGICAL, HISTORICAL,
AND ARTISTIC HERITAGE OF THE AMERICAN NATIONS
(CONVENTION OF SAN SALVADOR)

Objectives

To take steps at the national and international levels for effective protection of cultural treasures, and to fulfill the obligation to transmit the cultural heritage to coming generations.

Provisions

- (a) The identification, registration, protection and safeguarding of the cultural heritage to prevent its illegal export and import and to promote awareness and appreciation of the heritage (art. 1);
- (b) Cultural property to include, inter alia, monuments, objects, ruins, remains of human beings, fauna and flora of the pre-Colombian era, monuments, buildings, objects of an artistic, utilitarian or ethnological nature from the colonial era and the nineteenth century, libraries, archives, and manuscripts, publications and documents published before 1950, and any other post-1850 objects that parties declare to be within the scope of the Convention (art. 2);
- (c) Domestic measures to be taken by parties to register collections of such cultural property, to register transactions involving such property, and to prohibit the import of such property from other States without appropriate authorization (art. 7);
- (d) Parties to prevent the unlawful export and import of cultural property and to return illegally removed property to the State to which it belongs (art. 10);
- (e) Parties to co-operate in the circulation, exchange and exhibition of cultural property, the exchange of information on such property, and archaeological excavations and discoveries (art. 15).

Membership

Open for signature by the States members of the Organization of American States, and for adherence by any State.

Date of adoption	16. 6.1976
Place of adoption	Santiago
Date of entry into force	30. 6.1978
Languages	English, French, Portuguese, Spanish
Depository	OAS

Parties and dates of entry into force

Costa Rica	27. 8.1980
Ecuador	27. 9.1978
El Salvador	11. 8.1980
Guatemala	17.12.1979
Haiti	15.12.1983
Honduras	6. 7.1983
Nicaragua	1. 4.1980
Panama	30. 6.1978
Peru	22. 1.1980

Source: UNESCO 1983.

UNESCO 1972 CONVENTION CONCERNING THE PROTECTION OF THE WORLD
CULTURAL AND NATURAL HERITAGE

Objectives

To establish an effective system of collective protection of the cultural and natural heritage of outstanding universal value, organized on a permanent basis and in accordance with modern scientific methods.

Definitions

"Cultural Heritage" - For the purposes of this Convention, the following shall be considered as "cultural heritage":

- monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;
- groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;
- sites: works of man or the combined works of nature and of man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological points of view.

"Natural Heritage" - For the purposes of this Convention, the following shall be considered as "natural heritage":

- natural features consisting of physical and biological formations or groups of such formations which are of outstanding universal value from the aesthetic or scientific point of view;
- geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;
- natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.

Provisions

- (a) Each State party recognizes that the duty of identification, protection, conservation and transmission to future generations of the cultural and natural heritage belongs primarily to that State (art. 4);
- (b) Parties to integrate the protection of their heritage into comprehensive planning programmes, to set up services for the protection of their heritage, to develop scientific and technical studies and to take necessary legal, scientific, administrative and financial steps to protect their heritage (art. 5);
- (c) Parties undertake to assist each other in the protection of the cultural and natural heritage (art. 6);

- (d) A World Heritage Committee established, to which each party will submit an inventory of its national heritage and which will publish a "World Heritage List" and a "List of World Heritage in Danger" (arts. 8-11);
- (e) A World Heritage Fund established, to be financed by the parties and other interested bodies (art. 15);
- (f) Any party may request assistance for property forming part of its listed heritage, and such assistance may be granted by the Fund in the form of studies, provision of experts, training of staff, supply of equipment, loans or subsidies (arts. 19-22).

Membership

Open for ratification or acceptance by all States members of UNESCO, and by other States upon invitation. Instruments of ratification or acceptance to be deposited with the Director-General of UNESCO.

Date of adoption	16.11.1972
Place of adoption	Paris
Date of entry into force	17.12.1975
Languages	Arabic, English, French, Russian, Spanish
Depository	UNESCO

Parties and dates of entry into force

Afghanistan	20. 3.1979
Algeria	24. 6.1974
Antigua and Barbada	1.11.1983
Argentina	23. 8.1978
Australia	22. 8.1974
Bangladesh	3. 8.1983
Benin	14. 6.1982
Bolivia	4.10.1976
Brazil	1. 9.1977
Bulgaria	7. 3.1974
Burundi	19. 5.1982
Cameroon	7.12.1982
Canada	23. 7.1976
Central African Republic	22.12.1980
Chile	20. 2.1980
Colombia	24. 5.1983
Costa Rica	23. 8.1977
Cote d'Ivoire	9. 1.1981
Cuba	24. 3.1981
Cyprus	14. 8.1975
Denmark	25. 7.1979
Ecuador	16. 6.1975
Egypt	7. 2.1974
Ethiopia	6. 7.1977
France	27. 6.1975
Germany, Federal Republic of	23. 8.1976
Ghana	4. 7.1975
Greece	17. 7.1981
Guatemala	16. 1.1979
Guinea	18. 3.1979
Guyana	20. 6.1977

Haiti	18. 1.1980
Holy See	7.10.1982
Honduras	8. 6.1979
India	14.11.1977
Iran, Islamic Republic of	26. 2.1975
Iraq	5. 3.1974
Italy	23. 6.1978
Jamaica	14. 6.1983
Jordan	5. 5.1975
Lebanon	3. 2.1983
Libya	13.10.1978
Luxembourg	28. 9.1983
Madagascar	19. 7.1983
Malawi	5. 1.1982
Mali	5. 4.1977
Malta	14.11.1978
Mauritania	2. 3.1981
Mexico	23. 2.1984
Monaco	7.11.1978
Morocco	28.10.1975
Mozambique	27.11.1982
Nepal	20. 6.1978
Nicaragua	17.12.1979
Niger	23.12.1974
Nigeria	23.10.1974
Norway	12. 5.1977
Oman	6.10.1981
Pakistan	23. 7.1976
Panama	3. 3.1978
Peru	24. 2.1982
Poland	29. 6.1976
Portugal	30. 9.1980
Qatar	12. 9.1984
Saudi Arabia	7. 8.1978
Senegal	13. 2.1976
Seychelles	9. 4.1980
Spain	4. 5.1982
Sri Lanka	6. 6.1980
Sudan	6. 6.1974
Switzerland	17. 9.1975
Syrian Arab Republic	13. 8.1975
Tanzania	2. 8.1977
Tunisia	10. 3.1975
Turkey	16. 3.1983
United Kingdom	29. 5.1984
United States	7.12.1973
Yemen, Arab Republic of	25. 1.1984
Yemen, People's Democratic Republic of	7.10.1980
Yugoslavia	26. 5.1975
Zaire	23. 9.1974
Zambia	4. 6.1984
Zimbabwe	16. 8.1982

Source: UNESCO 1983.

WORLD HERITAGE LIST 1986

The Convention Concerning the Protection of the World Cultural and Natural Heritage is a treaty that provides for the designation and protection of outstanding cultural and natural properties. The treaty declares that the "deterioration or disappearance (of such properties) is harmful impoverishment of the heritage of all nations of the world." Each participating nation assumes primary responsibility for protecting and interpreting its own properties, while pledging to cooperate with other nations when assistance is required. More information is available from the Director, National Park Service, U.S. Department of the Interior, Washington, D.C. 20240 or US/ICOMOS, 1600 H Street, N.W., Washington, DC 20006.

The World Heritage Committee has approved the following 216 cultural and natural properties for inscription on the World Heritage List. The properties are arranged alphabetically by the 89 nominating countries. Properties considered to be in danger are indicated by an asterisk (*).

Algeria

Al Qal'a of Ben Hammad
Djemila
Tassili n'Ajjer
The M'Zab Valley
Tipsasa
Timgad

Argentina

Iguazu National Park
Los Glaciares

Australia

Great Barrier Reef
Lord Howe Island Group
Kakadu National Park
Western Tasmania Wilderness
National Parks
Willandra Lakes Region

Bangladesh

The historic mosque city of
Bagerhat
Ruins of the Buddhist Vihara
at Paharpur

Benin

*Royal Palaces of Abomey

Brazil

Historic Centre of Salvador de
Bahia
Historic Centre of the Town
of Olinda
Historic Town of Ouro Preto
Sanctuary of Bom Jesus do
Congonhas

Bulgaria

Ancient City of Nessebar
Boyana Church
Madara Rider
Pirin National Park
Rila Monastery
Rock-Hewn Churches of Ivanovo
Srebarna Nature Reserve
Thracian Tomb of Kazanlak
Thracian Tomb of Sveshtari

Canada

Anthony Island
Canadian Rocky Mountain Parks
(including Burgess Shale Site)
Dinosaur Provincial Park
Head-Smashed-In Bison Jump Complex
L'Anse aux Meadows National Historic
Park
Nahanni National Park
Quebec (Historic area)
Wood Buffalo National Park

Colombia

Port, Fortresses, and Group of
Monuments, Cartagena

Costa Rica

Talamanca Range--La Amistad Reserves

Cote d'Ivoire

Comoé National Park
Tai National Park

Cuba

Old Havana and its Fortifications

Cyprus

Painted Churches in the Troodos Region
Paphos

Ecuador

City of Quito
Galapagos National Park
Sangay National Park

Egypt

Abu Mena
Ancient Thebes with its Necropolis
Dahshur
Islamic Cairo
Memphis and its Necropolis--the
Nubian Monuments from Abu Simbel to
Philae
Pyramid Fields from Giza to

Ethiopia

Aksum
Fasil Ghebbi, Gondar Region
Lower Valley of the Awash
Lower Valley of the Omo
Rock-hewn Churches of Lalibela
Simien National Park
Tiya

France

Amiens Cathedral
Cape Girolata, Cape Porto and
Scandola Nature Reserve in
Corsica
Chartres Cathedral
Chateau and Estate of Chambord
Church of Saint-Savin-sur-Gartempe
Cistercian Abbey of Fontenay
Decroated Grottoes of the
Vezere Valley
Mont St. Michel and its Bay
Palace and Park of Fontainebleau
Palace and Park of Versailles
Pont du Gard (Roman aqueduct)
Roman and Romanesque Monuments
of Arles
The Roman Theatre and its
Surroundings and the Triumphal
Arch of Orange
The Royal Saltworks of Arc et
Senans Vezelay, Church and Hill
Place Stanislas, Place de la
Carriere, and Place d'Alliance,
Nancy

Germany, Federal Republic of

Aachen Cathedral
Pilgrimage Church of Wies
Speyer Cathedral
St. Mary's Cathedral and St.
Michael's Church at Hildesheim
The Castles of Augustsburg and
Falkenlust at Bruhl
Wurzburg Residence with the Court
Gardens and Residence Square

Ghana

Ashante Traditional Buildings
Forts and Castles, Volta Greater
Accra, Central and Western Regions

Guatemala

Antigua Guatemala
Archaeological Park and Ruins of
Quirigua
Tikal National Park

Haiti

National History Park--Citadel,
San Souci, Ramiers

Holy See

Vatican City

Honduras

Maya Site of Copan
Rio Platano Biosphere Reserve

India

Agra Fort
Ajanta Caves
Ellora Caves
Group of Monuments at Mahabalipuram
Kaziranga National Park
Keoladeo National Park
Manas Wildlife Sanctuary
Taj Mahal
The Sun Temple, Konarak

Iran, Islamic Republic of

Meidan-e Sha, Esfahan
Persepolis
Tchogha Zanbil

Iraq

Hatra

Italy

Church and Dominican Convent of
Santa Maria delle Grazie with
"The Last Supper" by Leonardo da
Vinci

Historic Centre of Rome
Rock Drawings in Valcamonia
The Historic Centre of Florence

Jordan

*Old City of Jerusalem and Its Walls
Petra
Quseir Amra

Lebanon

Anjar
Baalbek
Byblos
Tyre

Libya

Archaeological Site of Cyrene
Archaeological Site of Leptis Magna
Archaeological Site of Sabratha
Rock-art Sites of Tadrart Acacus

Malawi

Lake Malawi National Park

Malta

City of Valetta
Ggantija Temples
Hal Saflieni Hypogeum

Morocco

Medina of Fez
Medina of Marrakesh

Nepal

Kathmandu Valley
Royal Chitwan National Park
Sagarmatha National Park

Norway

Bryggen
Rock Drawings of Alta
Roros
Urnes Stave Church

Pakistan

Archaeological Ruins at Mohenjodaro
Buddhist Ruins at Takht-i-Bahi and
Neighboring City Remains at
Sahr-i-Bahlol
Fort and Shalimar Gardens at Lahoree
Historical Monuments at Thatt a
Taxila

Panama

Darien National Park
Fortifications on the Caribbean Sid

Peru

Chavin (Archaeological site)
City of Cuzco
Huascarán National Park
Santuario Historico de Machu Picchu

Poland

Auschwitz Concentration Camp
Bialowieza National Park
Historic Centre of Cracow
Historic Centre of Warsaw
Wieliczka Salt Mines

Portugal

Central Zone of the Town of Angra
do Heroismo
Monastery of the Hieronymites and
the Tower of Belem
Monastery of Batalha
Convent of Christ (Tomar)

Senegal

Djoudu National Park
Island of Goree
*Natural and Culturo-historical Region
Niokolo-Koba National Park

Seychelles

Aldabra Atoll
Vallee de Mai Nature Reserve

Spain

Altamira Cave
Churches of the Kingdom of the
Asturias
The Alhambra and the Generalife,
Granada
The Burgos Cathedral
The Mosque of Cordoba
Monastery and Site of the Escorial,
Madrid,

Spain (continued)

Old Town of Avila with its Extra-Muros Churches

Old Town of Segovia and Its Aqueduct
Parque Guell, Palacio Guell and Casa Mila, Barcelona
Santiago de Compostela (Old Town)

Sri Lanka

Ancient City of Polonnaruva
Ancient City of Sigiriya

Switzerland

Benedictine Convent of St. John at Old City of Berne
Convent of St. Gall

Syrian Arab Republic

Ancient City of Bosra
Ancient City of Damascus
Site of Palmyra

Tanzania

* Ngorongoro Conservation Area
Ruins of Kilwa Kisiwani and Ruins of Songa Mnara
Selous Game Reserve
Serengeti National Park

Tunisia

Amphitheater of El Djem
Archaeological Site of Carthage
Ichkeul National Park
Medina of Tunis
Punic Town of Kerkuane

Turkey

Goreme National Park and the Rock Sites of Cappadocia
Great Mosque and Hospital of Divrigi

United States

Everglades National Park
Grand Canyon National Park
Great Smoky Mountains National Park
Independence Hall
Mammoth Cave National Park
Mesa Verde National Park
Olympic National Park
Redwood National Park
San Juan National Historic Site and La Fortaleza
The Statue of Liberty
Yellowstone National Park
Yosemite National Park

Yemen, People's Democratic Republic of

The Old Walled City of Shibam

Yugoslavia

Durmitor National Park
Historical complex of Split with the Palace of Diocletian
*Natural and Cultural-Historical Region of Kotor
Ohrid Region with its Cultural and Historical Aspects and its Natural Environment
Old City of Dubrovnik
Plitvice Lakes National Park
Stari Ras and Sopocani

Zaire

*Garamba National Park
Kahuzi-Biega National Park
Salonga National Park
Virunga National Park

Zimbabwe

Mana Pools National Park, Sapi and Chewore Safari Areas

International

Brazil/Argentina

Jesuit Missions of the Guaranis (Includes Sao Miguel das Missoes)

Canada/United States

Kluane National Park Wrangell-St. Elias National Park

Guinea/Cote d'Ivoire

Nimba Strict Nature Reserve/Mt. Nimba Strict Nature Reserve

Middle East

Old City of Jerusalem and Its Walls (Territory in dispute)

THIRD ACP-EEC CONVENTION
LOME III

(Articles directly addressing cultural issues)

Part I
General provisions of ACP-EEC co-operation
Chapter 1
Objectives and principles of co-operation

Article 1

The Community and its Member States, of the one part, and the ACP States, of the other part (hereinafter referred to as the Contracting Parties), hereby conclude this co-operation Convention in order to promote and expedite the economic, cultural and social development of the ACP States and to consolidate and diversify their relations in a spirit of solidarity and mutual interest.

Article 10

Co-operation shall be aimed at supporting development in the ACP States, a process centered on man himself and rooted in each people's culture. It shall back up the policies and measures adopted by those States to enhance their human resources, increase their own creative capacities and promote their cultural identities. Co-operation shall also encourage participation by the population in the design and execution of development operations.

Account shall be taken, in the various fields of co-operation, and at all the different stages of the operations executed, of the cultural dimension and social implications of such operations.

Part II
The areas of ACP-EEC co-operation
Title VIII
Cultural and social co-operation
Chapter 3
Promotion of cultural identities

Article 127

Support shall be provided for action by the ACP States to:

- (a) safeguard and promote their cultural heritage, notably through the establishment of cultural data banks and sound recording libraries for the collection of oral traditions and the enhancement of such traditions;
- (b) promote cultural exchanges between ACP States in highly representative areas of their respective identities;
- (c) conserve historical and cultural monuments and promote traditional architecture.

The Convention was signed by the 10 member states of EEC (The European Community) and the 65 ACP (Africa-Caribbean-Pacific) states on December 8, 1984 in Lomé, Togo.

Signatories:

THE EUROPEAN
COMMUNITY

Belgium
Denmark
France
Germany
(Federal Rep.)
Greece
Ireland
Italy
Luxembourg
Netherlands
United Kingdom

THE 65 ACP STATES

Antigua & Barbuda
Bahamas
Barbados
Belize
Benin
Botswana
Burkina Faso
Burundi
Cameroon
Cape Verde
Central African
Republic
Chad
Comoros
Congo
Djibouti
Dominica
Equatorial Guinea
Ethiopia
Fiji
Gabon
Gambia
Ghana
Grenada
Guinea
Guinea Bissau
Guyana
Ivory Coast
Jamaica
Kenya
Kiribati
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Mauritius
Mozambique
Niger
Nigeria
Papua New Guinea
Rwanda
St. Christopher
& Nevis
St. Lucia
St. Vincent & The
Grenadines
Sao Tom &
Principe
Senegal
Seychelles
Sierra Leone
Solomon Islands
Somalia
Sudan
Suriname
Swaziland
Tanzania
Togo
Tonga
Trinidad & Tobago
Tuvalu
Uganda
Western Samoa
Vanuatu
Zaire
Zambia
Zimbabwe

Source: Commission of the European Communities 1985.

UNESCO RECOMMENDATIONS^{3/}

- I. Recommendation on International Principles Applicable to Archaeological Excavations, 5 December 1956.....
- II. Recommendation concerning the most Effective Means of Rendering Museums Accessible to Everyone, 14 December 1960.....
- III. Recommendation concerning the Safeguarding of the Beauty and Character of Landscapes and Sites, 11 December 1962.....
- IV. Recommendation on the Means of Prohibiting and Preventing the Illicit Export, Import, and Transfer of Ownership of Cultural Property, 19 November 1964...
- V. Recommendation concerning the Preservation of Cultural Property Endangered by Public or Private Works, 19 November 1968.....
- VI. Recommendation concerning the Protection, at National Level, of the Cultural and Natural Heritage, 16 November 1972.....
- VII. Recommendation concerning the International Exchange of Cultural Property, 26 November 1976.....
- VIII. Recommendation concerning the Safeguarding and Contemporary Role of Historic Areas, 26 November 1976.....
- IX. Recommendation for the Protection of Movable Cultural Property, 28 November 1978.....
- X. Recommendation for the Safeguarding and Preservation of Moving Images, 27 October 1980.....

^{3/} The full texts of these recommendations, as well as the UNESCO conventions, are published in the Conventions and Recommendations of UNESCO Concerning the Protection of the Cultural Heritage, UNESCO, 1983.

ANNEX D

GOVERNMENTAL AGENCIES WITH THE RESPONSIBILITY OF
PRESERVING CULTURAL PROPERTY

Afganistan

Institut Afgan d'Archeologie
Ministere de l'Information et
de la Culture
Darul-Aman
Kaboul

Barbados

Barbados National Trust
c/o Mr. D. A. Wiles
"Casa Loma"
Sunrise Drive
St. Michael

Antigua and Barbuda

Antigua National Trust
c/o Public Works
Government of Antigua
St. John's, Antigua

Benin

Ministere de la Jeunesse, de la
Culture Populaire et des Sports et
sous la Direction de la Culture
Populaire

Algeria

Direction des Beaux Arts
Sous/Direction des Monuments et Sites
Park Zyriab, Algiers

Inspection Generale des Antiquites
et des Musees de l'Algerie
Parc Gatliff, Algiers

Bolivia

Instituto de Estudios Bolivianos
Universidad Mayor de San Andres
Av. Villazon
La Paz

Ministerio de Vivienda y Urbanismo
Direccion de Monumentos
La Paz

Argentina

Comision Nacional de Museos y
Monumento y Lugares Historicos
Secretaria de Estado de Cultura e
Educacion
Avenida de Mayo 556
Buenos Aires

Brazil

Directoria do Patrimonio Historico e
Artistico Nacional
Ministerio da Educacao e Cultura
8º Andar
Rua da Imprensa 16
Rio de Janeiro,gb

Bahamas

Bahamas National Trust
P.O. Box N-4105
Nassau

Burma

Burma Archaeological Survey
Ningaladon Road
Rangoon

Bahrain

Directorate of Antiquities
and Museums
Ministry of Education
P.O. Box 43
Manama

Cameroon

National Commission for the
Protection of Monuments, Objects
and Sites
Ministry of National Education,
Culture and Vocational Training
Yaounde

Bangladesh

Directorate of Archaeology
and Museums
Dacca

Central African Republic

Direction des Affaires Culturelles,
des Arts et des Musees
B.P.349
Bangui

Counsellor for the Human Sciences
N'Djamena

Chile

Consejo de Monumentos Nacionales
Biblioteca Nacional
Av. Bernardo O'Higgins y Mac Iver
Santiago

China

Architectural Society of the
the People's Republic of China
Pai Wang Chuang, West District
Peking

Colombia

Departamento de Restauraciones
Corporacion Nacional de Turismo
Calle 19 No.6-68, Piso 7
Apartado Aereo No. 8400
Bogota

Directoria Nacional de Museos y
Monumentos
Ministerio de Educacion Nacional
Bogota

Instituto Colombiano de Cultura
via Instituto Colombiano de
Antropologia
Apartado Aereo No. 29665
Bogota

Instituto de Investigaciones
Esteticas
"Carlos Arbelaez Camacho"
Facultad de Arquitectura y Diseno
Universidad Javeriana
Bogota

Costa Rica

Ministerio de Cultura
Centro de Investigacion y Conserva-
cion del Patrimonio, Anthropologia
Apartado 10227
San Jose 1000

Cyprus

Department of Antiquities
Ministry of Communications and Works
Nicosia

Dominican Republic

Oficina de Patrimonio Cultural
la Ataranza No.2
Santo Domingo

Ecuador

Direccion de Patrimonio Artistico
Nacional
Convento de San Agustin
Chile y Guayaquil
Ministerio de Educacion
Quito

Egypt, Arab Republic of

Department of Antiquities
Midan El-Tahir
Cairo

Ethiopia

Ethiopian Antiquities Administration
P.O. Box 1907
Addis Ababa

Gabon

Haut Commissariat a la Culture et
aux Arts
Ministere de l'Education Nationale
et de l'Enseignement Technique
Libreville

Ghana

Ghana Museums and Monuments
Barnes Road
P.O. Box 3343
Accra

Greece

Comite de Sauvegarde des Sites et
Monuments Nationaux
Chambre Technique de Grece
Karageorgi Servias 4
Athens

Grenada

Minister of State for Tourism and Natural
Resources
Government of Grenada
St. George's

Guatemala

Consejo Nacional para la Proteccion de la
Antigua Guatemala
Instituto de Antropologia e Historia
Edificio No.5 de "La Aurora"
Zone 13
Guatemala City

Honduras

Instituto Hondureno de Anthropologia e
Historia
Secretaria de Estado en el Despacho de
Educacion Publica
Tercera Avenida No. 113
Comayagua, D.C.

Hungary

Department of Preservation of
Historical Monuments
P.O. Box 91
H-1502 Budapest

India

Archeological Survey of India
Janpath
New Delhi

Indian Association for the Study
and Conservation of Cultural
Property
New Delhi

Indonesia

Direktorat Museum, Departemen
P dan K
(Directorate of Museums)
Jalan Cilacap 4
Jakarta

Direktorat Sejarah dan Purbakala,
Departemen P dan K
(Directorate of History and
Archaeology)
Jalan Cilacap 4
Jakarta

Pusat Penelitian Purbakata dan
Peninggalan Nasional, Departemen
P dan K
(National Research Centre of
Archaeology)
Jalan Cilacap 4
Jakarta

Iran, Islamic Republic of

Direction General des Musees et
Monuments
Service Archeologique
c/o Iran Bastan Museum
Avenue Ghavam-e-Saltair
Tehran

Iraq

Directorate General of Antiquities
Ministry of Information
Baghdad

Jamaica

Jamaica National Trust Commission
72 Hope Road
Kingston 6

Jordan

Department of Antiquities of Jordan
P.O. Box 88
Amman

Kenya

Lamu Museum
Lamu

Korea, Republic of

Bureau of Cultural Property
Ministry of Culture and Information
117 Ch'angsong-don
Chongno-gu
Seoul

Lebanon

Association pour la Protection des Sites
et Anciennes Demeures
BP 154
Beirut

Service des Monuments Historiques
Direction Generale des Antiquites
Musee National
Beirut

Lesotho

Commission for the Preservation of
Natural and Historical Monuments, Relics
and Antiquities and the Protection of
Flora and Fauna
Ministry of Education
Roma, Maseru

Liberia

Department of Information and Cultural
Affairs
Department of the Interior
Monrovia

Madagascar

Conservation des Monuments Historiques et
Objets d'Art
Tananarive

Malaysia

Department of Museums
Jalan Damansara
Kuala Lumpur

Mauritania

Direction de la Culture
Ministere des Affaires Culturelles
Nouakchott

Mauritius

Ancient Monuments and
and Nature Reserves Board
Government of Mauritius
Ministry of Education and
and Cultural Affairs
Port Louis

Mexico

Instituto Nacional de Antropologia
e Historia
Cordova 45
Mexico 7, D.F.

Includes:

Direccion de Monumentos
Historicos
Ex-Convento de Churubusco
Mexico 21, D.F.

Departamento de Restauracion
Ex-Convento de Churubusco
Mexico 21, D.F.

Escuela Nacional de Conservacion
Restauracion e Museografia
(INAH-SEP)
Ex-Convento de Churubusco
Mexico 21, D.F.

Departamento de Catalogo
Ex-Convento de Culhuacan
Apartado Postal 55483
Mexico 13, D.F.

Departamento de Prehistoria
Moneda No.16
Mexico 1, D.F.

Morocco

Ministry of Cultural Affairs
Division fo Historic Monuments and
Antiquities
Rabat

Nepal

Department of Archaeology
Ministry of Education
H.M.G. Ram Shah Path
Kathmandu

Nicaragua

Ministerio de Cultura
Antigua Hacienda el Retiro
Managua D.N.

Nigeria

Federal Department of Antiquities
National Museum
P.M.B. 12556
Lagos

Oman

Ministry of National Heritage
Sultanate of Oman
Masqat

Pakistan

Department of Archaeology and Museums
5-B Pakistan Secretariat
Karachi 1

Panama

Comision Nacional de Arqueologia y
Monumentos Historicos
Ministry of Education
Panama

Instituto Nacional de Cultura
Direccion del Patrimonio Historico
P.O. Box 8265
Panama 7

Paraguay

Comision Nacional para la Defense y
Conservacion del Patrimonio, Artistico e
Historico de la Iglesia
Asuncion

Peru

Centro de Investigacion y Restauracion de
Bienes Monumentales
Ancash 769
Lima

Instituto Nacional de Cultura
Jiron Ancash 390
Lima

Philippines

Ayala Museum
Museum of Philippine History and
Iconographic Archive
P.O. Box 259
Makati Commercial Center
Makati, Rizal

Saudi Arabia

Monuments Department
Kingdom of Saudi Arabia
P.O. Box 3734
Riyadh

Senegal

Patrimoine National
Ministere de la Culture
Immeuble Administratif
Dakar

Sierra Leone

Monuments and Relics Commission
c/o Sierra Leone National Museum
P.O. Box 908
Freetown

Singapore

Preservation of Monuments Board
Ground Floor
National Development Building
Maxwell Road
Singapore 2

Sri Lanka

Archaeological Department
Colombo

Department of National Museums
Colombo

Sudan

Sudan Antiquities Service
P.O. Box 178
Khartoum

Syrian Arab Republic

Direction Generale des Antiquites
et des Musees
Musee National de Damas
Damascus

Tanzania

Division of Antiquities
Ministry of National Culture and
Youth
P.O. Box 2280
Dar es Salaam

National Museum of Tanzania
P.O. Box 511
Dar es Salaam

Tunisia

Inspecteur des Monuments
Historiques et des Sites
Archeologiques
4, place du Chateau
Tunis

Institut National d'Archeologie
et Arts
Place du Chateau
Tunis

Turkey

Gayrimenkul Eski Eserler ve Anitlar
Yuksekkurulu
(High Commission of Immovable
Antiquities and Monuments)
Findikli/Istanbul

Kultur Bakanligi
(Ministry of Culture)
Eski Eserler ve Muzeler Genel Mudurlugu
(General Directorate of Antiquities and
Museums)
Ankara

Uganda

Department of Antiquities and Museums
Ministry of Culture and Community
Development
24 Lumumba Avenue
P.O. Box 5718
Kampala

United Arab Emirates

Department of Antiquities
Midan El-Tahrir
Cairo

Uruguay

Consejo Ejecutivo Honorario de las Obras
de Preservacion y Reconstruccion de la
Antigua Colonia del Sacramento
Ministerio de Educacion y Cultura
Sarandi 444
Montevideo

Comision del Patrimonio Artistico y
Cultural de la Nacion
Ministerio de Educacion y Cultura
Sarandi 444
Montevideo

Venezuela

Centro de Investigaciones Historicas y
Esteticas
Apartado 3305
Caracas

Venezuela (continued)

Consejo Nacional de la Cultura
(CONAC)
Avda. Principal del Chuao
Caracas

Junta Nacional Protectora y
Conservadora
del Patrimonio Historico y
Artistico de la Nacion
Ministerio de Relaciones Interiores
Caracas

Viet Nam

Department de Protection des
Monuments et des Musees
Hanoi

Directorate of Cultural Affairs
Ministry of Education
Saigon

Source: NTHP/US 1978.

Yemen Arab Republic

Service des Antiquites
Palais du Government
P.O. Box 227
Sanaa

Yemen, People's Democratic
Republic of

Department of Antiquities
Khormaksar
P.O. Box 473
Steamer Point
Aden

Zambia

Commission for the Preservation of
Natural and Historic Monuments
P.O. Box 198
Maramba

ANNEX E

NONGOVERNMENTAL INSTITUTIONS WITH EXPERTISE IN PRESERVING CULTURAL PROPERTY

This can only be a rough, indicative listing. The main sources of information are the government ministries with responsibility for cultural phenomena, often the Ministry of Education and Culture. The National Museum and pertinent university departments are also highly relevant sources of assistance.

Institutions Concerned with All Types of Cultural Property

The Association for Preservation Technology
P. O. Box 2487
Station D
Ottawa, Ontario
Canada K1P 5W6

The Conservation Foundation
1717 Massachusetts Avenue, N. W.
Washington, D. C. 20036, U.S.A.

Cultural Property Advisory Committee
U.S. Information Agency
301 Fourth Street, S.W.
Washington, D.C. 20547, U.S.A.
(202) 485-6612

International Centre for the Study of the Preservation and Restoration of
Cultural Property (ICCROM)
13 via di San Michele
00153 Rome, Italy
or
International Centre Committee
c/o Advisory Council on Historic Preservation
(address below)

International Council on Monuments and Sites (ICOMOS)
Hotel Saint-Aignan
75 rue du Temple
75003 Paris, France
or
1600 H Street, N.W.
Washington, D.C. 20006, U.S.A.

United Nations Educational, Scientific and Cultural Organization (UNESCO)
Division of Cultural Heritage
Culture and Communications Sector
7 place de Fontenoy
75007 Paris, France

Institutions with Expertise in Historical Preservation

American Institute of Architects
1735 New York Avenue, N.W.
Washington, D.C. 20006, U.S.A.

Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, N.W.
Suite 809
Washington, D.C., U.S.A.
(202) 786-0503

ICOMOS: International Council on Monuments and Sites
Hotel Saint-Aignau
75 rue du Temple
75003 Paris, France

National Trust for Historic Preservation
1785 Massachusetts Avenue, N.W.
Washington, D.C. 20036, U.S.A.
(202) 673-4086

Preservation Assistance Division
National Park Service (U.S.)
P.O. Box 37127
Washington, D.C. 20031-7127, U.S.A.

The Secretariat of the World Heritage Committee
UNESCO
7 Place du Fontenoy
75700 Paris, France

Society of Architectural Historians
1700 Walnut Street, Room 716
Philadelphia, PA 19103, U.S.A.

World Monuments Fund
41 East 72nd Street
New York, N.Y. 10021, U.S.A.
(212) 517-9367

Institutions Concerned with the Preservation of Native Cultures

AMAZIND
Documentation and Information for Indigenous
Affairs in the Amazon Region
17, rue de Sources
1205 Geneva, Switzerland
or
P. O. Box 509
1211 Geneva 3, Switzerland

Committee for Indigenous Minority
Research and Action
5 Caledonia Road
London N1
United Kingdom

Cultural Survival, Inc.
11 Divinity Avenue
Cambridge, MA 02138, U.S.A.

Gesellschaft fur Bedrohte Volker
(Society for Endangered Peoples)
Postfach 159
3400 Gottingen
Federal Republic of Germany

International Work Group for
Indigenous Affairs (IWGIA)
Fiolstraede 10, DK-1171
Copenhagen K, Denmark

Survival International
36 Craven Street
London WC2
United Kingdom
and
2121 Decatur Street, N.W.
Washington, D.C. 20008, U.S.A.
(202) 265-1077

Werkgroep Inheemse Volken entijdschrift Tribaal
Minahassastrat 1
Postbus 4098
1009 AB Amsterdam
Netherlands

Institutions with Expertise in Salvage Archeology

Alberta Culture Archaeological Survey
Old St. Stephen's College
8820 112 Street
Edmonton, Alberta T6G 2P8
Canada

American Association of Museums
1055 Thomas Jefferson Street, N.W.
Washington, DC 20007, U.S.A.
(202) 338-5300

American Schools of Oriental Research
4243 Spruce Street
Philadelphia, PA 19104, U.S.A.
(215) 222-4643

Archaeological Assistance Division
National Park Service (U.S.)
P. O. Box 37127
Washington, D.C. 20031-7127, U.S.A.

Archaeological Institute of America
P. O. Box 1901, Kenmore Station
Boston, MA 02215, U.S.A.
(617) 353-9361

Barbados Conservation Association
Savannah Lodge, The Garrison
St. Michael, Barbados
Executive Director: Ms. Jill Sheppard

Escuela Superior Politecnica del Litoral
Escuela de Arqueologia
Apartado 5863
Guayaquil, Ecuador

Fundacao Pro-Memoria
SCN Quadra 2, Projecao K
Brasilia, DF. 70710, Brasil

Instituto Hondureno de Antropologia e Historia
Villa Roy
Bo. Buenos Aires
Tegucigalpa, Honduras

Instituto Nacional de Arqueologia
Calle Tiawanacu No. 93
La Paz, Bolivia

Instituto Venezolano de Investigaciones Cientificas
Departamento de Antropologia
Apartado 1827
Caracas, Venezuela

Institute of Jamaica
Museum and Archaeology Division
Port Royal Project
Kingston, Jamaica

Ministerio de Cultura y Educacion
Direccion Nacional de Investigaciones Culturales
Avda. Alvear 1690
Buenos Aires, Argentina

Ministerio de Educacion
Direccion de Bibliotecas
Archivos y Nacionales
Alameda O'Higgins 651
Santiago, Chile

Museo Nacional
Apartado 749
San Jose, Costa Rica

Museo del Hombre Dominicano
Plaza de la Cultura
Juan Pablo Duarte
Santo Domingo, Republica Dominicana

Museo del Hombre Venezolano
Universidad Central de Venezuela
Apartado 47372
Caracas 1041-A, Venezuela

Museo y Galerias del Banco Central
Quito, Ecuador

Proyecto Regional de Patrimonio Cultural y Desarrollo
UNESCO
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ANNEX F

CULTURAL PROPERTY SURVEY FORM 4/

Name of Project:
Appraisal (or other) Date:

Date of Survey: Surveyor: Affiliation:
Methodology(ies):

1. Cultural Property Reconnaissance

Is there evidence in the general project region of:

A. Archaeological or paleontological sites? Yes/No

Brief description:

B. The occurrence of an important historical event or historic structures? Yes/No

Brief description:

C. The occurrence of an important religious event, religious structures or a site sacred to indigenous or tribal peoples? Yes/No

Brief description:

D. A site of natural uniqueness or esthetic attraction? Yes/No

Brief description:

If reconnaissance revealed cultural property, the remaining two questions should be completed.

2. What are the principal qualities that make the site culturally valued?

3. Briefly outline any major political, cultural, legal, or scientific issues pertinent to the cultural property(ies).

Maps and more complete reports used or available should be appended or cited.

4/ Note: This can be annexed to the project identification documents and can be used for the Project Brief. This can be completed by the government's Ministry of Culture, a consultant from the national museum or a national university, or by the project pre-feasibility team's cultural property specialist.

LITERATURE CITED
AND SOURCES OF FURTHER INFORMATION

Advisory Council on Historic Preservation (ACHP). 1979. The Contribution of Historic Preservation to Urban Revitalization. Washington, D.C., 207p.

_____. 1982. Where to Look: A Guide to Preservation Information. Washington, D.C.: Superintendent of Documents (SD), U.S. Government Printing Office (USGPO), Stock #052-003-00879-3, 81p.

_____. 1985a. Federal Historic Preservation Case Law. Washington, D.C.; SD, USGPO, Stock #052-003-01000-3, 88p.

_____. 1985b. Treatment of Archeological Properties: A Handbook. Washington, D.C., 39p.

_____. n.d. "International center for the study of the preservation and restoration of cultural property." Washington, D.C., brochure.

American Society of Civil Engineering (ASCE). 1984. "A proposed eighth fundamental canon for the ASCE code of ethics." Journal of Professional Issues in Engineering 110(3):118-22.

Amoroso, G.G., and Fassina, V. 1983. Stone Decay and Conservation: Atmospheric Pollution, Cleaning, Consolidation and Protection. New York: Elsevier, 453p.

Asian Cultural Centre (ed.). 1981. Grand and Glorious Asia: Ancient Monuments of a Rich Cultural Past. Tokyo: Asian Cultural Centre for UNESCO, 83p.

Austin, R.C. 1985. "Beauty: a foundation for environmental ethics." Environmental Ethics 7:197-208.

Baldwin, G.C. 1966. Race against Time: The Story of Salvage Archaeology. New York: Putnam, 191p.

Biddle, M., and Hudson, D. with Heighway, C. 1973. The Future of London's Past: A Survey of the Archaeological Implications of Planning and Development in the Nation's Capital. Worcester: Rescue, 1 vol.

Bourke, M., Lewis, M. and Saini, B. 1983. Protecting the Past for the Future: proceedings of the UNESCO regional conference on historic places, Sydney, 22-28 May 1983. Canberra: Australian Government Publishing Service, 250p.

Bray, W., and Trump, D. 1977. Guide to Archaeology. New York: American Heritage, 269+p.

Burnham, B. 1974. The Protection of Cultural Property: Handbook of National Legislations. Paris: International Council of Museums (ICOM/UNESCO), 205p.

- Butzer, K.W. 1972. Environment and Archaeology. London: Methuen, 703p.
- Callicott, J.B. 1985. "Intrinsic value, quantum theory, and environmental ethics." Environmental Ethics 7:257-75.
- Campbell, R. 1962. "Saving ancient treasures above Aswan Dam." Civil Engineering (August): 32-34.
- Chang, K.C. 1968. Settlement Archaeology. Palo Alto, Calif.: National Press, 229p.
- Cleere, H. 1982. "Publication and dissemination of results of rescue archaeology" (213-228). In Wilson, R.L., and Loyola, G. (eds.), Rescue Archaeology. Washington, D.C.: Preservation Press, 266p.
- Commission on Conservation of Historic Stone Buildings and Monuments. 1982. Conservation of Historic Stone Buildings and Monuments. Washington, D.C.: National Academy Press, 384p.
- Commission of the European Communities. 1985. ACP-EEC Convention, Lome III. The Courier 89 (Special Issue): 134p.
- Cottrell, L. 1964. Encyclopedia of Archaeology. New York: Hawthorn, 512p.
- Dasmann, R.F. 1973. Classification and Use of Protected Natural and Cultural Areas. Morges, Switzerland: International Union for the Conservation of Nature (IUCN), 24p.
- _____. 1974. "Development of a classification system for protected natural and cultural areas" (388-402). In Elliott, H. (ed.), Second World Conference on National Parks. Morges, Switzerland: IUCN, 504p.
- Deetz, J. 1967. Invitation to Archaeology. Garden City, N.J.: Natural History Press, 150p.
- Delcourt, J. 1982. La turbulente histoire de Goree. Dakar, Senegal: Eds. Clair Afrique, 102p.
- Denevan, W.M. 1970. "Aboriginal drained-field cultivation in the Americas." Science 169(3946):647-54.
- _____. 1976. "Aerial photography in anthropological field research." Professional Geographer 28(1):124.
- _____. 1982. "Hydraulic agriculture in the American tropics: forms, measures, and recent research" (181-203). In Flannery, K.V. (ed.), Maya Subsistence: Studies in Memory of Dennis E. Puleston. New York: Academic Press, 368p.
- _____. 1983. "Demographic collapse - Indian Peru, 1520-1620." Americas 40(2):281-84.
- Denevan, W.M. 1985. "Peru's agricultural legacy." Focus 35(2):16-21.

- Derry, A. 1977. Guidelines for Local (Archaeological) Surveys: A Basis for Preservation Planning. Washington D.C.: National Park Service, Office of Archaeology and Historic Preservation National Register of Historic Places, 83p.
- Dimbleby, G.W. 1977. Ecology and Archaeology. London: Arnold, 54p.
- Dong, M.R. 1984. Museum Studies International. Washington, D.C.: Smithsonian Institution, 205p.
- Duerkson, C.J. (ed.). 1983. A Handbook on Historic Preservation Law. Washington, D.C.: Preservation Foundation and National Center for Conservation Law, 755p.
- Evans, J.G. 1978. An Introduction to Environmental Archaeology. Ithaca, N.Y.: Cornell University Press, 154p.
- Fagan, B.M. 1983. Archaeology: A Brief Introduction. Boston: Little, Brown, 199p.
- George, A. 1986. "2,000-year old Libyan farms point the way ahead." Earthscan (24 Jan):2.
- Gonzalez, A.R. 1982. "Rescue archaeology in South America: a summary of current projects" (91-144). In Wilson, R.L., and Loyola, G. (eds.), Rescue Archaeology. Washington, D.C.: Preservation Press, 266p.
- Green, E.L. 1984. Ethics and Values in Archeology. New York: Free Press, 301p.
- Heizer, R.F., and Graham, J. 1967. A Guide to Field Methods in Archaeology. Palo Alto, Calif.: National Press, 274p.
- Hinrichsen, D. (ed.). 1983. "How the world heritage convention works." Ambio 12(3-4):140-45.
- Hughes, J.D. and Swan, J. 1986. "How much of the earth is sacred space?" Environmental Review (Winter):247-59.
- ICCROM. 1986. Preventive Measures during Excavation and Site Protection. Conference in Gagnt, Belgium, 6-8 November 1986. Rome, 318p.
- ICOMOS. 1964. International Charter for the Conservation and Restoration of Monuments and Sites (Venice Charter). Venice: Stamperia de Venezia, International Council on Monuments and Sites, 9p.
- Jashemski, S. 1965. Pompeii and the Region Destroyed by Vesuvius in A.D. 79. Garden City, N.Y.: Doubleday, 61p.
- Jashemski, W.M.F. 1979. The Gardens of Pompeii: Herculeaneum and the Villas destroyed by Vesuvius. New Rochelle, N.Y.: Caratzas Bros., 372p.
- Keune, R.V. 1984. The Historic Preservation Yearbook. Bethesda, Md.: Adler and Adler, 590p.

- King, T.F. 1974. Recommended Procedures for Archaeological Impact Evaluation. Fullerton, Calif.: Society for California Archaeology, 17p.
- _____. 1978. The Archaeological Survey: Methods and Uses. Washington, D.C.: U.S. Department of Interior, Office of Archaeology and Historic Preservation, 134p.
- King, T.F. (ed.). 1980. Treatment of Archaeological Properties: A Handbook. Washington, D.C.: Advisory Council on Historic Preservation, 39p.
- _____, Hickman, P.P., and Berg, G. 1977. Anthropology in Historic Preservation: Caring for Culture's Clutter. New York: Academic, 344p.
- Kleye, F.E. 1980. Rehabilitation of Historic Buildings: An Annotated Bibliography. Washington, D.C.: SD, GPO, Stock No. 024-016-001130-3, 21p.
- Lee, J.A. 1984. "Rescue archaeology as a dimension of economic development assistance and financing." Dallas, Tex.: New World Conference on Rescue Archaeology, 5p.
- _____. 1985. The Environment, Public Health, and Human Ecology: Considerations for Economic Development. Baltimore, Md.: The John Hopkins University Press, 288p.
- Lyons, T.R. 1977. Remote Sensing Experiments in Cultural Resource Studies: Non-destructive Methods of Archaeological Exploration, Survey and Analysis. Albuquerque, N.M.: National Park Service, Chaco Center, 186p.
- Maddex, D. (ed.). 1983. The Brown Book: A Directory of Preservation Information. Washington, D.C.: Preservation Press, 160p.
- McCreery, D.W., and Sauer, J.A. 1983. Economic Development and Archaeology in the Middle East. Amman, Jordan: Department of Antiquities of the Hashemite Kingdom of Jordan and the American Center of Oriental Research, 30p.
- McGimsey, C.R. 1972. Public Archaeology. New York: Seminar Press, 265p.
- Mueller, J.W. (ed.). 1974. The Use of Sampling in Archaeological Survey. Washington, D.C.: Society for American Archaeology (Memoir 28), 91p.
- National Trust for Historic Preservation in the United States (NTHP/US). 1978. Directory of Historic Preservation Organizations Outside the United States. Washington, D.C.: The Preservation Press, 44p.
- Papageorge, K.M., and Guthrie, A.J. 1985. "The cultural property act." Museum News (June):47-52.
- Peatross, C.F. (ed.). 1983. Historic America: Buildings, Structures and Sites. Washington, D.C.: Library of Congress, 708p.
- Pilling, A.R. 1981. "Sacred sites: some cross cultural questions." ARC Newsletter 5(4):3.

Price, N.P.S. (ed.). 1984. Conservation of Archaeological Excavations with particular Reference to the Mediterranean Area. Rome:ICCRUM, 157p.

Prott, L.V., and O'Keefe, P.J. 1983. Law and the Cultural Heritage. Volume I - Discovery and Excavation. Abingdon, England: Professional Books, 76p.

Quintanilla, O.A. 1982. "Traditional cultures threatened by development" (29-39). In Wilson, R.L., and Loyola, G. (eds.), Rescue archaeology. Washington, D.C.: Preservation Press, 266p.

Radford, A.E., Otte, D.K.S., and Otte, L.J. (eds.). 1981. Natural Heritage. Chapel Hill, N.C.: University of North Carolina Press, 485p.

Rippeteau, B.E. 1979. "Antiquities enforcement in Colorado." Journal of Field Archeology 6(1):85-103.

Roddewig, R.I. 1983. Preparing a historic preservation ordinance. Chicago: American Planning Association, 46p.

Ruppe, R.J. 1966. "The archaeological survey: a defense." American Antiquity 31:313-33.

Schiffer, M.B., and Gummerman, G.J. (eds.). 1977. Conservation Archaeology: A Guide for Cultural Resource Management Studies. New York: Academic, 495p.

Schneider, K. and Dittmar, E. 1981. "Archeological resource inventory" (430-441). In Radford et. al. (eds.), op. cit.

Sykes, N. 1984. Manual on Systems of Inventorying Immovable Cultural Property. Paris: UNESCO, 180p.

Talmage, V., and Chesler, O. 1977. The Importance of Small, Surface, and Disturbed Sites as Sources of Significant Archaeological Data. Washington D.C.: National Park Service, Office of Archaeology and Historic Preservation, 35p.

UNESCO, 1976. Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972. Paris: UNESCO General Conference, 17th Session, 60p. (Also Washington, D.C.:GPO).

_____. 1982. A Legacy for All: The World's Major Natural, Cultural and Historic Sites. Bologna: Poligrafici Editoriale, 137p.

_____. 1983, updated 1985. Conventions and Recommendations of Unesco Concerning the Protection of the Cultural Heritage. Paris, 239p.

_____. Forthcoming. The Protection of Movable Cultural Property III: Compendium of Legislative Texts.

U.S. Dept. of Agriculture. 1976. The Archaeological Reconnaissance Report Training Guide. San Francisco, Calif.: Forest Service Region 5(R5-2700-37)(v.p.).

U.S. Dept. of Interior (USDI). 1977. "Recovery of scientific, prehistoric, historic, and archaeological data: Methods, standards, and reporting requirements." Federal Register 42 (19):5374-77 (Jan. 28).

_____. 1982. Respectful Rehabilitation. Washington, D.C.: Preservation Press (for USDI, NPS, Tech. Preservation Services):150p.

USDI. 1983a. "Archaeology and historic preservation: Secretary of the Interior's standards and guidelines." Federal Register 48 (190):44716-42.

_____. 1983b. Standards and Guidelines for Rehabilitating Historic Buildings. Washington, D.C.: National Park Service, Preservation Assistance Division (USPO:0-416-688), 61p.

Urbamet, C. 1973. Conservation et la restauration des monuments et des batiments historiques. Paris: UNESCO (Kirschhofer & Bushing), 288p.

Wendorf, F. 1962. A Guide for Salvage Archaeology. Santa Fe, N.M.: Museum of New Mexico Press, 128p.

White, E.E. 1962. "Saving the Temples of Abu Simbel." Civil Engineering (August):34-38.

Whitehouse, R. D. (ed.). 1983. Macmillan Dictionary of Archaeology. London: Macmillan, 597p.

Williams, S.A. 1978. The International and National Protection of Movable Cultural Property. Dobbs Ferry, N.Y.: Oceana, 302p.

Wilson, R.L., and Loyola, G. (eds.). 1982. Rescue Archaeology. Papers from the 1981 First New World Conference on Rescue Archaeology. (Organization of American States; National Trust for Historic Preservation). Washington, D.C.: Preservation Press, 266p.

World Bank. 1982. "Tribal peoples and economic development: Human ecologic considerations." Washington, D.C., 111p.

_____. 1984a. "Environmental policies and procedures of the World Bank." Washington, D.C.; Office of Environmental and Scientific Affairs, 8p.

_____. 1984b. "Environmental requirements of the World Bank." Washington, D.C.; Office of Environmental and Scientific Affairs, 41p.

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