DISSERTATION

THE INTERPRETIVE POWER OF SETTING: APPROPRIATE LEVELS OF RESTORATION AND DEVELOPMENT AT COPÁN ARCHAEOLOGICAL PARK, HONDURAS; A UNESCO WORLD HERITAGE SITE

Submitted by

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In partial fulfillment of the requirements

for the Degree of Doctor of Philosophy

Colorado State University

Fort Collins, Colorado

Summer 2007

COLORADO STATE UNIVERSITY

May 9, 2007

WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY CHRISTOPHER C. MAYER ENTITLED THE INTERPRETIVE POWER OF SETTING: APPROPRIATE LEVELS OF RESTORATION AND DEVELOPMENT AT COPAN ARCHAEOLOGICAL PARK, HONDURAS; A UNESCO WORLD HERITAGE SITE BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

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ABSTRACT OF DISSERTATION

INTERPRETIVE POWER OF SETTING: APPROPRIATE LEVELS OF RESTORATION AND DEVELOPMENT AT COPÁN ARCHAEOLOGICAL PARK, HONDURAS; A UNESCO WORLD HERITAGE SITE

Copán Archaeological Park (CAP) is a small but world-renowned cultural site facing important management decisions that will affect both internal and external setting attributes, interpretive potential, and the *ruins experience*. Managers must choose an appropriate level of restoration internally and work with local officials to achieve appropriate land uses adjacent to the park. In 2002 and 2003, visitor perceptions about these issues were probed using 700 plus post-visit surveys and two sets of on-site interviews. This study examined how differing levels of restoration and development within, and intensifying development next to CAP would affect interpretive potential and the visitor experience. Results indicated that Latin Americans, North Americans, and Europeans all preferred a mixture of restored ruins and those being reclaimed by nature. Visitors describe how this juxtaposition added to their experience. A majority of these visitors indicated a strong preference for maintaining agricultural or forested lands between the park and the town of *Copán Ruinas* and described how the intensification of development would deleteriously affect their experience. Protecting interpretive potential inherent in these settings will require interpreters to move beyond traditional interpretive planning and to inform the protected area and local government planning decisions that will ultimately determine the "from which" that programmatic interpretation is derived. Implications for Park management and cross-boundary involvement in land use decisions at this and similar site are discussed and recommendations given. If CAP and adjacent

lands are managed properly, CAP can provide visitors with a unique experience that will maintain or broaden the site's appeal.

The dissertation contains two stand-alone papers. Chapter IV examines appropriate levels of restoration and development and the setting attributes affecting the visitor experience. Chapter V identifies and provides suggestions for protecting the interpretive potential of the internal and external setting at CAP.

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ACKNOWLEDGEMENTS

Foremost I thank teacher, farmer, conservationist, and patriot, George Wallace for the advice he gave me 1999. I sought his counsel when I was unsure whether I should leave Colorado State to become a Peace Corps Volunteer. He asked, "Have you read widely?" I told him that I liked to think that I had. He said, "Then you know, that interesting lives have always taken dramatic turns." That was the moment that I made up my mind to go, and since then, life has been interesting. Thank you, George for your patience and guidance.

My committee members are owed a deep debt of gratitude for navigating me through the rocky waters of the Ph.D. process. One thousand thanks to Ross Loomis, Department of Psychology, Tim Merriman, from the National Association for Interpretation for the best advice anyone ever gave me when he reluctantly encouraged me to become a Peace Corps Volunteer, and Jerry Vaske for his patience in teaching me statistics and rigorous research methods standards. Thank you, Gentlemen.

Several friends merit special thanks. Nina Roberts and Michelle Laskowski for all the, "You can do it!" encouragement. To Bert Ballard for keeping our pact. To Jim Barborak for seeing my potential. To Paul Caputo for giving your talents to help a friend in need. Fellow RPCV Drew Stoll for the maps. To Jorge Betancourt, Carin Steen, Craig MacFarland, Ryan Finchum, Adam Bernstein, Erin Guild, Dale Woitas, Angela Faggert, Brad Wolfe, Bruce Hodgdon, Craig Chapin, and Mike Whatley. A special thanks goes out to the people of *Copán Ruinas* and the staff of Copán Archaeological Park. Finally, to my parents, Don and Marilyn Mayer for their unwavering love and support even though they did not always understand my master plan.

For Mary Norton

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CHAPTER I

> When we contemplate ruins, we contemplate our own future. To statesmen, ruins predict the fall of Empires, and to philosophers the futility of mortal man's aspirations. To a poet, the decay of a monument represents the dissolution of the individual ego in the flow of Time; to a painter or architect, the fragments of a stupendous antiquity call into question the purpose of their art. Why struggle with a brush or chisel to create the beauty of wholeness when far greater works have been destroyed by Time? (Christopher Woodward, In Ruins, 2001, p. 2)

Introduction

The Central American developing nation of Honduras is one of great promise and challenge. The promise of Honduras is built on its base of natural and cultural resources and its strong and willing workforce. Its challenges are manifest in the multiple, interrelated environmental, economic, and social crises that it confronts. The most prominent example of an environmental challenge was Hurricane Mitch in late 1998, which destroyed over 100 bridges and damaged nearly every highway and road in the country. Although much of the damage has been repaired, urban populations and accompanying environmental and social problems have grown dramatically. Concomitantly, deforestation from illegal logging and the burning and clearing of marginal land for agricultural continue to exacerbate soil erosion countrywide. Extractive industries such as mining and timber have been linked to everything from environmental degradation to wholesale corruption. For example, loosely controlled foreign mining has contaminated Lake Yojoa, the country's largest source of fresh water, with heavy metals (Mesoamerica, 2002a).

On the social front, in March 2002, United Nations Secretary General Kofi Annan identified Honduras as the HIV-AIDS capital of Central America (Mesoamerica, 2002b). In addition, gang violence and crimes such as kidnapping are on the rise while poverty consistently hovers at about 72% of a population of 6.6 million (Mesoamerica, 2002c). Wishing to remediate these daunting problems and convert from extraction to a less-consumptive form of sustainable economic development, Honduran President Ricardo Maduro, declared 2002 a national "year of tourism." That same year, his administration initiated a national tourism promotional and public communications campaign (INCAE/FIDE, 2003). If estimates for growth in international tourism manifest, President Maduro will have been wise to invest in tourism.

With over a hundred biological reserves and protected areas, Honduras will attract increasing tourism. These parks have been considered by many environmentalists as "paper parks" unsupported by financial and administrative wherewithal (Bustillo-Pon, 1990; Eltringham, Fisher, & Stewart, 2001). There are, however, several viable Honduran protected areas and tourist destinations. The Bay Island, Roatán, with access to immense coral reefs, is the country's most popular tourist destination. On the mainland, the north Caribbean coast offers miles of beaches and native Garífuna fishing culture. Eastern Honduras contains the Biosphere Reserve, *La Mosquitia*—a jungle so fecund it is considered "the lungs" of Central America. Inland, there are cloud forest national parks, waterfalls, and pre-Columbian and Spanish Colonial cultural sites. In western Honduras, near the Guatemalan border, archaeological remnants are scattered across the wide Copán River Valley. Also located there is the Copán Archaeological Park (CAP)—a monument to the artistic peak of the Maya civilization. Copán, the ancient Maya city, was a major

center of trade, art, and religion in the Maya world. Today the archaeological park is Honduras' second most popular tourist destination and its only profitable national park. CAP is the setting for this study related to setting and experience.

Archaeological sites like CAP provide tangible and intangible benefits to both local communities and the wider public. Archaeology benefits professional research as well as the publics who use and value it (Little, 2002). Cultural sites such as ruins are imbued with many of our greatest hopes and dreams. Examples of public benefits of archaeology include economic development, education, community cohesion, cultural exchange, inspiration, entertainment, and such ideals as mutual tolerance, appreciation, respect, and peace through understanding (Henson, 2001; Little, 2002; National Park Service, 2002; World Tourism Organization, 2001; UNESCO, 1980). Henson (2001) contends that archaeology "has an unrivalled ability to stir enthusiasm for the past and invoke a deeper appreciation of the local environment" (p. 111). The World Tourism Organization called mankind's inherent desire to see and learn about other cultures a "pillar of the tourism industry," and suggested that domestic visitors gain greater respect and understanding of their heritage (World Tourism Organization, 2001, p. 1).

The Copán Maya—A brief history

The Maya, a group of tribes culturally linked by common languages and religious beliefs, formed around 1,500 BC. Their world, known today as Mesoamerica, extended from southeast Mexico on the north to Guatemala, Belize, Honduras, and El Salvador to the south (Fash, 2001). Agriculture provided the basis of their societal stability, with maize the staple crop. Their hegemonic system was one of hereditary male chiefs. Large

city-states like those found at Palenque (Mexico), Tikal (Guatemala), Caracol (Belize) and Copán (Honduras) were centers of religion and trade (Gallimard-Firm, 1999).

Longevity of observation of the night sky enabled Maya astronomers to develop a precise 365-day calendar that pre-dates today's Gregorian calendar. Maya architecture is characterized by large mound foundations covered in layers of carved stone in the form of temples and residences. Miller (2001) noted, "The Copán Valley provides superb possibilities for the dramatic siting of architecture. The ancient city planners realized this and located their buildings to take advantage of specific views of the valley and surrounding mountains, especially the saddle throughout the mountains to the north. The ballcourt, for example, seems to reproduce the valley itself in its layout and orientation" (p. 136). Large open plazas that were ornamented with stelae and altars typically surrounded these elaborately adorned structures. The Maya used an elaborate system of hieroglyphic writing to record their dynastic history, mythology and astronomical notations. As Foster (2002) explained, "The inscriptions on the ruler's stelae are related not as a continuous narrative, but as a group of experiences that established the holiness of the space in which they were erected. The placement of the stelae reinforced this purpose: Located at the cardinal and intercardinal points of the *Great Plaza*, The stelae define the plaza as part of the sacred cosmic order" (p. 180). The Maya worshipped a variety of nature-based gods and performed rituals and ceremonies to ensure their favor. "Among the Maya, kings were thought to be divine shamans who operated in multidimensional ways. Through the power of their ritual performances, shaman-kings ordered and balanced both the worldly and supernatural realms and thereby protected their domains" (p. 183).

By the time of the Spanish Conquest, already gone was the great Maya city-state at Copán. The first reports of Copán's illustrious past reached Spain in 1576, when Diego García de Palacio reported to King Phillip II, "On the road to San Pedro, in the first town within the province of Honduras, called Copán, are certain ruins and vestiges of a great population, and of superb edifices, of such skill and splendor that it appears they could never have been built by the natives of that province. They are found on the banks of a beautiful river in an extensive and well-chosen plain" (Agurcia-Fasquelle, 1998, p. 29).

Contemporary history of Copán dates back to 1839, when John Lloyd Stephens, attorney and self-styled explorer, along with artist Frederick Catherwood embarked on an expedition to confirm rumors of the existence of a great civilization near Copán. Stephens chronicled his adventures, including his purchase of the ruins for $50, in his popular book, *Incidents of Travel in Central America, Chiapas, and Yucatan* (1969). At the time of Stephen's expedition, nature was well on its way toward obliterating the ancient city. He wrote, "The whole area is overgrown with trees and encumbered with decayed vegetable matter, with fragments of curious sculpture protruding above the surface, which, probably with many others completely buried, would be brought to light by digging" (p. 143).

An earthquake in the 1850s accelerated natural decay by leveling portions of the ruins including the hieroglyphic staircase (comprised of over 2,500 glyphs recording the history of rulers up to AD 755). Additionally, the Copán River was relentlessly eroding away the eastern side of the Acropolis (residential area of Maya nobility). Since the late 1800s, the ruins have undergone a series of excavations and restorations by various institutions, universities and teams of archaeologists, who have been responsible for

restoring a major portion of the ancient city center. In 1881, archaeologist Alfred Percival Maudslay made his first trip to Copán and was captivated by what he found. He was the first to clear the main archaeological group and create extensive maps of the remains. A decade later, Honduran President Luis Bogran, in an agreement with Charles P. Bowditch, Director of the Peabody Museum of Harvard University, granted caretaker responsibility to the museum to explore and restore the ruins. Their agreement included the still controversial entitlement to take away half of all objects found during the excavation. Nonetheless, the Peabody Museum is credited with having overseen the first major restorations and early attempts at conservation—such as the construction of a wall around the ruins to protect them from fire and vandalism (Robicsek, 1972).

From 1935 to 1947, an ambitious program of study and repair was undertaken by the Carnegie Institute of Washington. Their toil did much to stabilize and restore the ruins. Under their administration, the Copán River was diverted and arduous repair of the fallen hieroglyphic staircase began.

In 1975, the Honduran government initiated further research and restoration (*Proyecto Arqueológico Copán*)—first under the direction of Gordon Willey and subsequently under Claude Baudez and William Sanders. The government's dual goals were to enhance the tourist trade by restoring temples and palaces and to understand the city's ancient growth and development (Baudez, 1994; Sabloff, 1994). In recent times, large-scale restoration has tapered off as efforts have been focused on research and conservation. A good example of this is the work of Barbara Fash, on behalf of the Getty Foundation, who is assisting with conservation and restoration of the famed hieroglyphic staircase.

In 1981, the United Nations Educational, Scientific and Cultural Organization (UNESCO) named the ruins at Copán a World Heritage Site (WHS). Created in 1946, UNESCO strives to promote world peace through education and intercultural appreciation and exchange (UNESCO, 1998).

In 1982, the Copán Archaeological Park was declared a national monument by the Honduran government. The managing agency, founded in 1952, is the Honduran Institute of Anthropology and History (*Instituto Hondureño de Antropología e Historia,* or IHAH). In 1984, the IHAH approved Copán's first management plan (Barborak, McFarland, & Morales, 1984). That same year, a plan for the park's interpretation and environmental education was submitted to the IHAH for ratification and enactment. Major interpretative antecedents include the opening of the Museum of Archaeology in 1939, the installation of interpretative exhibits in the visitor center in 1985, and the inauguration of the Sculpture Museum in 1996. The public use section of the 1984 CAP management plan emphasized telling the whole story of the ancient Maya at Copán, and not only the romantic notions of kings, temples, and warfare (Barborak et al., 1984). At Copán, archaeologists have placed a greater emphasis than at similar sites looking at household archaeology and lesser monuments. This work has provided another side to the Copán story, one that does not rely solely on telling the story of kings, temples, and palaces, but also includes how the city functioned and how the citizenry lived and worked.

Overall, the restoration and promotion of the ruins as a means of attracting tourists have been successful. Barborak (2004) noted that CAP has turned *Copán Ruinas* into one of the most prosperous rural towns in all of Central America. In the late 1970s,

about 10,000 visitors a year came to Copán (Fash, 2002). A rise in tourism in the 1990s yielded economic benefits as Copán enjoyed a steady rise in the number of annual visitors. Visitation peaked in 1997, with 107,555 visitors recorded (*Informe Final del Año 2002*, 2002). October of 1998 brought Hurricane Mitch and its resultant nationwide infrastructure devastation, after which CAP experienced a temporary dip in visitation.

Study Area—Copán Today

Shackley (2000) called World Heritage Sites such as CAP "powerfully evocative symbols of national identity." Copán's allure is cross-cultural. The importance of the Copán ruins to Honduran culture is clear by their depiction on the national currency—the Lempira. Every Honduran schoolchild is taught the fame and majesty of Copán. For many foreign visitors, CAP is an indispensable stop on the "gringo trail" of Mesoamerican Maya sites. Visitors from around the world come to experience the beauty, history, and mystery of Maya civilization.

The town of *Copán Ruinas* is located 45-kilometers southwest (a 2.5 hour drive) of San Pedro Sula, the business capital of Honduras, and one-kilometer west of the park boundary. Pine-and-oak forested mountains surround the 24-square-kilometer valley, that at 600 meters above sea level, provides an agreeable climate (Agurcia-Fasquelle, 1998). Professor of Archaeological Anthropology, David Webster, has carried out excavations and research at Copán and reflected on the dramatic growth of the town. "*Copán Ruinas* had six houses when Stephens and Catherwood arrived in 1839," he noted (2002, p. 35), "and was still a sleepy Honduran town only connected to the outside world by sometimes impassable dirt roads when I first worked there in 1980." The contemporary *Copán Ruinas* is small but bustling. The town's cobble-stoned streets are clean and safe, and its

central park serves as a congenial meeting place for locals and tourists alike. Restaurants catering to the tastes of tourists and a variety of accommodations are available to meet every budget and comfort level.

Unless one arrives by tour bus or private vehicle, most visits to the archaeological park originate in the town of *Copán Ruinas*. The 15-minute walk from the town to the park provides time for geographic orientation and mental preparation. Tourists embark on foot, cross a bridge over *Cacahuatales* creek, and are immediately immersed in a pastoral valley landscape. This affords visitors the opportunity to observe traditional rural agriculture. Schlesinger (2001) points out, "An ancient Maya farmer passed up and down the length of his newly cleared field poking holes in the ground with a long stick and dropping five or so seeds into each hole. The Maya planted corn, beans, squash, and chili, much as the rural farmers in the Maya area do today" (p. 53). The cultural continuity extends beyond the crops to the tool used for sowing, which has only changed in one significant way since prehistoric times: the tool's point, once hardened by fire, is now made of steel (Gallimard-Firm, 1999).

Today's Maya ruins are often surrounded by the undeveloped natural world, and Copán is no exception. Within the 68-hectare archaeological park, gigantic ceiba trees (*Ceiba pentandra)* grow out of immense temples allowing visitors to witness the passage of time first hand and nature's ability to reclaim a city-state that once had over 10,000 inhabitants (Fash, 2001). The forest that surrounds the ruins filters out the sounds of modernity, while birds and insects provide a soothing soundscape for a visit that includes the opportunity to see whitetail deer, toucans, and giant blue morph butterflies.

Two opposing forces could potentially change the settings just described, which visitors currently experience. Before they do so, it is important to ask how these changes might affect the ruins experience and whether they would add or detract from it. CAP managers can attempt to mitigate both forces if it is discovered that changes in setting will reduce cultural, historic, or natural values provided by a visit to the ruins. The first agent of change is nature reclaiming the archaeological remnants (particularly within the park). Neither the collapsed structures appearing as tree covered mounds nor the restored hieroglyphic staircase that is being eroded by direct sunlight and rain are immune to the power of nature and time.

According to Sadek, "In addition to restoration, replication, documentation, and monitoring, national legislation and proper management of cultural sites are prerequisite to the 'sustainability' of the tourist industry and to the survival of both the national cultural heritage and the national economy" (1994, p. 42). To the U.S. National Park Service (NPS), the primary value of cultural resources is to "enliven, enrich, and inform" (National Park Service, 2002, p. 1). It is incumbent upon park stewards to serve the public in a way that endeavors to create memorable educational experiences while maintaining sites that are protected for the enjoyment of future generations.

Cultural resource management requires an activist approach that strikes a balance between total restoration and allowing nature to completely reclaim the ruins. UNESCO's guide to WHS tourism management states that CR managers are under an international obligation to maintain or restore the site's *original values* (Pedersen, 2003). Shackley (2000) described World Heritage Sites as fragile non-renewable resources which have to

be safeguarded both to maintain its authenticity and to preserve them for future generations. He contends that a WHS "...should present the visitor with an evocative experience by creating a visitor environment within the original spirit of place is retained while still creating adequate facilities and providing sufficient information for visitors" (p. 195).

It is estimated that less than five percent of the Copán River Valley's 4,500 archaeological mounds have been excavated, least of all restored. Financial constraints notwithstanding, some archaeologists, tourists, and heritage site managers would like to see the archaeological remnants developed and restored to the greatest extent possible. One reason may be to attract more tourists and thus capture more revenue; another may be that they intuit that restored ruins are preferable because they "bring the past alive." Unknown is if altering setting attributes through more extensive restoration is really desirable, or if benefits to the managing agency will accrue through this expenditure of human and financial resources. An overemphasis on tourism could lead to "unjustified reconstructions" and the destruction and loss of non-renewable archaeological remains (Feilden & Jokilehto, 1998).

The second potential agent of change that may well affect the setting attributes of the site is the intensification of land uses on adjacent pastoral lands. Shackley (2000) described several potential threats to the *genius loci* of a place associated with WHS designation. Among them were increased visitor numbers, governments seeking to enhance the site by over-restoration, and damage to the surrounding landscape by intrusive development.

If it is found that the current setting contributes to a quality visitor experience, it will require CAP managers to work with local landowners, government, and community groups to create land use zones near the ruins that maintain a setting which optimizes the visitor experience and buffers that experience from negative visual, auditory, and olfactory impacts as well as providing a transition to the history and culture of the Maya.

In research that included Copán as a case study, Wallace, Barborak, & MacFarland (2005) have described a pattern of land use around protected areas where real or anticipated tourism growth can cause agricultural lands to be slowly replaced by intensive commercial and residential development. Threats identified by their study included: unplanned tourism development; approaching urbanization; illegal, unplanned, or poorly designed roads; aircraft landings and over flights; and highly visible communications towers. Experiencing traditional customs and traditions of local people may be part of what visitors seek and adds a dimension to their visit to the ruins. If it is lost to development, this can impact both visitors and local residents.

ICCROM warns WHS managers that, "Encroachment and intrusive commercial development are typical threats that must be addressed by those responsible for conservation management. In addition, well-intentioned reuse and introduction of new services and infrastructures may detract from the original monuments and their contextually significant setting" (Feilden & Jokilehto, 1998, p. 74). "What is clear," wrote Ceballos-Lascuráin, "is that cultures that are economically vulnerable and politically subordinated are those most at risk from cultural changes instigated or wrought by tourism" (1996, p. 81).

In theory, Copán has an officially designated buffer zone, which includes established criteria for land use within that zone, and provisions for tracking land use proposals on adjacent lands. Study participants expressed doubts about whether or not these tools would be applied and respected. This was corroborated by Pedersen (2003) when he reported, "At Copán, a major international hotel was built even though many had suggested that smaller existing hotels in a nearby town would have been adequate with some minor upgrading. Many unattended ruins were destroyed just because they lay near a new access road to the Copán ruins" (p. 48). In recent years, highways have been paved and widened, permitting bus service between major Guatemalan and Honduran cities. An airstrip was completed west of the town that Humphrey (2003, p. 486) predicts "may increase the tourist traffic in the town, bringing among others, day-trippers from cruise ships docking at Roatán or Puerto Cortes." At the time of this writing, a larger regional airport is being planned and developed.

Extant Context—Protecting the Habitat of History

Context is the relationship of an archaeological find in time (chronological) and space (spatial) to all of the other finds made in the site (Fagan, 2003). Context is the foundation of history essential for clear understanding of the find (Smith, 2003). Loss of context diminishes the historic fabric, authenticity, cultural information, and value of a find (Fagan, 2003; National Park Service, 2002). CAP's extant context is its still-existing tangible links to the history and culture of the ancient Maya. Lipe (1984) wrote, "Probably no cultural item or property of any antiquity ever functions in today's context in the same way that it did in the past. Yet I think it is important that some relationship to

the original context be retained and communicated, whatever other functions may be added" (p. 2).

Protected areas are managed to preserve rare habitats. CAP and its nearby environs represent an attempt to protect and preserve a rare history in context. Smith (2003) explained that "Context is the foundation of history and archaeology, and archaeologists and presenters of the past need to make that a clear part of the message. A context for presenting the past is critical if archaeologists are to be effective researchers and storytellers" (p. 5). According to the U.S. National Park Service, "Once the historic fabric of a monument is gone, nothing can bring back its authenticity; once the objects in an archaeological site are disturbed, nothing can recover the information that might have been gained through analysis of their spatial relationships" (2002, p. 2). Visitors exposed to increasingly intensified land use may find it difficult to imagine oneself in the time and place when this civilization thrived. Dramatically altering the landscape surrounding CAP may reduce the larger context in which the Maya lived and farmed.

According to the World Tourism Organization, "culture can be commercialized and simply become a commodity to serve tourists. In the process, it gets despoiled and degraded. Culture and tourism must be mutually supportive of each other to make the relationship sustainable" (2001, p. 5). Cultural resource management directives assign first priority to the minimization of degradation or loss of archaeological remnants, and second, compatibility issues between cultural resources, new development, and visitor needs (National Park Service, 2002).

Williams and Stewart (1998) noted that many valued qualities of a place go unacknowledged until they are threatened. Examples of Copán's endangered extant

contexts resulting from land-use intensification include: soundscapes—the natural sounds that characterize an area including its wildlife; viewshed—the visual landscape of rural/agricultural vistas (Maya maize production was central to the success of the civilization); and the night sky—light pollution (astronomy was at the center of Maya cosmology). Feilden and Jokilehto (1998) declared, "there remains the urgent necessity to take due care not only of specific monuments or groups of buildings, but also to provide sufficient planning tools for the control and balanced development of their wider context" (p. 16).

Whereas sense of place can encompass both natural and cultural history (Williams & Stewart, 1998), CAP's legal boundaries do not take into account the larger geographic area in which the site evolved. Furthermore, CAP managers do not have exclusive domain over adjacent private land-use decisions. When stakeholder opinions differ as to the best use of the lands surrounding a protected area, conflict results. From a management standpoint, conflicting land use decisions are those that threaten the long-term ecological, cultural, and social equilibrium of the protected area. The effect of intensifying land uses near protected area boundaries may include the sharpening of ecological and aesthetic gradients which essentially reduce the size of the area and the breadth of available experience opportunities (Wallace et al., 2005).

Research Questions

Answers to the following questions will provide CAP managers with data needed to make the kinds of informed long-term development decisions regarding site conservation, preferred setting attributes, and the integrity of visitor experiences that enable them to maintain their site's essential values in perpetuity.

The research questions from the first manuscript were: in terms of the internal setting attributes, what is the right amount of restoration at this archaeological site and is there also a value in allowing visitors to witness the collapsed structures and tree covered mounds as well as restored temples, stele, ballcourts and hieroglyphic staircases? The second question deals with the external setting attributes at CAP and asks what might be the effect of intensifying development on adjacent pastoral lands for the quality of the visitor experience and the realization of desired outcomes?

The research objectives from the second manuscript were: (1) To better understand the implications of possible changes to the internal and external setting at CAP, and in hopes of learning more about the specific links between setting and desired outcomes at an archaeological site like Copán, the study had the following objectives; (2) to determine visitor preferences for both external and internal setting attributes; (3) how changes in the external and internal settings might affect the intellectual and emotional impact of the ruins experience and the achievement of desired visitor outcomes; and (4) to understand where interpreters might be able to influence the planning and management process in order to optimize the interpretive potential.

CHAPTER II

Literature Review

This research is grounded in a large literature focusing on cultural resource management best practices and leisure theory such as sense of place (meanings and perspectives of place) and experience-based setting management, a branch of the benefits approach to leisure. This study focuses on visitor preferences for both the park's internal and external settings. It does not offer new theory, but does provide a conceptual framework based on an outcomes approach to leisure that is informed by literature that examines the meanings and values of place. It builds on a behavioral approach to recreation which holds that recreationists are motivated to engage in activities in specific settings in order to achieve desired experience outcomes (Manning, 1999).

Institutional Directives

Several tourism and cultural resource management institutions either serve as models for, or are in a direct advisory capacity to, the sensitive management of cultural resources and tourism at Copán.

U.S. National Park Service

The U.S. National Park Service (NPS) serves as custodian and steward of many valued cultural resources such as the Aztec Ruins National Monument and the cliff dwellings within Mesa Verde National Park. Chaco Culture National Historic Park has a "sister park" relationship with Copán Archaeological Park. NPS has sent consultants to CAP to advise on resource conservation, and in 2002, managers from CAP visited Chaco NHP. The NPS Organic Act (1916) directs managers to preserve the resources in its charge "unimpaired for the enjoyment of present and future generations." The NPS

guidelines to managing cultural resources warns, "If they are degraded or lost, so is the park's reason for being" (National Park Service, 2002, p. 1). Cultural resources are viewed as "an inseparable union of social and physical qualities" and three central issues guide their management: first is the discovery of the significances and meaning of the resource; second is to slow the rate at which "the essential material qualities" are lost; and lastly is to allow for enjoyment of resources while minimizing deleterious effects on them.

The NPS views cultural resources as the tangible material evidence of past human activities, and as finite and nonrenewable. Park Service cultural resource managers are urged to manage in such a way as to reflect awareness of their "irreplaceable" nature. Cultural resource management is a dynamic combination of research, planning, and stewardship. Research involves the identification, evaluation, and understanding of cultural resources within their cultural contexts. Planning involves management through integration of cultural resource concerns, the minimization of adverse effects, the provision of information for public understanding, and the determination of appropriate uses and treatments of resources.

NPS policy states that, "cultural resource management must be integrated with natural resource management, education, and visitor experience as the primary concerns of park management. An integrated approach builds on the fundamental relationships among physical, biological, and social systems; it views human beings as part of the natural world and the natural world as the basis for human activity" (National Park Service, 2002, p. 8). The NPS considers cultural resources symbolically as "a tangible reminder of values and ideas; as spark to our spirits and to fire our imagination; as a path

by which we can discover our own humanity," and as, "essential points of orientation and inspiration" (2002, p. 1, p. 8). Cultural resources are valued because they connect generations and have "an inherent capacity to mold and reinforce our identities as social creatures" (p. 1).

UNESCO

The United Nations Educational, Scientific and Cultural Organization (UNESCO) emerged out of World War II (November 4, 1946) and the recognition "That since wars begin in the minds of men, it is in the minds of men that the defenses of peace must be constructed" (UNESCO, 1980). A primary objective is to "contribute to peace and security in the world by promoting collaboration among nations through education, science, culture and communication in order to further universal respect for justice..." (p. 1). The UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage, signed in Paris on November 16, 1972, is an international agreement that calls on all nations to preserve cultural and natural sites of outstanding universal value (Pedersen, 2003). UNESCO defines a World Heritage Site as "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" (Feilden & Jokilehto, 1998, p. 13).

Operational guidelines dictate that before a site receives World Heritage designation, it must be evaluated for its universal value within the widest possible context (UNESCO, 1980). Intrinsic values of a cultural resource are an amalgam of its materials, design, and setting. Cultural resources like those found at Copán have been degraded by natural weathering and modified through restoration and functional use. It is recognized

that the accumulated changes are now a part of the resource's historic character, material substance, and cultural value (Feilden & Jokilehto, 1998). The UNESCO International Cultural Tourism Charter offers guiding principles for managing cultural tourism at World Heritage Sites. The Charter recommends managing for long-term sustainability by facilitating worthwhile, satisfying, and enjoyable first-hand experiences. Tourism and conservation should benefit host communities and planning should include local people (Pedersen, 2003).

ICCROM

The International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) is an intergovernmental body created by UNESCO in 1956 to provide expert advice on conservation of cultural properties and training activities. ICCROM is concerned with the extrinsic identity, educational, and social values of the cultural resources that justify its conservation (Feilden & Jokilehto, 1998). ICCROM recommends that tourism development and infrastructure projects take into account the aesthetic, social and cultural dimensions, natural and cultural landscapes, bio-diversity characteristics, and the broader visual context of heritage places.

ICCROM regards values as subjective affective connections to a site. A resource's value is determined by the degree of interest in the object in its setting. *Identity value* is based on recognition and the emotional ties that society has for a site. Examples of affective ties include tradition, wonder, spirituality, patriotism, and nationalism. Impacts of strong emotional attachment (identity values) can include safeguarding, conserving, and restoring a resource, but may also result in over-restoration. ICCROM cautions that weak identity values could result in neglect and destruction of a resource.

Cultural resources are seen to have *educational value* by raising awareness of culture and history in daily life. Cultural resources also have *social value* related to the use of cultural resources and the mix between traditional social activities such as traditional Maya rituals and contemporary social activities like tourism. Strong social value can result in a grass-roots interest in the maintenance of a resource.

ICOMOS

The International Council on Monuments and Sites (ICOMOS) was founded in 1965 to serve as UNESCO's principal advisor in matters concerning the conservation and protection of monuments and sites. ICOMOS advises UNESCO and the World Heritage Committee about the appropriateness of new sites for the World Heritage List. Its specialized scientific committees draw on the knowledge of experts worldwide to establish international standards for the preservation and management of the cultural milieu. ICOMOS considers the "reasonable and well-managed physical, intellectual, and emotive access to heritage and cultural development" as both a right and a privilege (1999, p. 1). When it comes to the balance between sustainable tourism and development, ICOMOS offers this caution: "The natural and cultural heritage, diversities and living cultures are major tourism attractions. Excessive or poorly-managed tourism and tourism related development can threaten their physical nature, integrity and significant characteristics. The ecological setting, culture and lifestyles of host communities may also be degraded, along with the visitor's experience of the place" (p. 2). ICOMOS recognizes that cultural and natural heritage play an important role in modern life and recommends that they be considered on both a spiritual and material level and should be preserved and presented within the broadest possible context.

Theoretical literature

Sense of Place

Suvantola (2002, p. 48) liken travel to "a path we take to reach for new experiences." Travel takes us to unfamiliar places that challenge our senses to pay attention, thus converting the ordinary into adventure by putting us into contact with things we have not seen before. Kotler and Kotler wrote, "Generating experiences involves activities in which visitors can directly participate, intensive sensory perception combining sight, sound, and motion, environments, in which visitors can immerse themselves rather than behave merely as spectators, and out-of-the-ordinary stimuli and effects that make museum visits unique and memorable" (2000, p. 276). Shackley wrote, "Visitors to such sites deserve to receive an experience that is something special, something unique, an order of magnitude better than anything they have visited before" (2000, p. 205).

Pine and Gilmore (1999) define experiences as "memorable events, revealed over time, that engage individuals in an inherently personal way" (p. 46). Remarkable locations coupled with positive experiences are particularly memorable (Greene, 1996). Williams and Stewart (1998) defined sense of place as "the collection of meanings, beliefs, symbols, values, and feelings that individuals or groups associate with a particular locality" (p. 19). Understanding sense of place is useful because cultural and natural resources exist in a social and political world. Sense of place is socially produced and may encompass both natural and social history. Place meanings are neither static nor homogenous. Different stakeholder groups may have competing place meanings;

therefore, attention should be paid not only to the opinions of local residents but also those of tourists.

Meaning is assigned to a location depending on several factors that, according to Greene (1996), "results from an interaction between the unique cultural and physical characteristics of a setting and the personality and behavior of an individual in that setting" (p. 302). Williams, Patterson, Roggenbuck, and Watson (1992), compared the leisure setting to a consumer product made up from a collection of features or attributes and that decision making is made easier by identifying each user group's optimal combinations of setting attributes. "The setting is the context within which recreations takes place and it can facilitate or hinder not only the activities that occur but also the quality of the recreation experience" (p. 29).

Manfredo defined a setting opportunity as "the entire environment in which a recreation opportunity occurs and comprises resource, social, and managerial attributes" (2002b, p. 75). Setting attributes that CAP managers can influence include the level of restoration, the juxtaposition of nature and ruins, and to a lesser degree—the level of development of lands adjacent to the park. Resource attributes are elements of the biophysical environment that will facilitate an experience such as a landscape's topography and other physical feature (Brown, Haas, & Driver, 1980). A site's degree of naturalness is a resource attribute that may facilitate positive experiences. Examples of resource attributes lands adjacent to CAP are such things as the degree of naturalness and the extant context (setting attributes, such as traditional agricultural practices, that have not changed significantly since the time of the ancient Maya). Social setting attributes are those elements of the social environment that facilitate or constrain a recreation

experience. Examples of social setting attributes at Copán may include perceptions of crowding and noise pollution. Managerial attributes are the degree to which the presence of management either facilitates or constrains experience attainment (Manfredo, Driver, & Brown, 1983). Examples of managerial attributes at CAP include signs of modernity, the degree of site hardening, the level of archaeological restoration, or the degree of development of adjacent lands.

Some unique setting attributes are not valued until they are threatened or lost. At CAP these valued qualities may include nature, solitude, and the opportunity to commune with the *genius loci*, or "spirit of the place." According to Greene (1996), spirit of place is a complex and difficult to define amalgam of landscape, culture, experience, and psychology. Shackley (2000) described several potential threats to the *genius loci* of a place associated with WHS designation. Among them were increased visitor numbers, governments seeking to enhance the site by over-restoration, and damage to landscape by intrusive development. Suvantola (2002) contends that hotels and commercial infrastructure are a threat because they are too familiar and reminiscent of modern urban society.

Another example of a setting attribute that may be threatened is night sky. Copán's *Great Plaza* is aligned to the stars, which directed the Maya when to plant, harvest, perform ceremonies, and hunt. Richman (2003) noted that satellite photos reveal that light pollution is steadily increasing worldwide. She advocates preserving and restoring the night sky that inspired ancient cultures such as the Maya. She said, "The night sky is our best link to all human cultures that have gone before us, providing a way for us to better understand them" (p. 152). The U.S. National Park Service has recognized

the importance of night sky as a cultural resource and has begun to gather baseline measurements of light pollution (Richman, 2003).

Benefits and Experience-Based Management

The ultimate goal of recreation management is to facilitate activities that result in positive outcomes while protecting or improving settings for future generations. Mannell (1999) directed planners and managers to understand the psychological outcomes that are perceived to be most satisfying by particular types of visitors and "what specific determinative attributes of those settings that influence the realization of satisfying and dissatisfying experiences are under managerial control" (p. 357). An outcomes-oriented approach assists managers and planners in better understanding constituents' experiential preferences and desires for specific improved or maintained conditions and can facilitate planning by more efficiently guiding allocation of human and natural resources to provide a spectrum of opportunities (Driver, 1997; Driver & Bruns, 1999; Manfredo & Larson, 1993).

A benefits approach to leisure management has evolved over the last half century that seeks to facilitate positive leisure experiences through a deeper understanding of the psychological outcomes sought by participants. Succeeding versions of benefits-based management emerged to examine new premises or to address the limitations of previous ones. In 1970, Beverly Driver and Ross Tocher wrote, "Toward a Behavioral Interpretation of Recreational Engagements, With Implications for Planning," a paper that Dustin (1999b) said "re-conceptualized recreation as an individual psychological state rather than an activity" (p. 56). Driver (1997) explained, "those of us who were developing, applying, and refining the Benefits Approach to Leisure (BAL) made the

judgment that if people derive psychological satisfaction from leisure, they must benefit in some way" (p. 39). In 1999, Driver and Bruns described the BAL as an outcomes-oriented approach that assists managers and planners to better understand the visitors' experiential preferences and desires for specific improved or maintained conditions.

The BAL was developed to guide recreation management by focusing on the systematic determination of customer preferences and net benefits. An outcomes approach urges managers to address stakeholders' preferences for satisfying psychological experiences (Driver, 1997). BAL is made operational through three benefit types: an improved condition, the prevention of a worse condition (or maintenance of a desired condition), and the realization of a specific satisfying psychological experience (or psychological outcomes).

Greene said, "a rich understanding of the spectrum of place-related experiences of an area's users should help managers develop a more complete, more sensitive understanding of their managerial challenges" (1996, p. 303). Mannell (1999) directed managers to understand: "which psychological outcomes are perceived to be most satisfying by particular types of recreationist who are engaging in desired activities within preferred settings; and what specific determinative attributes of those settings that influence the realization of satisfying and dissatisfying experiences are under managerial control" (p. 357). A behavioral approach to recreation posits that recreationists are motivated to engage in activities in specific settings in order to fulfill desires to derive benefits (Manning, 1999).

A recreation experience is defined as the psychological and physiological result from engaging in a specific recreation activity within a specific recreation setting

(Brown, Haas, & Driver, 1980). Participation in leisure activities can be likened to the pursuit of defined and undefined intrinsic rewards, or benefits. Benefits come in many forms, such as an improved condition, the prevention of a worse condition through maintenance of a desired condition, and the realization of a specific satisfying psychological experience that accrue to individuals through participation (Mannell, 1999). Brown (1981) described psychological benefits as perceptions of enhanced well-being. "Psychological benefits," he explained, "are subsequent outcomes resulting from immediate experiences and provide the reason for people to participate in specific activities in specific settings" (p. 13). Outcomes are the bundle of satisfactions sought from participation in recreation. Examples of desirable outcomes identified by this study include learning/discovery, opportunities for solitude, contemplation or introspection, stress reduction, relaxation, and the satisfaction that comes from seeing something rare and authentic.

Activity-Based Management

Activity-Based-Management (ABM) emerged in the 1950s and '60s and provided for numbers and varieties of leisure experiences rather than the quality of those experiences (Dustin, McAvoy, & Goodale, 1999). ABM of recreation did not help to explain why people elected to (or not to) participate, nor was it useful for explaining the benefits that accrued to the individuals and societies that supported these sites through fees and taxes.

Experience-Based Management

Experience-Based Management (EBM) emerged in the 1970s and 1980s and began to examine and value the experiential content of recreation (Dustin et al., 1999). EBM is a consumer-oriented view of recreation as a psychological state that is inextricably linked to setting attributes and focuses on preferred experiences. The development of EBM was strongly influenced by expectancy valence model of human motivation (Haas, 1979). The model has two core expectancies—first, that effort will lead to performances, and second, that performances will lead to positive psychological outcomes. CAP managers may use EBM to facilitate planning by guiding allocation of human and natural resources and to provide a spectrum of opportunities (Table 2.1). EBM has been criticized as being too specialized and overly responsive to the needs of individuals over the larger community.

Table 2.1 EBM approach to defining a "ruins experience"*

Opportunity Component	Description	Example
Experience Opportunity	The bundle of satisfactions or psychological outcomes sought from participation in a recreation engagement	Learning/Discovery Relationship with nature Introspection
Setting Opportunity	Setting Opportunity—Describes the environment in which will facilitate the type of recreation experience sought. It comprises resources, social, managerial attributes.	
Resource attributes	Elements of the biophysical environment that will facilitate an experience.	Juxtaposition of nature and archaeology Degree of naturalness Extant context in adjacent lands
Social attributes	Elements of the social environment that facilitate or constrain a recreation experience	Crowding, noise, traffic
Managerial attributes	Presence of management to facilitate or constrain experience attainment.	Presence of modernity Degree of development Degree of site hardening and archaeological restoration
Activity Opportunity	The activity or mix of recreation activities which together facilitate the total recreation experience	Self-guided discovery and learning Photography Experience nature Meditation/moments of solitude

*(Adapted from Manfredo, 2002b, p. 74)

Recreation Opportunity Spectrum

The development of the Recreation Opportunity Spectrum (ROS) signaled a shift in emphasis for recreation managers. According to Brown (1980, p. 1), the ROS concept hinges on the empirically established idea that "people participate in specific recreation activities, in specific environmental settings, to realize predictable recreation experiences. This suggests a clear linkage between activities, settings, and resulting experiences." Recreation settings are composed of environmental, social, and managerial conditions, and alternative combinations of said conditions can be used to provide a diversity of recreation opportunities (Manning, 1999; Newman, Marlon, & Cahill, 2001; Roggenbuck, 2000). With ROS, the broadest spectrum of opportunity is accommodated because land is zoned to provide a continuum of settings—from primitive to urban—and

recreational opportunities—from undeveloped to highly developed (Ibrahim & Cordes, 2002).

Recreation Experience Preference scales

The ROS model posits that people engage in a recreation activity with the expectation of receiving positively valued benefits (Ibrahim & Cordes, 2002). Recreation Experience Preference (REP) scales were devised through hierarchical clustering to measure empirically related psychological benefits, or "desired goal states" (Manfredo & Driver & Tarrant, 1996). Table 2.2 provides examples REP scales pertinent to CAP visitors. REP scales measure the desired goal states that are attained through recreation participation. They attempt to measure the motivations and internal rewards (psychological outcomes) for engaging in leisure activities. REP scales help us to understand the underlying motivations for participation in leisure and are useful to managers intent on meeting visitor needs.

Motivation is an internal human response or a psychological process that initiates, directs, and sustains behavior. It is purposive, rather than reflective, in nature. Manfredo, Driver, and Tarrant (1996) described recreation as, "a psychological experience that is self-rewarding, occurs during non-obligated time, and is the result of free choice." Motivation in a leisure context encompasses the desires, needs, motives, goals, desired psychological outcomes, experiences, and preferences that come into play when one chooses to engage in a recreational activity. If managers can plug into what inducements and incentives drive visitors to engage in recreation, they can plan programs and provide opportunities that optimize these activities within the individual.

Table 2.2 REP scales relevant to this study, grouped by domain*

Domain	Experience Preference Item
Learning	
	General learning
	Exploration
	a. to experience new and different things
	b. to discover new things
	Geography of area
	a. to get to know the lay of the land
	b. to learn about the topography of the land
	Learn about nature
	a. to study nature
	b. to learn more about nature
Enjoy Nature	
	Scenery
	a. to view the scenery
	b. to view the scenic beauty
	General nature experience
	a. to be close to nature
	b. to enjoy the smells and sounds of nature
Introspection	
	Introspection
	a. to think about your personal values
	b. to think about who you are

*(Adapted from Manning, 1999)

Experience-Based Setting Management

Experience-Based Setting Management (EBSM) is a branch of the Benefits Approach to Leisure (BAL), which was developed to guide the management of recreation resources by focusing on the systematic determination of customer preferences and net benefits. EBSM is consumer-oriented and views recreation as a psychological state that is inextricably linked to setting attributes which help provide preferred experiences. EBSM centers on how settings contribute to or detract from the achievement of desired outcomes and informs decisions regarding the management of physical environments (setting attributes) in which recreation occurs (Floyd & Gramann, 1997).

Recreation setting attributes are defined as the social, managerial, and resource attributes of the area. Resource attributes include those things that make up a landscape such as topography and other physical features (Brown, Haas, & Driver, 1980). Resource attributes, such as the degree of naturalness, are elements of the biophysical environment that may facilitate an experience. Examples of social setting attributes are crowding and

noise pollution, whereas managerial attributes are the degree to which the presence of management either facilitates or constrains experience attainment.

Benefits-Based Management

Benefits-Based Management (BBM) attempts to identify the benefits sought by individuals and groups, and then to provide leisure services that lead to those benefits (Dustin, 1999a). The underlying assumption of BBM is that it is possible to increase the benefits of leisure and recreation by reducing the negative consequences or increasing the positive consequences. BBM acknowledges the sovereignty of the visitor by striving to offer an array of activity and experience options. Lee and Driver (1996) declared, "BBM is based on the premise that before management agencies can truly serve and meet the needs of people, they must understand what people want and what managers can and are providing, articulate those wants, and develop and deliver benefit-related outputs" (p. 144). BBM was developed to counter the perceived insufficiency of EBM.

Empirical research employing benefits approach to leisure

According to Shackley, "Most visitors to cultural World Heritage Sites are motivated by and interested in the history, development and significance of the site. To a large extent the success of their visit will depend on the availability of information..." (2000, p. 195). Empirical research has established links between settings and desired outcomes and activities (Manfredo & Larson, 1993; Stein & Lee, 1995). Manning noted that "people sharing the same activity had more uniform relationships between motivations and setting preferences than all recreationists considered together" (1999, p. 186). Iso-Ahola (1999) defined a motive as an internal factor that arouses and directs human behavior. When speaking of *uniform relationships between motivations* among

CAP visitors, it is useful to examine results of the park's audience market analysis (Mayer, 2003). In 2002, the Wildlife Conservation Society (WCS) was contracted to direct and author an updated CAP management plan. The WCS suggested that CAP managers could benefit from an extensive analysis of visitor preferences, characteristics, and opinions. This project resulted in a final report and presentation of findings to the Honduran Institute of Anthropology and History.

According to Ormsby, Moscardo, Pearce, and Foxlee (2004, p. 28), "By examining motives it is possible to determine preferences for the various elements that comprise the recreational setting. Once these motives and preferences for visiting a recreational site are understood, the researcher or planner can connect these motives to environmental settings and the ability of the resource to provide such experiences." Table 2.3 shows that the primary reason visitors come to the ruins is to learn more about Maya history and culture (Hondurans, 72%, international visitors at 68%). This desire to learn and imagine more was corroborated by the most cited suggestion for improving the ruins experience—the addition of more interpretive signage. A more nuanced insight into visitor preferences will be provided in forthcoming interview summaries.

Table 2.3 Primary motivation for visiting the Copán Archaeological Park

Main motivation for visit	Honduran visitors (n = 207)	International visitors (n = 458)
1. To learn more about Maya culture and history	72%	68%
2. To imagine what Maya life was like	16%	18%
3. To relax	4%	5%
4. Other (combined among several)	8%	9%

A paucity of research was found regarding benefits derived from settings conducted in cultural sites much less cultural sites in Latin America. Much of the research has taken place in Colorado and other Western states, where the benefits

approach to leisure was largely conceptualized. These studies grant insight into the value of a place's setting attributes to constituents.

Brown and Ross (1982) examined the setting and experiential preferences among river kayakers, rafters, hunters, campers, and hikers at Glenwood Springs Resource Area in Colorado. They concluded, "The results of this study showing that desires for specific experiences are associated with preferences for recreation settings provide rudimentary indication that the expectancy-value rationale underlying recreation opportunity spectrum planning has merit" (p. 109).

Manfredo, Driver, and Brown (1983) examined the assumptions that make up experience-based setting management. They questioned various Wyoming wilderness users and grouped them by the experiences they desired and then further examined groups by activities and setting preferences. Their study suggested that managers focusing on various setting attributes could develop criteria and standards for inventorying land for its ability to provide different recreation opportunities.

Virden and Knopf (1989) examined the relationship between activity styles, desired experiences, and preferred environmental settings among a diverse group of Colorado recreationists. This study revealed linkages between activity types and setting preferences and noted that the strength of some desired experiences increased with preferences for more primitive settings.

Manfredo and Larson (1993) used an EBM framework to examine preferences for wildlife viewing opportunities and settings in Colorado. Their study emphasized the key role of setting when they noted, "experience outcomes are the ultimate goal and motivation of the recreationist, whereas settings and activities are instrumental to that

goal" (p. 236). According to the authors, the use of EBM "can facilitate planning by guiding allocation of human and natural resources to provide opportunities" (p. 234). Additionally, they assert that EBM may assist in planning and development of facilities, interpretation, and education, thus increasing the probability that opportunities for specific experiences are made available.

Stein and Lee (1995) applied BBM in the investigation of the relationship between outcomes desired by recreationists and activities and settings that are instrumental to the achievement of those benefits. Their study showed linkages between desired benefits and activities and settings. They specifically recommend that managers take advantage of the commonalities in desires for settings, activities, and benefits. They assert, "managers cannot provide benefits; but they can provide opportunities for positive visitor experiences by managing settings for particular experience and benefit opportunities" (p. 65).

Wurz (1996) examined the feasibility of applying the ROS in Ecuador's Galapagos National Park WHS. Toward that end, he described visitor preferences for experiences, setting types, and management actions. Further, he used audience segmentation to explore the differences between Ecuadorian and foreign visitors regarding their motivations, perceptions, and preferences.

Manfredo, Driver, and Tarrant (1996) conducted a meta-analysis of 36 studies that had used REP scales. The study showed an overall consistency in domains and scales used. Additionally, they offered recommendations to aid in proper application and refinement of REP scales.

Floyd and Gramann (1997) used an EBM framework to study the relationship between the social and psychological experiences desired by market segments of hunters and their preferences for setting characteristics. The authors suggested that managers could attract preferred segments of recreationists by manipulating or promoting various physical environments.

Walker, Hull IV, and Roggenbuck (1998) examined the quantity of benefits outdoor recreationists reported during the recollection phase. Optimal experiences describe psychological states that are fundamentally different from everyday life occurrences, involve deep focus and immersion, a loss of sense of time and consciousness of self. Results led them to assert "that the quantity of optimal experiences gotten during the on-site phase of outdoor recreation is a predictor of the quantity of benefits gotten off-site, during the recollection phase of outdoor recreation" (p. 469).

Vaske and Kobrin (2001) studied how attachment to a local natural resource can influence environmentally responsible behavior. Their research demonstrated linkages between place attachment to a local natural resource and responsible behavior and suggested that managers can benefit from examining the meanings that people have for local places.

Manfredo (2002) employed an EBM approach to defining a wildlife viewing recreation opportunity. They examined experience opportunities, the bundle of satisfactions or psychological outcomes sought from participation in a recreation engagement and setting opportunities, which describe the environment that will facilitate the type of recreation experiences sought.

Brooks (2003) took a hermeneutic approach toward understanding backcountry experience and relationship to place at Rocky Mountain National Park (Colorado, USA). He points out that "Humans are conceived of as meaning-makers, and outdoor recreation is viewed as emergent experience that can enrich people's lives rather than a predictable outcome of processing information encountered in the setting" (p. iii).

CHAPTER III

Methodology

This project emerged as part of a third-year extension to the principal investigator's service as a U.S. Peace Corps Volunteer. The Wildlife Conservation Society was contracted to direct and author an updated management plan (see Copán Archaeological Park Management Plan, 2003). It was suggested that an extensive analysis of visitor's preferences, characteristics, and opinions be conducted. This project resulted in a final report to the Honduran Institute of Anthropology and History (Mayer, 2003), which in turn served to inform the development of this subsequent study.

Mixed Methods

Visits to WHS sites like CAP can have profound affective, philosophical, or even spiritual outcomes. The depth of such visitor experiences would not be captured using solely quantitative research methods (Pedersen, 2003). A mixed methods approach must be employed. Berg noted that "every method is a different line of sight directed at the same point" (1998, p.4). A research paradigm is a collection of attributes, not a static concept. Traditionally, quantitative paradigms are more objective, confirmatory, explanatory, and analytic. In contrast, qualitative paradigms are more subjective, holistic, *real world* based, exploratory, and contextual (Creswell, 1994; Hein, 1998). Quantitative data obtained through surveys can be predictive, consistent, and replicable, and allows for the examination of data from many demographic angles. Qualitative interviews are personal, subjective, and especially useful for gaining in-depth information and detailed opinions useful to "fine tune" or "harmonize" management objectives (Pedersen, 2003).

A mixed method paradigm is complementary, valid, reliable, and aids in corroboration, crosschecking data, and is helpful for gaining multiple perspectives (Driver, 1996; Furze, De Lacy, & Birckhead, 1996; Pedersen, 2003). A mixed methods approach recognizes the strengths and limitations of both paradigms and aims to use the strengths of each technique to address the weakness in the other (Creswell, 1994; Yallowitz & Wells, 2000). Using a variety of strategically selected research methods contributes to the strength of the evidence (Berg, 1998; Brewer & Hunter, 1989). Using multiple methods addresses the issue of internal validity because the accuracy of the information is enhanced through convergence among sources of information.

Related empirical research

Managers of parks and protected areas should have an understanding of the affects that internal and external development can have on the context, setting, and hence experience opportunities offered by that site. Yet Pedersen's (2003) guide to managing tourism at World Heritage Sites points out, "A major research problem has been that few studies have been designed on the advice of those being affected." Indeed, one task of this study was to identify and build on relevant research precedents that employed similar theoretical basis and methodology at cultural/ecotourism destinations in the Americas.

Cultural heritage tourism overlaps with the related field of ecotourism. Lincango (1995) used mixed methods to evaluate ecotourism operations in the *Cuyabeno* Wildlife Reserve in the Ecuadorian Amazon Basin. The study used a visitor survey, interviews with nature tour operators, and focus groups with *Cuyabeno* residents to develop indicators and standards for each of several central ecotourism principles.

Wurz (1996) used a quantitative research approach to determine the feasibility of applying the Recreation Opportunity Spectrum in Ecuador's Galapagos National Park WHS. Toward that end, he described visitor preferences for experiences, setting types, and management actions. Further, he used visitor segmentation to explore the differences between Ecuadorian and foreign visitors regarding their motivations, perceptions, and preferences.

Holmes (2003) adopted a mixed methods approach (surveys and interviews) to determine resident perspectives toward ecotourism and its effects on communities and implications for collaborative management and participatory planning at *Arroyo Surdido, Samaña*, Dominican Republic.

At Copán, Mortensen (2001) used mixed methods in an examination of the local dynamics of global heritage *archaeotourism* in terms of who benefited from the tourist trade. Methods employed include a stratified community survey, a survey of IHAH employees, in-depth interviews with archaeologists, and participant observation.

CAP was included in a study of protected area land use planning, regulation best practices, and capacity-building needs in Mexico and Central America (Wallace et al., 2005). Researchers employed mixed methods techniques such as focus groups with participatory activities, targeted interviews, site visits, participant observation, and document review.

General research categories and questions

In this study, a mixed methods, multi-phase approach was employed in order to understand the importance of the setting on the ruins experience. It assessed preferences and experiences in relation to possible management decisions. Theoretically driven

questions centered on place-related perspectives and setting preferences. Additionally, research questions examined background information useful for segmenting a visit by trip characteristics, motivations, or demographics. The research questions, mentioned in Chapter I, guided the study methodology, data collection, and analysis. Surveys and interviews were used to determine if: a. intensified adjacent land use will add or detract from desired ruins experiences; b. whether more extensive restoration benefits the ruins experiences and if seeing a setting created by the juxtaposition of restored ruins next to ruins that have been reclaimed by nature add an element to the visitor experience. Table 3.1 summarizes each phase of research and their underlying topics.

Table 3.1 Phases of research by data collection technique and topics explored

Phase	Data Format	Topics Explored
1	Survey	Trip characteristics
		On-site activities
		Motivations for visit
		Development/restoration opinions
		How nature affects the visit
		Preference for level of restoration of archaeological remnants
		Preference for development of area surrounding CAP
		Opinions on cutting trees on ruins and in the forest
		Demographics: Age, Gender, Group Size, Education, Country, Religion
1b	*Copáneco* suvey	Development/restoration opinions
		Preference for level of restoration of archaeological remnants
		Preference for development of area surrounding CAP
		Opinions on cutting trees on ruins and in the forest
		Demographics: Age, Gender, Education, Religion
2	Interviews 1	Nature
		Imaginings
		Spiritual components of visit
3	Interviews 2	Meanings and significance of CAP
		Restoration/Development perspectives
		Opinions on cutting trees on ruins and in the forest

Obtaining agency support

In October 2002, a research prospectus outlining the study goals, objectives, and expected utility of results was submitted to officials at IHAH headquarters in Tegucigalpa. After review by Carmen Julia Fajardo Cardona (Head of Department of Archaeological Research), the prospectus was accepted and the principle investigator and

IHAH management signed a one-year research contract. Official identification was provided, which granted researchers access to all areas of CAP. On-site, a counterpart IHAH employee, Manuel de Jesus Espinoza, was assigned as an agency representative and principal research assistant.

Development of survey instruments

A research planning team was formed to discuss research objectives and develop interview and survey questions. Each member submitted comments and suggestions that resulted in the final written surveys and interview protocols. The team included: Jorge Betancourt, Peace Corps-Honduras—instrumental in establishing many Honduran national parks; Oscar Cruz Melgar, IHAH Regional Representative—nearly 30 years working at the Copán ruins WHS; Jim Barborak, Wildlife Conservation Society—principal author of both of the archaeological park's management plans; and Dr. George Wallace, Colorado State University—professor of protected area management and director of the Center for Protected Area Management and Training. The opinions of IHAH staff, tour guides, *Copánecos* and visitors were sought and assimilated into the research planning process. All surveys were designed so that they could be self-administered or taken or with the aid of a research assistant. All surveys were printed in both Spanish and English, and all interviews were conducted in either Spanish or English as preferred by those being interviewed.

Survey pre-testing

Pre-testing a survey allows one to identify problems and to refine the instrument before administration to a larger sample (Brewer & Hunter, 1989). The survey was pre-

tested over a three-day period in April 2002 with approximately 100 visitors. Problems were identified and changes were made to address them.

Data collection

The study was conducted in three phases and took place between June and September 2002, and consisted of a post-visit survey and two rounds of focused interviews. Phase three, conducted during the last three weeks in July 2003, was a series of directed interviews designed to clarify and expand the results gained in the primary phases (see Table 3.2 for specific dates).

Surveys and interviews were administered in the picnic area that lies just off the path between the visitor center (where one purchases entrance tickets) and the ruins entrance gate (where one first views the central group of ruins). This site was selected because, logistically, it afforded the greatest opportunity to intercept visitors returning from the central ruins. Additionally, the picnic area had fewer distractions from arriving tourists, offered comfort and shade, and the close proximity to the central archaeological group meant the experience was still 'in progress' (See map and photograph of research setting in Appendix G).

Table 3.2 Data collection format, sample population, dates, and sample size

Phase	Data format	Sample population	Dates	*n*
1a	Survey	General population of CAP visitors	06/07/02—09/17/02	640
1b	*Copáneco* survey	Residents of *Copán Ruinas*	08/31/02—09 /21/02	125
2	Interviews	General population of CAP visitors	05/09/02—09/15/02	20
3	Interviews	General population of CAP visitors	07/10/03—07/24/03	23

Research assistants

As part of a class project on business marketing, and to fulfill a community-service graduation requirement, junior and senior level students of the *Copán Ruinas* high school, *Dr. Jesús N. Chinchilla Valle,* volunteered as research assistants during the first phase of data collection. The principal investigator conducted classroom trainings on

evaluation and survey administration. The research assistants were trained and supervised by the principal investigator in the systematic collection of all quantitative data. On-site, small groups of students received further instruction and training—including practice in administration of the survey (see photograph of research assistant training in Appendix G). The research assistants were given language lessons in English courtesy phrases. They were also provided with a script, written in English, to request participation in the survey. At all times, either the principal investigator or the IHAH counterpart supervised the student research assistants. Groups of four to six students administered surveys on weekday mornings and for two shifts on weekends.

Sampling frame

The sample population included all possible visitors to the archaeological park who were at least sixteen years old. Surveys were administered on all days of the week between 8 a.m. and 4 p.m. (the business hours of the park). On most days, at any given time, there were more research assistants than returning visitors; therefore, all possible respondents had an equal opportunity to participate. Rather than individuals being randomly selected from each group, small groups were allowed to talk together about both their collective and individual experiences at the ruins. Once prospective respondents were intercepted, the PI or research assistants introduced themselves and the purpose of the study. It was explained that participation in the study was going to aid in decision making for park managers and that participation was entirely voluntary and anonymous.

Additional sample of Copánecos

According to McKercher and Du Cros (2002), "an attitude still exists in many parts of the developing world that the legitimate needs of local residents can be ignored in pursuit of hard currency provided by foreign tourists" (p. 180). To alleviate this concern, it was deemed necessary to obtain an additional sample of opinions from the residents of *Copán Ruinas*. This sample was useful for comparing the similarities and differences between local, national, and international visitors. An abridged version of the larger perspectives survey was administered to a sample of 125 town residents (see Appendix D). The survey centered on the central research questions surrounding archaeological restoration and local area development as well as basic demographic information like age, gender, and education. Because the survey was administered in the town, rather than the archaeological park, trip-related questions were eliminated. The principal investigator and a trained research assistant administered the surveys to *Copánecos* throughout the small town.

Demographic characteristics for comparison by segmentation

A useful tool from the field of marketing is segmentation. The capacity to understand data according to distinct visitor characteristics permits improved tailoring of services and experience opportunities (Bruyere, Rodriguez, & Vaske, 2002; Pedersen, 2003; Vaske, Beaman, Stanley, & Grenier, 1996). The initial phase of inquiry used a quantitative post-visit survey to obtain an understanding of the visitor groups demographics, learning, motivations, and perceived levels of satisfaction and quality. Demographic information gathered in this study included age, gender, education, and country of origin.

Phase one—survey

The objective of the quantitative survey was to gain background information about the visitors, their experiences, and to determine the appeal of on-site and near-site setting attributes on the ruins experience (Appendices B – D). It probed for preferences for different setting attributes such as the level of restoration in the ruins as well as adjacent land uses for their affect on the visitor experience. Several questions asked about the contrast between restored ruins and those being reclaimed slowly by natural processes. A series of questions assessed visitor perceptions of potential management actions and how they might affect their visit.

Researchers explained that within CAP, parts of the ruins have been restored and other parts are seen in the process of being reclaimed by nature. Respondents were asked to rate on a scale from one (1) to five (5) how removing the trees from the temples and cutting many more in the forest in order to protect the archaeological remains would affect their visit. CAP and the town of *Copán Ruinas* are located only one-kilometer apart and the town has the potential to grow right up to the edge of the park. Respondents were asked which statement best reflected their views about the appropriate use of private lands around the park. The four possible choices included: *the land surrounding the Copán Archaeological Park should be kept in some mix of natural and agricultural uses*; *the land should be returned to a natural condition like forest*; *the town should be allowed to grow out to meet the park*; or *the land should be dedicated to tourism related development like restaurants, lodging, or retail stores.*

Phase two—interviews

Instead of using a fixed set of questions, focused interviews (also known as semi-structured or semi-standardized interviews) are directed by an *interview guide* of pre-determined research topics (Appendix E). This provides the informant a wider range within which to express his perspectives (Furze et al., 1996). Topics are presented in a systematic and consistent order, but informants are given freedom to digress (Berg, 1998). The objective of the focused interviews was to discern whether the restored ruins of an ancient civilization juxtaposed with non-restored ruins being reclaimed by nature and other natural surroundings provided unique perspectives and experiences. The principal investigator conducted all interviews.

Semi-structured interviews were conducted from early May until mid September 2002 in the shaded picnic area located near the point where visitors leave the central ruins. An interview protocol was used to maintain a systematic and consistent order of questioning and topics addressed while still allowing visitors the flexibility to digress (Berg, 1998; Furze et al., 1996). During the interviews, field notes were taken and then transcribed daily to preserve the nuanced content of the interviews (Ellen, 1984).

Phase three—interviews

Results from the first interviews guided the development of subsequent round of interviews, which probed the affect key setting attributes had on the ruins experience. According to Furze et al. (1996), structured interviews are basically a standardized survey instrument with set questions that are applied orally. Asking each informant the same questions preserves structure and consistency (Berg, 1998). The second set of interviews was more structured and used consistently worded questions, asked in the same order,

and which also incorporated the use of photo cues (Manning 1999; Furze et al., 1996; Whyte, 1995; Wallace, 1990). Photos representing differing levels of restoration and development aided interview informants in visualizing potential changes. The interviews took place in the picnic area (near the path returning from the central ruins) during July 2003—the peak visitation month (Appendix F). The same location and method of conducting both individual and small group interviews were used. In this case, however, all interviews were audio recorded, as this method increases the verisimilitude of the data (Ellen, 1984).

Respondents were asked for their preferences and perspectives surrounding: (a) archaeological restoration; (b) adjacent area land use, as well as; (c) the meaning of places like CAP. These setting attributes are of central concern because their potential to be altered is considerable. This set of interviews not only explored a. and b. above, but also went on to probe perceptions about potential changes in management actions and setting attributes related to increasing levels of both restoration and the intensification of the adjacent landscape.

Informants were told that CAP managers needed to make decisions about the future development of the park. They were asked what level of restoration would be most satisfying to them personally. Follow up questions asked informants to identify more specifically what setting components of the ruins they preferred and for what reasons. Because interviews seek to gather complex and detailed information, visual materials such as photos help to illustrate and clarify research questions. Photos (see photographs of levels of ruins restoration and local area land use in Appendix G) representing a spectrum of choice were presented to informants to illustrate and clarify research

questions and to cue responses (Furze et al., 1996; Manning, 1999; Whyte, 1995). Informants were also asked what the archaeological park represented to them and if it held any special meaning or significance to them, and they were encouraged to elaborate. A hypothetical follow-up question asked if the scenario opposite of their stated preference were to occur, how that would affect the informant's experience or the meaning the place had for them.

Setting attributes around CAP

Informants were asked whether they arrived at the park by walking from the town to the ruins on the pedestrian trail. If they had walked to the park, they were asked which attributes of the path they liked or disliked and if the trail prepared them mentally or emotionally for their visit.

Limitations

Due to circumstances, some visitor groups were less accessible and therefore more difficult to sample. For example, visitors accompanied by tour guides were difficult to intercept because the guides ushered them past researchers (perhaps because their tour had not yet concluded and they had not yet received a gratuity). Large organized tour groups were difficult to interview because they moved *en masse* and were often on a tight schedule, while other visitors appeared to be in or expressed biological distress (over-heated, hungry, needed to use restrooms). Limited ability to communicate in several languages was an obvious limitation in conducting research at a World Heritage Site that attracts a heterogeneous audience. This research was conducted in either Spanish or English. As a result, some possible audience segments may be under-represented.

Another limitation of this study is the lack of representation among a key

stakeholder group. The Maya *Chortí*, the recognized descendants of the Maya groups that tourists come to appreciate, lays inarguable claim to the ruins. Still today, groups of Maya *Chortí* perform religious rituals within the confines of the archaeological park. Subsequent research that concerns major management decisions and planning should include provisions to include the opinion of this group.

Quantitative analysis

Survey results were analyzed using Statistical Package for Social Science (SPSS) Version 10.0. Unless otherwise stated, a significance level of $p < 0.01$ was used for all tests. Preferences for setting attributes can be examined from many demographic angles. It was of interest to determine the relative importance of independent variables like country of origin, education, age, or gender on setting preferences. Analysis of variance (ANOVA) was used to predict averages on setting preferences for continuous demographic variables.

Qualitative analysis

To classify and divide responses into meaningful groups, it is important to impose an organizing system on the analysis of qualitative data (Tesch, 1990). When analyzing transcripts, codes are assigned to broad categories for data-labeling and data-retrieval (Miles & Huberman, 1984). Codes for the second round of interviews were assigned to *a priori* categories determined by the research questions and sub-questions. For example, the codes for the first set of exploratory focused interviews that employed field notes were more generally categorized. Example codes include nature, perspectives, spirituality, and connection. The codes for the structured interviews were more specific. Example codes include preferences for low, medium, and total restoration. The research

instrument and recording techniques also influence how codes were developed. Further, categories were allowed to "emerge" from repetition in the narrative data (Hein, 1998; Tesch, 1990). Examples of emergent codes were authenticity, utilitarianism, cultural respect, and civic pride.

Several factors drove the analysis of the qualitative data. Foremost was the original intention behind using qualitative methods, which was to elicit descriptive data that would support, refute, or elucidate the core research questions. Interview excerpts were meant to be descriptions that fostered greater understanding and insight. Second, although the two rounds of interviews yielded rich descriptive data, the relatively small sample size limits generalization and the effective application of other common qualitative analysis techniques such as content analysis. In order not to unduly inconvenience informants, interviews were kept brief, usually not surpassing 15-minutes in length. The brevity of the interviews resulted in a manageable amount of transcript data for analysis by the principal investigator.

The first round of interviews was recorded using field notes and were transferred to computer (Microsoft Word) on a daily basis. A technique called free-form analysis (McQuarrie, 1996) was used to analyze the field notes. This technique consisted of a thorough and systematic review of notes to uncover themes, contrasts, discoveries, and enumerations. Notes from each interview were then coded and segregated by the pertinent study categories, such as land use, restoration, nature, perspectives, and spirituality.

The second round of interviews were transcribed from the cassette tapes, and when necessary, translated from Spanish to English. Any questions as to the content of

the interviews in terms of language were noted and checked by a fluent Spanish-speaking colleague. Cases where it was impossible to discern the words of the informant were noted in the transcripts. No speculations were made where there existed uncertainty as to the intended responses.

Transcriptions of the second set of interviews were not *back-translated.* Back-translation is the technique of returning translated interview transcripts to their original language in order to verify that the essence of the text had been captured. Rather than speculate as to their content, cases where there was doubt as to what was said were excluded from the transcripts.

Coding

According to Creswell (1994), the process of analyzing qualitative data is eclectic and flexible and defies standardization. Analysis was based on reduction and interpretation of qualitative data. A coding procedure, or schema (categories pre-determined according to the core research questions), was used to reveal categories and themes. New categories emerged from the interview transcripts. Tesch (1990) considers qualitative analysis as a process of de-contextualization and re-contextualization of data where one attempts to take apart and bring together data in the hope that a larger, consolidated picture will emerge.

For the purposes of this study, the transcript contents were coded in three steps as recommended by Nueman (2000). The first step, called *open coding*, was guided by the theoretical framework and assigned codes that represented the first attempt to condense the mass of data into conceptual categories. The transcripts were read once for impression and then read again to identify major topics and unique topics. The second examination

of the data, called *axial coding*, was where already identified major themes are organized around several core generalizations. The third step, *selective coding*, involved re-examining and re-organizing and elaborating themes from the last rounds of analysis.

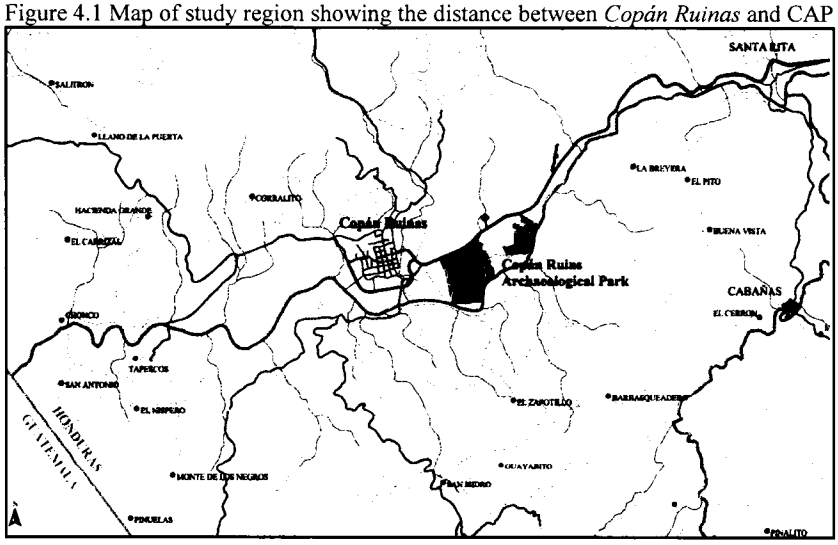
CHAPTER IV

Appropriate Levels Of Restoration And Development At Copán Archaeological Park: Setting Attributes Affecting The Visitor Experience

Introduction

In western Honduras, near the Guatemalan border, archaeological remnants are scattered across the wide Copán River Valley with none more spectacular than Copán Archaeological Park (CAP)—a monument to the artistic zenith of the Maya civilization (Figure 4.1). Copán, the ancient Maya city, was a major center of trade, art, and religion in the Maya world. Today the archaeological park is Honduras' second most popular tourist destination and its only profitable national park. It was declared a UNESCO World Heritage Site in 1981 and a national monument in 1982 and the managing agency is the Honduran Institute of Anthropology and History (*Instituto Hondureño de Antropología e Historia,* or IHAH). This study focuses on the effect of internal and external setting attributes on the visitor experience at Copán.

Figure 4.1 Map of study region showing the distance between *Copán Ruinas* and CAP



Throughout Mesoamerica, ruins like those at CAP have been restored with the hope of attracting more tourists. Kelleher (2004) wrote, "...even when relatively small

numbers of affluent and educated people visited historic sites, elaborate reconstructions were carried out. For example, in the 20th century archaeologists reconstructed the Mayan temples at *Chichen Itza* in the jungles of Mexico's Yucatan peninsula, as well as other remote ruins that could be visited by only the most dedicated travelers" (p. 7). In 1975, the Honduran government initiated a project, the *Proyecto Arqueológico Copán*, to enhance the tourist trade by restoring temples and palaces and also to better understand the city's ancient growth and development (Baudez, 1994; Sabloff, 1994). There are multiple consequences of restoring ruins as a means of attracting greater tourism. These include attracting more visitors, increased economic activity in nearby communities and an accelerated rate of physical deterioration once ruins are exposed to the natural elements. New restorations can also dramatically increase the fixed cost of operation of that area, the need to expand staff and increase monitoring and can stimulate a myriad of land use changes to the adjacent landscape. Overall, the restoration and promotion of the ruins at CAP as a means of attracting tourists has been successful. Barborak (2004) noted that CAP has turned *Copán Ruinas* into one of the most prosperous rural towns in all of Central America. Tourism has increased tenfold since the late 1970s, when 10,000 visitors came to CAP (Fash, 2002; *Informe Final del Año 2002*, 2002).

The town of *Copán Ruinas* is located 45-kilometers or a 2.5 hour drive southwest of San Pedro Sula, the business capital of Honduras, and one-kilometer west of the park boundary. Pine and oak forested mountains surround the 24 square-kilometer valley, that at 600 meters above sea level, provides an agreeable climate. The contemporary *Copán Ruinas* is small but bustling. The town's cobble-stoned streets are clean and safe, and its central park serves as a congenial meeting place for locals and tourists alike. Restaurants

catering to the tastes of tourists and a variety of accommodations are available to meet every budget and comfort level. Unless one arrives by tour bus or private vehicle, most visits to the archaeological park originate in the town of *Copán Ruinas*. The 15-minute walk from the town to the park provides time for geographic orientation and mental preparation. Visitors cross a bridge over *Cacahuatales* creek, and are immediately immersed in a pastoral valley landscape. This affords an opportunity to observe traditional rural agriculture before arriving at the ruins. Although a good number of ruins have been restored within the 68-hectare archaeological park, others have not. In some places, gigantic ceiba trees (*Ceiba pentandra)* grow out of immense temples allowing visitors to witness the passage of time first hand and nature's ability to reclaim a city-state that once had over 10,000 inhabitants (Fash, 2001). The forest that surrounds the ruins filters out the sounds of modernity, while birds and insects provide a soothing soundscape for a visit that includes the opportunity to see whitetail deer, toucans, and giant blue morpho butterflies.

In 2002, the Wildlife Conservation Society (WCS) was contracted to direct an updated management plan for CAP. The WCS, noting that there was limited information about visitors or their experience, suggested a variety of studies and activities including an analysis of visitor preferences, characteristics, and perceptions to inform the planning process, infrastructure development and visitor management. The authors assisted with pre and post planning efforts over a three-year period. Their participation included: carrying out two comprehensive visitor surveys; conducting two sets of interviews with visitors to probe setting preferences; a mixed methods survey of managers about the effects of adjacent land use on the management of CAP; multiple meetings with

managers, community members and other key contacts; and the planning and development of the *Yax Ché* interpretive trail with counterparts. Throughout this process, the authors recorded much information as participant observers both in written and photographic form. The lead author lived continuously at *Copán Ruinas* for over a year. On three occasions, the study results were formally presented and discussed with stakeholders and conference attendees and follow-up sessions were held with CAP and municipal administrators to discuss management implications. Together, these activities comprise an extensive case study from which a number of recommendations can be discussed.

Changes to Internal and External Settings at Copán

This paper focuses on two specific questions that emerged from the case study and which have important implications for CAP, the town of *Copán Ruinas* and many similar archaeological sites. Forces are at work at CAP that could potentially change both internal and external settings and either add or detract from the quality of the visitor experience and the cultural, historic and natural values provided at Copán. The first question deals with internal setting attributes and asks: what is the right amount of restoration at this archaeological site and is there also a value in allowing visitors to witness the collapsed structures and tree covered mounds as well as restored temples, stele, ball courts and hieroglyphic staircases? Some archaeologists, tourists, and heritage site managers would like to see most of CAP's archaeological remnants developed and restored to the greatest extent possible. They reason that this will attract more tourists, capture more revenue, or intuit that restored ruins are preferable because they bring the past to life. Feilden and Jokilehto (1998) point out that once exposed, nature in the form

of sunlight and rain also take a toll on restored but non-renewable archaeological remains and that an overemphasis on tourism can lead to unjustified reconstructions. We were interested in how different levels of restoration might affect the experience of visitors.

The second question deals with the external setting attributes at CAP and asks what might be the effect of intensifying development on adjacent pastoral lands for the quality of the visitor experience and the realization of desired outcomes? Given the importance of tourism as an income generator, economic planners and national and local decision makers often make decisions encouraging the expansion of tourism development without full appreciation of the implications – especially for the preservation of cultural sites (World Tourism Organization, 2001, p. 8). Shackley (2000) describes several potential threats to the *genius loci* or special setting attributes of a place associated with World Heritage designation. Among them are increased visitor numbers, over-restoration, and damage to the surrounding landscape by intrusive development. The International Council on Monuments and Sites cautions that excessive or poorly-managed tourism and tourism-related development can threaten the physical nature, as well as integrity and significant characteristics of cultural sites, the visitors' and host communities' experience of place (ICOMOS, 1999). Pedersen (2003) suggests that balanced economic development at World Heritage Sites can only be achieved by acknowledging the dynamic and often conflicting relationship between heritage places and tourism. He describes a classic community tourism cycle that leads sequentially to unplanned and unrestrained growth and deleterious effects on local communities. In a study of 16 protected areas in six Mesoamerican countries that included the town of *Copán Ruinas* and CAP, Wallace et al. (2005) document a pattern of land use around protected areas

where real or anticipated tourism growth causes forested or agricultural lands to be slowly replaced by poorly planned commercial and residential development. The World Heritage List application for CAP itself points out that, "the natural surroundings of the area are being threatened by the infringement of the neighboring town of *Copán Ruinas*" (UNESCO, 1980). The authors wondered how visitors perceived the relationship between the setting created by adjacent land uses and their desired experience outcomes at Copán.

Linking Activities, Settings, Desired Experience Outcomes, and Benefits

This study builds on the behavioral approach to analyzing the visitor experience which holds that visitors to parks and protected areas are motivated to engage in activities in specific settings in order to achieve desired experience outcomes which in turn lead to personal and social benefits (Manning, 1999). Sometimes referred to as Experience-Based Setting Management (EBSM) or Benefits-Based Management, this consumer oriented approach has for three decades used quantitative methods to probe visitor activities, motivations and setting preferences and the links between them (Floyd & Gramann, 1997; Schreyer & Driver, 1989; Driver, 1975; Driver & Brown, 1975). This conceptual framework suggests that while managers cannot guarantee that desired experiences or benefits will be achieved, they can control the integrity of the physical, social and managerial setting attributes with careful zoning (Brown, Driver, & McConnell, 1978; Clark & Stankey, 1979;) and offer a range of settings or experience opportunities making it more likely that a diversity of visitors will achieve desired outcomes and benefits from their visit.

Although the relationship between setting and desired outcomes is often intuitive, the studies that have been conducted have produced only a modest confirmation of the

link between them (Manning, 1999). With a few exceptions (Mayer, 2003; Wurz, 1996; Wallace & Smith, 1996), most studies using a behavioral approach have been in North America or Australia and few, if any, have taken place at cultural or archaeological sites where the range of motivations for visiting may be more specialized (Mayer, 2003), and where managers have a more specific mission and less latitude to provide for a variety of management zones or settings. Additionally, few studies that relate motivations and setting preferences have compared results for national and international visitors. Finally, studies have seldom used mixed methods that pair visitor interviews with survey data.

Study Objectives and Methods

Research Questions

In order to better understand the implications of the impending changes to the internal and external setting at CAP as described above, and in hopes of learning more about the specific links between setting and desired outcomes at an archaeological site like Copán, the following research questions were posed. (1) For the internal setting, what are visitor preferences for differing levels of archaeological restoration in the Park and do these differ among local, national and international visitors? (2) For the external setting, what are visitor preferences for differing land uses and levels of development on lands adjacent to the park and do these differ among local, national and international visitors? (3) For both internal and external settings, how might changes in internal or external settings attributes affect the visitor experience and the achievement of desired experience outcomes at CAP.

Methods

Mixed methods consisting of: A self-administered, post-visit survey with a probability sample of visitors to CAP; two sets of in-depth interviews with a smaller sample of visitors; discussions with key contacts; and participant observation, were utilized to address research questions (Table 4.1). A comprehensive visitor survey was developed in collaboration with CAP managers, Honduran and US protected area specialists from the Wildlife Conservation Society and staff from the Center for Protected Area Management and Training at Colorado State University. This quantitative survey included items that probed visitor characteristics; preferences for the level of archaeological restoration and specific management actions like tree removal; and preferences for differing land uses adjacent to CAP. The survey was pre-tested with visitors and improved. Available in both English and Spanish, surveys were administered between June and September 2002 (n = 640) each weekday between 8 a.m. and 4 p.m. for 13 weeks as visitors left the ruins. All visitors with the exception of tour groups had an equal opportunity to participate. Additionally, a sample of residents of the town of *Copán Ruinas* (n = 125) were given surveys to ensure that the perceptions of local people were included (McKercher & Du Cros, 2002).

Semi-structured interviews were conducted in 2002 during the peak of visitation (May – August) with exiting visitors or small groups (n = 20) and again in July of 2003 (n = 23). The latter were more structured (Manning, 1999; Berg, 1998; Furze et al., 1996) and utilized photo cues (Fairweather & Swaffield, 2002; Manning, 1999; Furze et al., 1996; Wallace & Trench, 1995; Whyte, 1995; Wallace, 1990) to help visitors envision a range of both levels of restoration and differing intensities of adjacent land use. Small

groups were allowed to talk together about both their collective and individual experiences at the ruins. Interviews probed: (a) the effect provided by the juxtaposition of restored ruins and those being reclaimed by nature as well as other setting attributes; (b) the appropriate level of restoration at the ruins; and (c) experience outcomes derived from internal and external settings in their existing state.

Participant observation was used to gather additional data. Immersion in the community and credibility that Peace Corps service granted the author allowed him to participate in planning meetings, community events and permitted full access to the ruins, park staff, and visitors over many months. Techniques included taking photographs of setting attributes and elements of the ruins experience; journal writing; and the shadowing of managers and guided tours. Key contacts were used to clarify the Honduran legal framework for land use decisions and to answer questions about CAP's enabling legislation, zoning, and restoration plans.

Table 4.1 Research phases, methods, sample sizes and type of data gathered at CAP

Phase	Method	Data gathered
1a	Quantitative survey of general visitor pop. n = 640	Trip characteristics
June-Sept. 2002	Developed using key contacts, pilot test w visitors	On-site activities
		Motivations for visit
		Preferences regarding development/restoration:
		How natural setting affects the visit
		Preference for level of archaeological restoration
		Preference adjacent land use, level of development
		Perceptions of management actions
		Demographics: age, gender, group size, education, country, religion
1b		Preferences regarding development/restoration:
Aug. 2002	Quantitative survey of *Copánecos* n = 125	Preference for level of archaeological restoration
		Preference adjacent land use, level of development
		Perceptions of management actions
		Demographics: age, gender, education, religion
2a		
May – Aug. 2002	Qualitative interviews w gen.visitor pop. n = 20	Perceptions regarding appropriate levels of internal & external restoration/development
		Spiritual components of visit
2b		Experience outcomes, meaning & significance
July 2003	Qualitative interviews w gen.visitor pop. n = 23	Perceptions regarding appropriate levels of internal & external restoration/development
		Perceptions of management actions
		Experience outcomes, meaning & significance
Continuous	Participant observation, discussions w/ key contacts	Journal entries, photos of settings, shadowing of managers and guides, clarification of legal framework for recommendations

Data Analysis

In addition to the descriptive statistics used for all survey items, chi-square, pair-wise comparisons and a potential for conflict index (Manfredo, Vaske, & Teel, 2003) were used to look for differences in setting preferences among local, national and international visitors. Interview notes were taken and transcribed daily during the 2002 interviews, and audio recorded then transcribed during 2003. Free-form analysis (McQuarrie, 1996) was initially used to analyze responses into sub-theme categories relevant to study objectives. Then three rounds of transcript review (open, axial, and

selective coding) were used to code and improve the development and description of sub-themes pertaining to each research question (Neuman, 2000).

Limitations

The study did not sample tour groups which are on a schedule and whose leaders are seldom willing to take the time for clients to participate in such studies. Most tours receive a good orientation to CAP but move at a measured pace focusing on a few of the most notable restored ruins and not giving visitors time to linger or reflect on the setting in the way non-guided visitors are able to do. Tour groups are also noisier and have fewer encounters with wildlife at CAP. Accordingly, results may differ for a sample of tour group members.

Visitor Characteristics

Visitors to Copán Archaeological Park (Table 4.2) are young (most are under 35) and better educated than the general population in their countries of origin. Excluding the sample of 125 people from *Copán Ruinas* (referred to as "*Copánecos*"), visitors came from Latin America (70%), Europe (19%) and North America (12%). Slightly more than half of the Europeans and Latin Americans were men while two thirds of the North Americans were men. The primary motivations for all visitors were to learn more about Maya history and culture and to imagine what Maya life was like.

Table 4.2 Characteristics of study participants/visitors to CAP by country of origin

	Europeans n = 112	North Americans n = 70	Latin Americans* n = 427	*Copánecos*** n = 125
Gender				
Females	45%	31%	47%	42%
Males	55%	69%	53%	58%
Age				
16-29	52%	53%	79%	73%
30-39	25%	14%	9%	15%
40-49	11%	16%	7%	4%
50-59	9%	14%	3%	7%
60-69	3%	3%	1%	1%
> 70			2%	1%
	M = 32	M = 34	M = 24	M = 27
Education (years)				
1 – 8	1%	4%	23%	19%
9 – 12	3%	10%	44%	45%
13 – 16	28%	38%	20%	26%
17+	68%	47%	13%	10%
	M = 18	M = 16	M = 12	M = 11

*Includes Honduran visitors both local and national
** Sample of *Copán Ruinas* residents only

Internal setting preferences

Preferred levels of restoration and maintenance

All visitor segments showed a preference for retaining a mixture of restored ruins and those in the process of being reclaimed by nature. Europeans and North Americans were similar in their strong preference for maintaining this combined setting and although the majority Latin Americans and *Copánecos* preferred the combined setting (Table 4.3), that preference was not as strong as it was for others. Pair-wise comparisons revealed that there were no significant differences between Europeans and North Americans or between *Copánecos* and other Latin Americans.

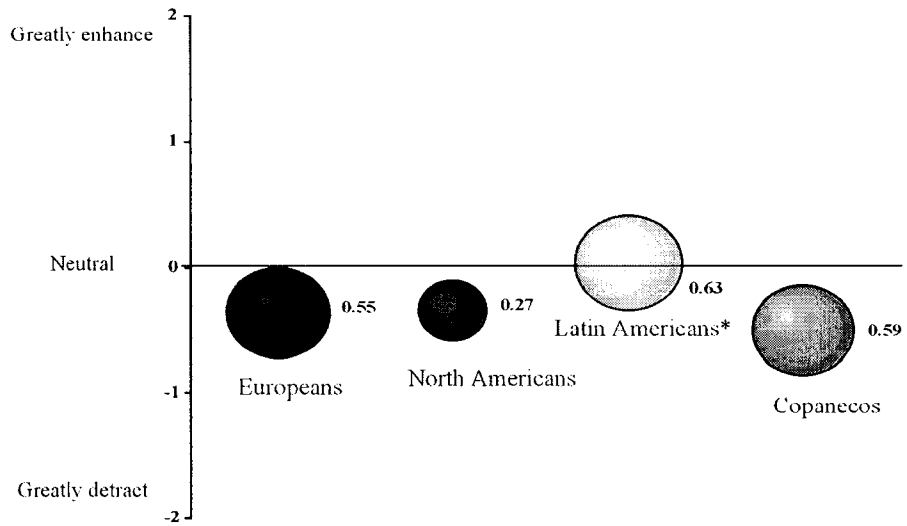
Table 4.3 Setting attribute preferences for the level of archaeological restoration within CAP

	Europeans n = 107	North Americans n = 70	Latin Americans* n = 387	*Copánecos*** n = 125
Restore all eventually	30%	27%	44%	44%
Maintain contrast	70%	73%	56%	56%

*Includes Honduran visitors both local and national
** Sample of *Copán Ruinas* residents only
Pearson Chi-Square: 12.99, df = 3, Cramer's V: .14, $p < 0.01$

One of the management (restoration) actions being proposed by archeologists was the cutting of trees that were growing on the non-restored ruins and the nearby forest to protect archaeological remnants. A survey item explained that this was to protect the ruins and then asked respondents if this would add or detract from their experience. This item served as an additional indicator of setting preference related to differing levels of restoration. The majority of respondents indicated that cutting trees would detract from their ruins experience. Figure 4.2 is a "bubble chart", also known as the Potential for Conflict Index (Manfredo et al., 2003) and shows means and variances simultaneously with the size of each bubble denoting the degree of in-group consensus or potential for conflict (the smaller the circle, the greater the consensus of in-group opinion). Europeans, North Americans, and *Copánecos* all indicated that cutting the trees that were growing on the non-restored ruins would detract from their experience. Overall, Latin Americans were neutral and the difference with other visitors was significant ($p < 0.05$), but they also had the least in-group consensus. *Copánecos* were strongest in their opinion that a setting with fewer trees would degrade their experience.

Figure 4.2 The impact of cutting trees on non-restored ruins on the visitor experience at CAP



Scale: 5-point Likert scale (-2 greatly detract from ruins experience, -1 detract from ruins experience, 0 neutral, 1 enhance ruins experience, 2 greatly enhance ruins experience)
* Latin Americans were significantly different from all groups at $p < 0.05$

Interviews added rich information regarding preferences for internal setting attributes. Informants were asked to comment on the appropriate mixture of restored and non-restored ruins at CAP. Photo cues depicted different levels of restoration and the juxtaposition between restored and non-restored ruins. Several themes emerged from the analysis of responses given by visitors and are given here along with illustrative excerpts.

1. Having both restored and non-restored ruins (combined setting) helps to define the essence of what *ruins* are and makes the passing of a civilization more apparent. Whether due to previous experience visiting other ruins or exposure through formal or self-study, most visitors arrive with a pre-conceived notion of what Mayan ruins are. The setting they encounter either reinforces or contradicts their ideas. An *over-restored* setting is perceived to be sanitized, sterile, or inauthentic. Many informants equated advanced restoration with a loss of realism, a distortion of history, and a reduction in the affective aspects of ruins. *It's interesting to see what it would have looked like when the*

Spaniards found it. – Terry, 27, England; *... part of the site should reflect how nature reclaims. It's a damn good lesson actually.* – Patrick, 25, USA; *It just wouldn't feel like you were outside seeing ruins. It would be like you just saw a model and in restoration are we sure what it looked like?* – Carl, 25, USA; *Everything should not be too perfect* – Donald, 60, Honduras; *It would all be sanitized* (with too much restoration) – Dan, 25, England; *Restoration up to a certain point is necessary to conserve them but at times they can make them look very superficial, so if you change them totally, it isn't the same anymore.* – Susan, 25, Mexico. Several of those interviewed urged managers to maintain equilibrium between what is natural and what is restored so as to avoid creating a simulacrum—a setting that has the form but not the substance of authentic ruins.

2. The combined setting provokes a broader historical context – both cultural and natural – that connects the ancient with the contemporary. A setting that includes fully restored, partially restored and ruins being reclaimed by nature is desirable to many because it enables them to access a longer historical period and to appreciate more fully the ancient Maya civilization at Copán. One informant said, *The image is better with the trees. When the Maya left, the jungle ate up the cities. It is very impressive to see the trees growing out of the ruins.* – Luis, 56, Spain; *...so that you can appreciate the art that the Maya have left for us, for me, about 80% restored is good and the rest left as you find it.* – Roland, 21, Guatemala; *This site gives you a good feel for the culture that without the trees (taking over some ruins) I wouldn't get.* – Marcy, 25, USA; *You bridge a couple of centuries because those trees are at least three or four hundred years old* – John, 59, Holland.

3. The combined setting provokes reflection about sustainability and the human/nature relationship. For many years, the reasons behind the collapse of the Mayan civilization were a mystery. Travel writers used this to create a romantic mystique that fueled the imaginations of visitors (Webster, 2002). In recent years, anthropologists and archaeologists have linked the collapse of the ancient Maya civilization to environmental exploitation and degradation (Diamond, 2005; Fash, 2001; Webster, 2002). Many informants drew from the setting distinct parallels between the collapse of the Maya, the use of natural resources, and the future direction of our own civilization. *Man can do many things but nature is stronger. So this is important to show to people that this... is happening all the time with us also* – Ben, 58, Belgium; *It is good to see the park surrounded by forest. It raises questions in my mind like, what are we doing today, what track are we on?* – Steve, 33, USA; "*...they didn't live in harmony with the environment...*(the same as what) *we are doing in the whole world"* -- Bill, 67, Canada.

4. The combined setting retains the enchantment/mystery of the still undiscovered and can enhance tranquility, introspection and spirituality. The mixture of forest and ruins as well as the intangible mystery and the allure of the yet undiscovered are valued setting attributes. *"...the jungle has a more spiritual ambience to it rather than only a history museum...it is fairly quiet and you can find a part you like and just absorb the atmosphere a little bit. It is tranquil"* – Roger, 25, Great Britain; "*These places can be doorways to your own inner self. Here there is mystery, just enough magic left to draw people in"* – Jude, 57, USA; *"it is much easier to connect with yourself here* (in the combined setting)*...a perfect place for meditation"* – Lisa, 31, Germany; *"To see the*

stones displaced by the roots, I prefer that. You can philosophize much, much better" – Paul, 43, USA.

5. The combined setting is more hospitable, relaxing, and enables an appreciation of nature as well as culture for many. Many informants referred to the importance of maintaining the trees and natural vegetation for their amenity value. Instead of being perceived as damaging to the ruins, the trees, understory, lichens, and birds enhanced the value of the experience at the ruins. *It is the trees that give the refreshing climate to this place* – Anna, 28, Honduras; *Can you imagine walking at noon without the trees?* – Maria, 25, from the town of *Copán Ruinas*; *Nature cannot be separated. It is as important as the architecture. The sound of the birds is part of the enchantment of the place* – Thomas, 52, USA; *I came to appreciate the works of the Maya but one can relax a lot looking at the ruins in the total silence of the forest. It is fascinating because there are no car sounds...there are only the sounds of beautiful nature.* – Roland, 21, Guatemala.

6. Some restoration is essential as non-restored ruins are inscrutable. Maya structures in the form of tree-covered mounds are spread throughout CAP. To the untrained eye, these mounds can easily be mistaken for natural hillocks. Some respondents commented that non-restored remnants were less enjoyable, or that restored ruins were more comprehendible and revealed the design, artistry, craftsmanship and ingenuity of the Maya. ...(some) *nature is great, but I don't understand what it is...what did the Maya create?* – Nicholas, 47, Italy; *I thought it was a little hill or something. If you want to show the world the culture of the* (ancient) *city, you have to develop the site* – Roberto, 20, Guatemala.

7. Remnants must be protected. Many visitors recognized the need to protect restored and non-restored remnants at CAP but responses varied about when it is best to clear vegetation near restored ruins or on top of non-restored ruins. *If you have a street and a tree's roots are ruining the street, you have to do something about it* – Edward, 22, Costa Rica; *If* (you cut trees) *the roots of your tree are dying then your ruin is dying because after so many years, it hangs on the tree* – John, 59, Holland; *When the Park removes the protection of the shade, the sun and water fall directly on the stones...causes even more damage* – Charles, 25, *Copán Ruinas.*

Visitor Preferences for External Setting

Appropriate land uses adjacent to Copán Archaeological Park

The majority of visitors indicated a strong preference for maintaining agricultural or forested lands between the park and the nearby town of *Copán Ruinas.* Respondents were given a multiple choice question where they could indicate whether they preferred to see the private land surrounding CAP: (a) kept in some mix of natural and agricultural uses; (b) returned to a natural condition like forest; (c) the town should be allowed to grow to meet the Park; or (d) used for tourism-related development such as restaurants, lodging, or retail stores. Table 4.4 indicates that all visitor types showed a strong preference for maintaining a pastoral or forested buffer around the park. Latin Americans were more likely to approve of urban expansion (10%) or tourism infrastructure (19%). *Copánecos* were nearly evenly divided in their preference for agricultural land use or reforestation (44% and 45% respectively). Europeans were the least likely to approve of either urban expansion or tourism related development ($p < 0.01$). Overall results suggest

that respondents showed a strong affinity for maintaining a natural or pastoral setting in the CAP buffer zone (a term not used with visitors).

Table 4.4 Visitor perceptions of appropriate land uses adjacent to CAP

Preference	Europeans n = 111	North Americans n = 69	Latin Americans* n = 377	*Copánecos*** n = 125
1. Agricultural	60%	48%	35%	44%
2. Reforestation	38%	45%	36%	45%
3. Town grow to meet park	1%	6%	10%	5%
4. Tourist infrastructure	1%	1%	19%	6%

*Includes Honduran visitors to CAP
** Sample of *Copán Ruinas* residents only
Pearson Chi-Square: 62.63, Cramer's V: .18, $p < 0.01$

During the two sets of interviews, questions and photo cues probed visitor perceptions about appropriate land use adjacent to CAP. Their comments mirrored survey results and provided much detail regarding the dominant preference for not intensifying land uses between the park and the town or around the park. Again, interview data was analyzed for salient themes and connections between setting and desired experience outcomes. Themes are accompanied by illustrative interview excerpts.

1. The walk from *Copán Ruinas* provides an important transitional setting that enhances the visitor experience at Copán Archaeological Park. Several interviewees described how the walk between the town and the park provided historical context, geographic orientation, and cultural appreciation for a mixed ancient and contemporary yet traditional rural landscape. Some described the setting as one that allowed them to anticipate the ruins experience, form questions and to see the Honduran countryside more intimately than they had previously been able to do. Paul, 33, from France said, *...it prepares you to see the ancient civilization*; *I like to see the agriculture and the local people going about their day* – Sam, 27, USA; *It was kind of fun having that buildup of getting more excited about what you are walking towards* – Carl, 25, USA; *I thought it was very pleasant walking under the trees. I just got here yesterday, so I really hadn't*

had a chance to feel the countryside, or feel the nature except from the window of a bus – Laura, 47, USA.

2. Copán Archaeological Park is a relatively small area which needs buffering if the internal setting is to be protected and the valley as a cultural landscape associated with ancient Copán is to be recognizable. Visitors valued the quiet, the tranquility, the night sky, and other aspects of their visit that are currently intact because the surrounding area does yet not interfere with these qualities. Donald, 60, Honduras said, *Sincerely, I am afraid that this whole area will be nothing but concrete here. We only have this area and we have to restore, recuperate and buy more of it*; *We should maintain it* (adjacent lands) *intact and not permit them to fill it with electricity, cars, construction and all. They should preserve the entire area's natural history...it would have to be an area much bigger, not just the area of the pyramids* (CAP area) – Javier, 44, Ecuador. Since ancient Copán once utilized the whole valley around CAP, visitors felt that the scope and scale of the experience would change if the area was changed from pastoral to developed. Gavin, 29, USA said, *It* (the walk) *gave me a sense of the physical scope of the entire site. If it were urbanized, I would have a harder time figuring out what is Copán versus the* (original) *Mayan city*; *The government should buy the land around the park. It is surrounded by archaeologically significant lands* – Maria, 25, *Copán Ruinas*. Maria went on to suggest that adjacent lands should become a mixture of other Mayan sites, reforestation and recreational areas for families.

3. Visitors enjoy the current size, scale and level of tourist infrastructure in *Copán Ruinas* as well as the fact that it is close but not too close to CAP. Most of those interviewed commented on how much they enjoyed the town as part of the experience,

but that it depended on its not losing its friendly small town atmosphere. Many feared that it might. Edward, 31, from Costa Rica said, *It* (urban expansion) *would be like a circus, but they could prohibit that. I would like to come back with my children in 20 years and see it like it is now; I don't think that the town growing will help us much. The people come here and they say 'Copán isn't a city, it is still a town'. It is peaceful and still beautiful, but I don't think the peace we have will last* – Carlos, 25, *Copán Ruinas; I like how it is now because it isn't so exaggerated. Everybody likes the environment of a small town, with the customs and culture that have not been affected* – Susana, 25, Mexico; *It is just that you see a lot of this* (development) *in big cities. We lose what is Honduras – the green, the mountains, the trees. You lose a lot because it will look like any other place* – Emily, 20, Honduras. Other informants noted that a rural setting that protects open space demonstrates respect for the significance of the ruins. Many commented that the town was the appropriate center of tourism infrastructure if CAP is to remain more competitive with other Mayan sites.

4. Many visitors recognize the ecological benefits of reforestation around CAP but feel that both agriculture and natural forest provide an appropriate setting next to CAP. Reinforcing survey results, those interviewed may prefer forest but can support an external setting that promotes either forest related or traditional farming. A pastoral or agricultural countryside with low densities of people working the land was seen as natural and acceptable for many. Nicholas, 47, from Italy said, *To reforest is one solution but the forest reserve or the agriculture are both similar. They both appear alike to us – like nature; For me, reforested is close to perfect, however an environment in the middle like agriculture, is good too. This way people can live there without destroying the natural environment totally* – Roberto, 20, Guatemala.

5. Informants were reluctant to impose their values on the local community. When it came to control over the development of adjacent lands, many informants followed the expression of their personal preferences by assigning importance to the opinions, well-being and autonomy of local residents. Dave, 21, from France preferred to see *the level* (of development) *that is good for the people.* Although Nicholas, 47, from Italy said that reforestation would be *the safest for everything.* He added, *...it would feel like the people around here didn't have a stake in this and that it was all being preserved for visitors.* Dan, 24, from England said, *It is important for the community or whoever controls the development to keep their eye on the needs of the community because these ruins are going to bring people regardless....*

Discussion and Recommendations

Protected area managers, and municipal officials for that matter, must make decisions that balance (1) user preferences with (2) legal and institutional directives, (3) natural resource constraints, and (4) the economic and human resources they have to work with. The visitor preferences revealed by this study indicate that restraint should be used with regard to both the level of restoration within Copán Archaeological Park and the level and type of development permitted on private lands adjacent to the park. Moreover, visitors have articulated how particular setting attributes are related to the experience outcomes they seek. Principal visitor motivations of wanting to learn more about Maya history and culture and imagine what Mayan life was like, turn out to be more nuanced than survey questions alone might indicate. For many, such learning incorporates reflection on why civilizations succeed or fail, on the human-nature relationship and personal introspection, for example, and a setting having restored,

partially restored ruins and ruins being reclaimed by and integrated with nature makes those experiences easier to achieve.

Because of Copán's small size, visitors perceive a need to protect the internal setting by buffering the park with appropriate adjacent land uses or by land acquisition. There was a shared apprehension that intensifying development would create steep ecological, cultural and aesthetic gradients at the park's edge that would change the nature of the visitor experience within the park as well. Nearly all visitors found both the location and size of tourist infrastructure in *Copán Ruinas* and the walk through the rural countryside to be important setting components that enhanced their experience. Without planning and taking action, the current trajectory of both internal and external development are likely to alter these preferred setting attributes and perhaps affect the long-term quality and economic sustainability of tourism in Copán, as has happened in many similar locations (Pedersen, 2003; Wallace et al., 2005; McKercher & Du Cros, 2002). To maintain the quality of the visitor experience, comply with IHAH and World Heritage guidelines and the physical constraints of the CAP site will require a sound internal and external zoning strategy, careful visitor management and cross-boundary collaboration between CAP and the Municipality of *Copán Ruinas* regarding land use decisions and land conservation.

Managing the Internal Setting

Both the 1984 and 2003 management plans for CAP call for zoning within and around the Park. Study results and the behavioral approach suggest that several internal zones are needed to insure diverse experience opportunities and appropriate levels of protection for park resources (Manning, 1999). These might include: an "intensive use"

or group activity zone where the entrance, visitor center, outdoor classrooms, interpretive trail, and picnic areas are located; a "core archaeological zone" taking in the Central Ruins (Great Plaza, Acropolis, Cemetery, Ballcourt, Hieroglyphic Staircase, etc.) many of which are restored with hardened viewing areas and interpretive signage capable of accommodating larger groups; and a "natural archaeological" zone with smaller, more intimate viewing areas with shaded alcoves, benches or large rocks and native vegetation that emphasize the juxtaposition of restored and non-restored ruins and sounds of nature. The latter areas with centuries old trees, lichen and moss growing on ruins should, as Woodward (2001) suggests, reveal "the hand of Time, and the contest between the individual and the universe." These zones would be distinguishable not only by their physical setting attributes but also by the level of infrastructure development, permitted group sizes, activities available, and type of managerial presence including the presence of CAP staff, signage, and trail design among others. There could be some mix of restored and non-restored ruins in each of the last two zones so that tour groups visiting the Central Plaza might also witness the contrast.

Interpretation for visitors should address the full-spectrum of ruins from non-restored to fully-restored. Some non-restored or partially restored ruins could be interpreted for visitors in a way that helps to overcome their inscrutability and boost interest, understanding, and appreciation. Tree covered mounds could be compared to others like them that have been restored or utilize artistic renderings depicting and interpreting what they may have looked like thus reducing the need for restoration, disturbances to the archaeological record or natural surroundings and nature's propensity for self-renewal. Whenever possible, non-native or tree species not used by former

Mayan residents should be removed to improve naturalness and historical accuracy. Historically significant trees such as the rubber tree (instrumental in the Maya ballgame), the ceiba (Maya *tree of life*), and cacao (the *food of the gods*) can be planted where they support the interpretive program and do not threaten archaeological remnants.

Obviously managers must also be concerned that substituting interpretation for restoration or the slowing of restoration activities does not lead to the stagnation of a research program that pursues information about the past that has value for its own sake (Lipe, 1984). New restoration projects do peak curiosity and attract new and repeat visitors and deepen understanding of Maya culture. Fortunately, there are many sites in the Copán Valley outside of CAP that can, if IHAH and the Municipality collaborate and provide incentives to private landowners, allow such research to continue. Another option is to unearth and explore sites internal to CAP and then return them to a non-restored state that protects them from the elements.

Managing the External Setting

Visitors have confirmed that land use around CAP can have an impact on the quality of the visitor experience and the realization of desired outcomes within the park. They have described important setting attributes for both the buffer zone and the town of *Copán Ruinas*. Meanwhile, a number of subsistence activities such as firewood gathering occur in and around the Park, and commercial development projects including, an airport, hotels, private schools, quarries, communications towers, water lines and roads have been proposed or started adjacent to CAP. Some of these projects were stopped, others mitigated to some degree but the land use decision process has been reactive, confusing, and the responsibilities of overlapping jurisdictions are unclear (Wallace et al., 2005).

Enabling legislation for CAP does include the designation of a buffer zone around the Park and both management plans have proposed management sub-zones within that buffer zone. Additionally, the national Law for Cultural Heritage (*Ley Para La Proteccion del Patrimonio Cultural*, 1998) gives IHAH the power to regulate development that "alters the cultural or natural context" of archaeological sites which presumably includes within buffer zones. At the same time, with the advent of decentralization in Honduras, the Municipality governing Copán has the authority to create land use plans and authorize development on private land within its jurisdiction and the national level Natural Resources and Environment Ministry is responsible for the environmental impact statements required for developments of a certain size or for public works. Focus groups and meetings with key contacts during the case study found that it is still unclear how these overlapping jurisdictions will create and implement a collaborative land use decision process.

Recommendations for strengthening the local land use decision process

Ultimately, sustainable tourism in Copán will require an adopted sub-area land use plan and code that recognizes a buffer zone around CAP, and sets acceptable land uses and densities and performance criteria (height, bulk, setbacks, lighting, landscaping that would not compete with the grandeur of or impact the ruins) for any proposed development in that zoning district. The plan and land use code would be best adopted by both the IHAH and the Municipality local government officials and become part of the Municipal master plan and referenced in the park's management/implementation plan. Moreover, there should be a joint commission, development review, and decision process for such proposals with shared responsibility and decision power by both the

Municipality of *Copán Ruinas* and IHAH. A shared data base regarding land tenure, infrastructure, resource constraints and capabilities, cultural sites, sensitive natural areas as well as joint oversight and patrolling- especially along the walkway used by visitors - would serve to galvanize inter-jurisdictional collaborative efforts. Joint planning of this type is already being carried out by the Lake Yojoa Commonwealth in Honduras which has established a legal precedent for collaboration between protected area and local government officials (AMAPURLAGO, 2002).

In other countries, the use of transferable development rights has been incorporated into such sub-area plans to protect special places. As was done in another World Heritage Site, the Sian Kaan Biosphere Reserve in Mexico, the town of *Copán Ruinas* could designate a receiving area where tourist development is desirable and require the transfer the rights for such development from the buffer zone. This would be in keeping with the perceptions of visitors regarding the appropriate location for such development. At the time he co-authored CAP's first management plan, Barborak et al. (1984, p. 60) wrote "It should be stressed that concentrated, modest, architecturally integrated tourist facilities can provide many more benefits to local communities than high-class, high-cost hotels, restaurants, and guide services." An equally important and complementary approach for retaining the rural/pastoral setting that is important to visitors and which buffers CAP is the purchase of private land or conservation easements in the buffer zone. Land purchased in fee could either be turned over to IHAH, a conservation organization, or be leased back to original owners or conservation buyers with deed restrictions ensuring land uses that are compatible with CAP. The Copán

Foundation, a strong local NGO, is a logical entity to spearhead fundraising for such conservation efforts.

Implications for the Behavioral Model

It was mentioned earlier that the Behavioral Model assumes a linkage between the settings visitors seek and the fulfillment of desired experience outcomes, and while managers cannot guarantee visitors a satisfying experience, they can control the integrity and quality of setting attributes that visitors seek out, thereby making the achievement of desired, often psychological, experiences more likely. Past, largely quantitative studies have shown a modest relationship between visitor motivations and setting (Manning, 1999) and McCool, Stankey, and Clark (1985) have suggested that some motivations or desired experience outcomes can be achieved in multiple settings. In one of the few studies involving international visitors, Wallace and Smith (1996) found a weak relationship between motives and setting preferences among visitors to five Costa Rican protected areas. In the Copán study, especially in the qualitative data provided by interviews, visitors have clearly linked the satisfaction of particular outcomes – learning about Mayan history and culture, gaining a broader understanding of human-nature relationships, social sustainability, and one's place in the world – with particular setting attributes. It may well be that cultural sites like Copán Archaeological Park, which have a more specific purpose and concomitantly draw a visitor with a narrower range of visitor motivations or desired outcomes, are where such linkages are seen most clearly and where changes in setting attributes can have a more profound affect. A mixed-methods approach, which questions visitors directly about the importance of setting in a variety of sites, may continue to inform the behavioral model.

Theoretical models aside, the study provides managers at CAP as well as local government officials with added information about user preferences for both internal and external settings that can be applied to two particularly pressing issues. Finding appropriate levels of internal and external development could make tourism in Copán more sustainable. Both are the types of challenges facing many protected areas and their gateway communities, which will require a collaborative cross-boundary approach to their solution.

CHAPTER V

Identifying And Protecting The Interpretive Potential Of The Internal And External Setting At Copán Archaeological Park

> All was mystery, dark, impenetrable mystery, and every circumstance increase it. ...here an immense forest shrouded the ruins, hiding them from sight, heightening the impression and moral effect, and giving an intensity and almost wildness to the interest. (John L. Stephens, on the ruins at Copán *Incidents of travel in Central America, Chiapas and Yucatan,* 1841 (1969, p. 105).

Introduction

This paper emanates from a three-year case study conducted by the authors at Copán Archaeological Park (CAP), a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site (WHS). The study included focus groups, visitor surveys, interviews, and participant observation during the development of an interpretive trail. Visitors and local residents provided considerable information about what combination of internal and adjacent land setting attributes bestow the richest experiences and facilitate connection to the *genius loci* (spirit of place) of the park (Mayer & Wallace, in press). Findings are used to identify planning and management actions that could directly affect the setting and subsequently the visitor experience. As part of this, we describe the *interpretive potential* of the site and how interpreters must move beyond traditional interpretive planning and provide information to unit managers and local governments during site and regional level planning process.

Interpretive potential as we define it here is the best possible physical, social, and cultural/historical milieu for transmitting and receiving the emotional and intellectual meanings of a place and is closely tied to the elements of setting. It is the "from which" that programmatic interpretation is derived. Interpreters have traditionally used non-

personal media like exhibits, signs, and publications for message delivery, but according to Merriman and Brochu (2005) interpretive planning should also encompass landscape features. They advocate examining the "mechanics" that influence the visitor experience such as how the site, facilities, and interpretation "work together to create design balance and physical spaces that function as well as look good" (p. 44).

Of particular importance to setting at Copán are decisions about the extent to which ruins are restored and strategies for working with the municipality to achieve adjacent land uses that provide a compatible external setting that also has a notable effect on the visitor experience. We propose that interpreters, who often focus on the development of activities, materials, and interpretive messages, must also become more involved in the overall planning and management process if a site's interpretive potential is to be protected and later realized. What happens during site and regional planning largely determines the extent to which interpreters can later practice their art. We suggest that being able to inform and influence planning decisions so that they yield an optimal mixture of setting attributes is itself a seldom discussed part of the interpreter's art. This is especially true for cultural sites where both the "original objects" (Tilden, 1977) and the emotional and intellectual connections to the inherent meaning of the resources (Brochu and Merriman, 2002) are complex and often occur within a limited spatial context.

Though not related directly to the interpretive potential of settings per se, the Visitor Experience and Resource Protection planning framework (U.S. Department of the Interior, 1997; Manning, 1999) used by the US National Park Service recognizes the need to address the identification of important interpretive themes early on in the planning

process while developing an area's vision statement and the description of desired future conditions that anchors and guides the rest of the planning process. Understanding the interests, expectations and setting preferences of visitors and perceptions about current and potential management actions can help us understand and later communicate a site's interpretive potential. This study wished to better understand the extent to which setting attributes serve as the medium or "from which" or interpretive messages can be extracted and how they influence the diversity and content of interpretive messages.

In order to understand this and to be able to inform future planning decisions at Copán and similar WH sites, we examined visitor perceptions regarding the external and internal settings at CAP. Particularly, we examined preferred levels of restoration and naturalness within CAP and preferences for land uses that surround and directly affect the relatively small park. We attempt to relate these findings to the concept of interpretive potential and its protection and enhancement.

Study Area Background

In western Honduras, near the Guatemalan border, archaeological remnants are scattered across the Copán River Valley with none more spectacular than those at CAP—a monument to the artistic zenith of the Maya civilization. Copán, the ancient city-state, was a major center of trade, art, and religion in the Maya world. Today the archaeological park is Honduras' second most popular tourist destination and its only profitable national park. It was declared a World Heritage Site by UNESCO in 1981 and a national monument in 1982. CAP is managed by the Honduran Institute of Anthropology and History (*Instituto Hondureño de Antropología e Historia,* or IHAH).

In 1975, the Honduran government initiated a project, the *Proyecto Arqueológico Copán*, to enhance tourism revenues by restoring temples and palaces and also research the city's ancient growth and development (Baudez, 1994; Sabloff, 1994). To date, the level of restoration and promotion at CAP has been successful and has turned *Copán Ruinas* into one of the most prosperous rural towns in all of Central America (Barborak, 2004). Tourism has increased tenfold since the late 1970s, when 10,000 visitors came to CAP (Fash, 2002; *Informe Final del Año 2002*, 2002). *Copán Ruinas* is one-kilometer west of CAP and 45-kilometers southwest (a 2.5 hour drive) of San Pedro Sula, the business capital of Honduras. The small but bustling town's cobble-stoned streets are clean and safe, and its central park serves as a meeting place for locals and tourists alike. Restaurants catering to the tastes of tourists and a variety of accommodations are available to meet every budget and comfort level.

Unless one arrives by tour bus or private vehicle, most visits to CAP originate in the town. The 15-minute walk from the town to the park provides time for geographic orientation and mental preparation. Although a good number of ruins have been restored within the 68-hectare archaeological park, others have not. In some places, gigantic *ceiba* trees (*Ceiba pentandra)* grow out of immense temples allowing visitors to witness the passage of time firsthand and nature's ability to reclaim a city-state that once had over 10,000 inhabitants (Fash, 2001). The forest and agricultural landscape that surrounds the ruins filters most of the sounds of modernity. Birds and insects provide a natural soundscape and opportunities to see whitetail deer, toucans, and giant blue morpho butterflies are common in and around the park.

There are a variety of opinions on how the park and areas between the park and town should be developed. Some archaeologists, tourists, local businesspeople, and managers would like to see most of CAP's archaeological remnants developed and restored to the greatest extent possible. Others would like to see added tourism facilities and businesses near the park. They reason that this will attract even more tourists, generate more revenue, or that restored ruins are preferable because they bring more of the past to life. Because of the diversity of opinion about how to manage the ruins and adjacent lands, it is worth asking, however, how altering internal and external setting attributes will affect the interpretive potential of the site and ultimately, the quality of the visitor experience.

Relevant Literature

Restoration at Cultural Sites

Throughout Mesoamerica, ruins like those at CAP have been restored with the hope of attracting more tourists. Kelleher wrote:

> Even when relatively small numbers of affluent and educated people visited historic sites, elaborate reconstructions were carried out. For example, in the 20th century archaeologists reconstructed the Mayan temples at *Chichen Itza* in the jungles of Mexico's Yucatan peninsula, as well as other remote ruins that could be visited by only the most dedicated travelers (2004, p. 7).

There are, however, multiple positive and negative consequences of restoring ruins and increasing tourism at small cultural sites. The welcome consequences include attracting more visitors, increased economic activity, and the expansion of nearby communities (Pedersen, 2003). One key negative consequence of restorations is that they

initiate an accelerated rate of physical deterioration once ruins are exposed to the natural elements. Feilden and Jokilehto (1998) point out that once exposed, sunlight and rain take a toll on restored (and non-renewable) archaeological remains, and that an overemphasis on tourism volume can lead to unjustified reconstructions. New restorations can also dramatically add to the fixed cost of operation, the need to increase staff presence, and require monitoring.

Few, if any studies have looked at visitor perceptions about differing levels of restoration. We do know that expectations about any site can shape the experience attained therein (Knudson, Cable, & Beck, 2003, Burde & Mayer, 1996). Even if one brings few expectations, according to Lipe's comparative study of world cultural resource management, "When one encounters a cultural resource, the vision of the past that it evokes and the affect associated with the experience is highly conditioned, if not determined, by the other knowledge about the past that the participant brings to the encounter or that he is provided on the spot" (1984, p. 4). For example, paint peeling off the walls in a modern museum may signal lack of maintenance or even institutional financial difficulties. But if visiting a Western ghost town, the visitor probably expects and even wants to see things in disrepair, replete with tumbleweeds blowing down the street. If the town were too well kept, it would it lack a certain authenticity from the visitor's point of view.

What about in the case of Mayan ruins? What is the appropriate level of restoration? Do visitors expect or are they also stimulated by and glad to find non-restored ruins that provide the juxtaposition of nature and culture inherent in carved stones inextricably tangled with roots and vines? Does a walk through a traditional

agricultural landscape before arriving at the ruins provide a setting that enhances the visitor's experience any better than moving from an urbanized setting directly to entrance to the cultural site?

Linking Activities, Settings, Desired Experience Outcomes, and Benefits

This study is guided by the behavioral approach to analyzing the visitor experience. This approach holds that visitors to parks and protected areas are motivated to engage in activities in specific settings in order to make the achievement of desired experience outcomes more likely. Satisfying experience outcomes or motives in turn produces personal and social benefits (Manning, 1999). Sometimes referred to as Experience-Based Setting Management or Benefits-Based Management, this consumer-based approach has for three decades used quantitative methods to probe visitor activities, motivations and setting preferences, experience outcomes, and the links between them (Floyd & Gramann, 1997; Schreyer & Driver, 1989; Driver, 1975; Driver & Brown, 1975). The conceptual framework suggests that while managers cannot guarantee that desired experiences or benefits will be achieved, they can control the integrity and diversity of the physical, social, and managerial setting attributes with careful planning and zoning (Clark & Stankey, 1979; Brown, Driver, & McConnell, 1978). This makes it possible to offer a range of settings or experience opportunities making it more likely that more visitors will achieve desired outcomes and benefits from their visit.

Although the relationship between setting and desired outcomes is often intuitive, the studies that have been conducted have produced only a modest confirmation of the link between them (Manning, 1999). With a few exceptions (Mayer, 2003; Wurz, 1996;

Wallace & Smith, 1996), most studies using a behavioral approach have been in North America or Australia and few, if any, have taken place at cultural or archaeological sites where the range of motivations for visiting may be more specialized (Mayer, 2003) and where managers have a more specific mission and less latitude to provide for a variety of management zones or settings. Additionally, few studies have compared results for national and international visitors. Finally, studies that look at the relationship between setting and visitor experience outcomes have seldom used mixed methods that pair visitor interviews with quantitative survey data.

Methods

Study Objectives

To better understand the implications of possible changes to the internal and external setting at CAP, and in hopes of learning more about the specific links between setting and desired outcomes at an archaeological site like Copán, the study had the following objectives: (1) to determine visitor preferences for both external and internal setting attributes; (2) how changes in the external and internal settings might affect the intellectual and emotional impact of the ruins experience and the achievement of desired visitor outcomes, and; (3) to understand where interpreters might be able to influence the planning and management process in order to optimize the interpretive potential.

Because visits to a WHS like CAP can have profound affective, philosophical, or spiritual outcomes, the depth of such visitor experiences may be enhanced using both quantitative and qualitative research methods (Pedersen, 2003), providing what Berg described as different lines of sight directed at the same point (1998, p.4). A case study

offers the opportunity for both "thick description" and a well-rounded perspective on the exemplar (Stake, 1995).

Two different surveys and two separate rounds of semi-structured interviews, along with participant observation were employed with visitors and residents of *Copán Ruinas*. Table 5.1 provides an overview of the data collection approaches.

Table 5.1 Data collection format, sample population, dates, and sample size

Phase	Data format	Sample population	Dates	n
1a	Survey	General population of CAP visitors	06/07/02—09/17/02	640
1b	*Copáneco* survey	Residents of *Copán Ruinas*	08/31/02—09/21/02	125
2	Interviews	General population of CAP visitors	05/09/02—09/15/02	20
3	Interviews	General population of CAP visitors	07/10/03—07/24/03	23

The visitor survey was developed in collaboration with CAP managers, Honduran and U.S. protected area specialists from the Wildlife Conservation Society, and staff from the Center for Protected Area Management and Training at Colorado State University. The survey included questions on visitor characteristics, preferences for intensities of adjacent land use, the level of archaeological restoration, and specific management actions like tree removal. The survey was pre-tested with visitors and strengthened thereafter. Available in both English and Spanish, the survey was conducted between June and September 2002 each weekday and on weekends between 8 a.m. and 4 p.m. for 13 weeks as visitors exited the park. All visitors, with the exception of fixed-schedule guided tour groups, had an equal opportunity to participate. Residents of the town of *Copán Ruinas* were also surveyed to ensure that the perceptions of local people were included (McKercher & Du Cros, 2002). Descriptive statistics, chi-square and analysis of variance (ANOVA) were used to analyze the effect of selected demographic variables on setting preferences.

Semi-structured interviews were conducted in 2002 during the peak of visitation (May–August) with exiting visitors or small groups and again in July 2003 with the latter

being more structured (Manning, 1999; Berg, 1998; Furze et al., 1996). The second round of interviews used photo cues (Manning, 1999; Furze et al., 1996; Wallace & Trench, 1995; Whyte, 1995; Wallace, 1990) to help visitors envision a range of levels of restoration (Figures 5.1 and 5.2). Interviews were targeted and focused directly on study topics (Yin, 1998). Small groups were allowed to talk together about both their collective and individual experiences at the ruins. Interviews targeted visitor perceptions about: (a) the setting attributes like the juxtaposition of restored ruins and those being reclaimed by nature; (b) the appropriate level of restoration at the ruins as well as the experience outcomes derived from the existing landscape and (c) the adjacent landscape. Field notes were taken and then transcribed daily, while the second set of interviews was audiotaped and transcribed verbatim. Free-form analysis (McQuarrie, 1996) was initially used to analyze responses into sub-theme categories relevant to study objectives. Three rounds of transcript review (open, axial, and selective coding) were used to code and improve the development and description of sub-themes (Neuman, 2000). In discussing themes, it is important to differentiate between interview themes (oft-repeated visitor preferences and perceptions) and interpretive themes (major points/messages about the inherent meanings of the resource) that make up the cornerstone of thematic interpretation (Ham, 1992).

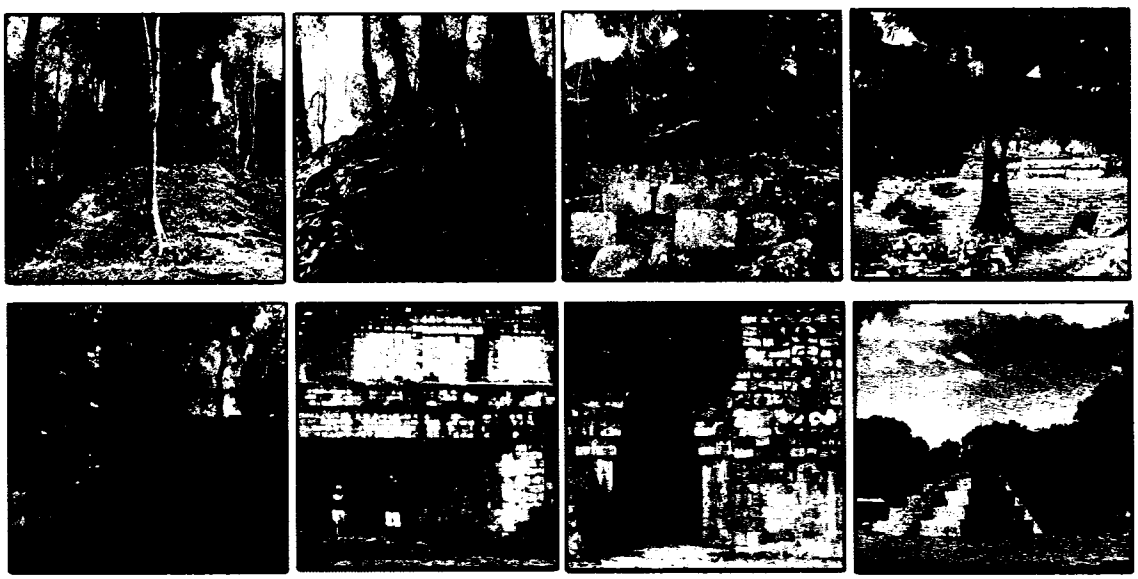


Figure 5.1 Internal setting from non-restored to totally restored ruins

Figure 5.2 External setting from reforestation and agriculture to residences and businesses like modest and luxury hotels

Immersion in the community and the credibility that Peace Corps service granted the lead author allowed him to participate in planning meetings and events, and permitted full access to the ruins, park staff, and visitors. Additionally, the lead author was contracted to direct an updated marketing plan for CAP that reported that the primary motivation for visiting CAP among all groups was to learn more about Maya history and culture and to imagine what Maya life was like. Photographs of setting attributes and elements of the ruins experience, the shadowing of managers and guided tours, as well as conversations with key contacts were used to answer questions about CAP's enabling legislation, public use, zoning, and restoration plans. Survey data, interview themes, notes, and photographs were used to help describe the relationship between setting, experience outcomes, and interpretive potential.

Findings

Visitor Characteristics

CAP visitors are young (most are under 35) and better educated than the general population in their countries of origin (Table 5.2). Excluding the sample of 125 people from *Copán Ruinas* (referred to as *Copánecos),* visitors to CAP came from Latin America (70%), Europe (18%) and North America (12%). Slightly more than half of the Europeans and Latin Americans were men while two thirds of the North Americans were men.

Table 5.2 Sample characteristics by country of origin

	Europeans n = 112	North Americans n = 70	Latin Americans* n = 427	*Copánecos*** n = 125
Gender				
Females	45%	31%	47%	42%
Males	55%	69%	53%	58%
Age				
16-29	52%	53%	79%	73%
30-39	25%	14%	9%	15%
40-49	11%	16%	7%	4%
50-59	9%	14%	3%	7%
60-69	3%	3%	1%	1%
> 70			2%	1%
	M = 32	M = 34	M = 24	M = 27
Education (years)				
1 – 8	1%	4%	23%	19%
9 – 12	3%	10%	44%	45%
13 – 16	28%	38%	20%	26%
17+	68%	47%	13%	10%
	M = 18	M = 16	M = 12	M = 11

*Includes Honduran visitors both local and national
** Sample of *Copán Ruinas* residents only

Setting preferences for lands around CAP

Presently, visitors walk through a rural setting on their way to CAP and this external setting is in a fairly natural state (primarily agricultural). However, the town has the potential to grow to the edge of the park. Survey respondents were given a multiple choice question where they could indicate whether they preferred to see the private land surrounding CAP: (a) kept in some mix of natural and agricultural uses; (b) returned to a natural condition like forest; (c) allow more residential uses, or; (d) undergo tourism related development like restaurants, lodging, or retail stores. Table 5.3 indicates that all visitor types showed a strong preference for maintaining a pastoral or forested buffer around the park ($x^2 = 62.63$, $p < 0.01$). Latin Americans were the more likely to approve of land use that includes more residences (10%), stores and tourist development (19%). *Copánecos* were nearly evenly divided in their preference for agricultural land use or

reforestation (44% and 45% respectively). Overall results suggest that respondents showed a strong affinity for maintaining a natural or pastoral setting.

Table 5.3 Park buffer zone: development preferences by place of origin

Preference	Europeans n = 111	North Americans n = 69	Latin Americans* n = 377	Copánecos** n = 125
1. Agricultural	60%	48%	35%	44%
2. Reforestation	38%	45%	36%	45%
3. Town grow to meet park	1%	6%	10%	5%
4. Tourist infrastructure	1%	1%	19%	6%

*Includes Honduran visitors both local and national
** Sample of *Copán Ruinas* residents only
Pearson Chi-Square: 62.63, Cramer's V: .18, $p < 0.01$
Scale: 1. The (private) land surrounding the CAP should be kept in some mix of natural and agricultural uses.
2. The land surrounding the CAP should be returned to a natural condition like forest.
3. The town should be allowed to grow out to meet CAP.
4. Lands surrounding CAP should be dedicated to tourism related development like restaurants, lodging, or retail stores.

Interview informants later described their preferences for external setting attributes. Three main preferential categories emerged and corroborated the strong preference among all visitor segments for not intensifying land uses between the park and the town.

1. Many preferred adjacent agricultural or reforested landscapes for the aesthetic and transition effect they would provide. Many informants felt that reforested lands looked the best and some said the best way would be to reforest it all saying reforestation *brings life* and that *they should always conserve green spaces and natural areas so despite changes there are always trees.* —Pam, 18, Honduras.

The preference for forest restoration was nuanced. Many indicated that an external setting perceived as *natural* adds something to the visit that would be lost if land use intensified. Although a reforested setting was valued for its many benefits, an agricultural setting was tantamount to nature for urban visitors like Nicholas, 47, from Italy:

To reforest it is another solution, but the jungle reserve or the agriculture are both similar. They both appear alike to us—like nature. But they should never develop the town, because if the town grows wider, for me, that brings many problems for the people. There is money, and they can earn money...but if it stays like this, for me, it is best.

Others also preferred an external setting that includes nature elements and also where traditional farming is valued. The responses elicited from informants revealed a desire for an external setting that complements or blends with or transitions to the setting within the park while recognizing the needs of the local people. Laura, 47, from the USA, said, *I looked out at the field and took pictures and saw the horses by the roadside...and that was part of the charm.* Robert, 20, from Guatemala, considered an agricultural setting to also be an appropriate transition beneficial to both tourists and local area residents when he said, *For me, reforested is close to perfect; however, an environment in the middle, like agriculture, is good too. This way the people can live without destroying the natural environment totally.* Emily, 20, from Honduras, said, *It's just that you see a lot of this* (development) *in the big cities. We lose what is Honduras—the green, the mountains, the trees. You lose a lot because it will look like any other place.*

Regardless of their preference for a mix of rural land uses, there was wide agreement among respondents that the tourist infrastructure should be kept in town, away from CAP, and at an appropriate small town scale. Roland, 21, from Guatemala, indicated a preference for a setting that was reforested, but more important to him was the need for maintaining the land as open space. He said:

The tourist center should be integrated into the town, and they should leave this space for forests. In between the town and the park they should leave a good space for the trees and reforestation. It is good to have various hotel options, but like I said, they should be separated from this place. They shouldn't be up to the entrance of the ruins, nor even close to the ruins.

Several informants noted that an external setting that protects open space between the town and the park shows respect for the significance of the ruins and is valued as a transition zone between the cultural site and tourist infrastructure and commercialism. Fred, 37, from Spain, when asked about his setting preferences for the land around Copán, said:

What you have to understand is that Copán has to compete against other tourist destinations. If it's too touristy, it becomes too exploited. It should be a fair combination between what the people need, but if they get rid of everything they like about this place it will attract less tourism. So, they can build more hotels if they want, but they should respect the structure of place. Don't build in just any place. Don't build where there is forest. Don't just build enormous buildings.

2. The walking path between CAP and *Copán Ruinas* was seen as helping to tie CAP to the scale and scope of Maya culture in the Copán Valley. Without any formal interpretive efforts present, visitors gleaned meanings from the setting and described interpretive messages that began to emerge even before they reached the park. The pastoral setting provides an intimate look at the Honduran countryside linking past and present. As Gavin, 29, from the United States, replied:

It gives me a sense of the physical scope of the entire site. When I was walking here from town, and saw some of the outlying sites, I could sort of have a picture in my head that this city was really big. Here are some of the outlying parts of it. People must have either been living here, or these were places people went for certain kinds of activities. So, I felt I got something out of that in terms of the sheer size of the site, got a sense for the city. If it were urbanized, I would have a harder time sort of figuring out what is Copán now, versus the Maya city, and how big was it and where it was.

The walk through a non-motorized, non-commercial, agricultural/pastoral setting is seen to be a harmonious part of CAP's attraction. Joe, a 33-year-old Guatemalan, described the antiquities and nature in *all of their splendor* as *harmonious* and the main attraction for his visit. He added that commercial development would alter the image and the *feeling* of the external setting.

3. Informants indicated a preference for intangible external setting attributes that are tied to the "in ruins" experience. A setting with more intensified land use—such as more residences and businesses—was perceived as a potential threat to the *genius loci*, or spirit of the place. A high value attached to the tranquil atmosphere inside of the park linked to the importance of keeping noise, commerce, and modernity at a respectful distance—lest they detract from the ruins experience. Roland, 21, from Guatemala, made it clear why it is important to maintain separation between the town and the park when he said:

It is fascinating because there are no car sounds. I think there are only the sounds of beautiful nature. It is a very calm and peaceful place to relax. It is a good place to meditate and leave the stress of the city.

Visitors linked the tranquility to the small town charm of the town of *Copán Ruinas*. Charles, 25, of *Copán Ruinas* was asked if he felt the town growing larger would affect tourism. He said:

I think so. Now, many of the tourists come because it is peaceful and small and because after 10 p.m. you can sleep peacefully. You can still walk in the streets at 11 or 12 at night without problems. But if the town grows to a bigger size, things will change. It is possible that we will have thieves as well. These types of changes can change the flow of tourism. I don't think that the town growing will help us much. Unfortunately it is difficult to stop it, but I think it would be best if we maintained it like it is now. The people come here and they say, 'Copán isn't a city, it is still a town.' It is peaceful. It is still beautiful. But I don't think the peace we have will last.

Forested and pastoral adjacent land setting attributes like trees and shrubs were valued because they buffer sound and provide the tranquility that begins to usher in reflection and information processing. Natural sound is another easily overlooked setting attribute. CAP is small and reforestation would essentially enlarge and restore this otherwise vulnerable area.

Internal setting preferences for levels of restoration and maintenance

It is estimated that less than five percent of the Copán River Valley's 4,500 archaeological mounds have been excavated, least of all restored. Within CAP there exist many ruins that have been restored and others that have been reclaimed by nature. To study the juxtaposition issue more closely, a dichotomous dependent variable was used to examine differences in long-term restoration preferences among visitors by country of origin (Table 5.4). Survey data revealed that, within the park, all visitor segments preferred retaining a mixture between restored ruins and those in the process of being reclaimed by nature ($x^2 = 12.99, p < 0.01$). Europeans and North Americans were similar in their strong preference for maintaining this combined setting and although the majority of Latin Americans and *Copánecos* preferred the combined setting, that preference was not as strong as it was for others.

Table 5.4 Setting attribute preferences for level of archaeological restoration within the park

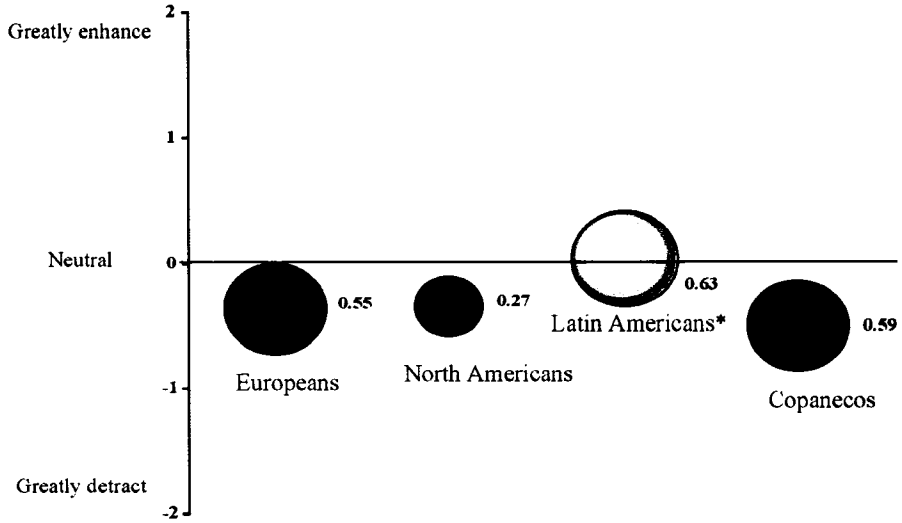
	Europeans n = 107	North Americans n = 70	Latin Americans* n = 387	Copánecos** n = 125
Restore all eventually	30%	27%	44%	44%
Maintain contrast	70%	73%	56%	56%

*Includes Honduran visitors both local and national
** Sample of *Copán Ruinas* residents only
Pearson Chi-Square: 12.99 df = 3, Cramer's V: .14, $p < 0.01$
Dependent variable: 1. Restore all ruins eventually
2. Leave a mix between restored ruins and ruins in process of being reclaimed by nature

One of the restoration actions being proposed by archaeologists was the cutting of trees that were growing on the non-restored ruins and in the surrounding forest to protect archaeological remnants. A survey item explained the reasons behind cutting the trees, and then asked respondents if this management action would add or detract from their experience. This item served as an additional indicator related to differing levels of restoration.

Figure 5.3 is a "bubble chart", also known as the Potential for Conflict Index (Manfredo, Vaske, & Teel, 2003) and shows means and variances simultaneously with the size of each bubble denoting the degree of in-group consensus or potential for conflict (the smaller the circle, the greater the consensus of in-group opinion). The majority of respondents indicated that cutting trees would detract from their ruins experience. Europeans, North Americans, and *Copánecos* all indicated that cutting the trees that were growing on the non-restored ruins would detract from their experience. Overall, Latin Americans were more neutral and the difference with other visitor segments was significant ($F = 5.69, p < 0.05$), but they also had the least in-group consensus. *Copánecos* were strongest in their opinion that a setting with fewer trees would degrade their experience.

Figure 5.3 How tree cutting on non-restored ruins would affect visitor experience in CAP



Scale: 5-point Likert scale (1. greatly detract from ruins experience, 2. detract from ruins experience, 3. neutral, 4. enhance ruins experience, 5. greatly enhance ruins experience)
* Latin Americans were significantly different from all groups at $p < 0.05$

Interview informants were asked about preferences regarding the appropriate mixture of restored and non-restored ruins at CAP. Photo cues depicted restored, partially restored and non- restored ruins. Four salient visitor preference categories emerged from the analysis of responses and are given here along with excerpts from the interviews.

1. The combined setting, with nature obviously present, retains the enchantment/mystery of the yet undiscovered and can enhance tranquility, introspection, and spirituality. Informants who had just experienced restored ruins in the process of being reclaimed by nature expressed emotional connections to the site. The experience of witnessing ruins in the process of being reclaimed by nature encouraged informants to go beyond the intellectual pursuit of facts into the realm of wonder and reflection. As Roger, 25, from England stated, *...the jungle has a more spiritual ambience to it rather than only a history museum... it is fairly quiet and you can find a part you like and just absorb the atmosphere a little bit. It is tranquil.* According to Anna, 28, Honduras, *It is the trees that give the refreshing climate to this place, and if you cut them, you will see how they were built but you won't see any of the nature. They bring a lot of tranquility to someone who comes here and you feel like you can relax.* Thomas, 52, from the United States offered that *Nature cannot be separated. It is as important as the architecture. The sound of the birds is part of the enchantment of the place.*

A setting that mixed forest and ruins evoked mystery and introspection for Jude, 57, USA, who said, *These places can be doorways to your own inner self. Here* (partially restored and non-restored ruins) *there is mystery, just enough magic left to draw people in.* The setting itself, with centuries old trees and archaeological remains, without the aid

of tour guides or interpretive signs, provided intellectual and emotional connections that promoted learning about the site and the self for a number of informants.

2. A combined setting helps to define the essence of what a ruin is provokes thinking about the power of nature to reclaim and makes the passing of a civilization more apparent. Emotional and philosophical responses were common when informants were asked about the prospect of cutting trees from the temples and archaeological remains in order to protect them in the long term. One informant said, *The image is better with the trees. When the Maya left, the jungle ate up the cities. It is very impressive to see the trees growing out of the ruins* – Luis, 56, Spain; *I do not agree* (with restoration that eliminates ruins with trees growing on them) *because those trees are ancient and that part of the temples gives a different sensation.* – Joe, 33, Guatemala.

The combined setting provoked reflection about sustainability and the human/nature relationship among those interviewed. Many informants drew from the setting distinct parallels between the collapse of the Maya, the use of natural resources, and the future direction of our own civilization. Patrick, 25, USA said, *...part of the site should reflect how nature reclaims. It's a damn good lesson actually*; *It is good to see the park surrounded by forest. It raises questions in my mind like, what are we doing today, what track are we on?* – Steve, 33, USA; A setting perceived to be over-restored was seen to be sanitized, sterile, or inauthentic. Many informants equated advanced restoration with a loss of realism, a distortion of history, and a reduction in the affective aspects of what ruins are. Pete, 27, from Australia said, *There always needs to be an element of realism and I think that when you start restoring it, you can pass the point where it becomes more about the form, and you lose a bit of realism*; *Everything should*

not be too perfect. – Donald, 60, Honduras; *It would all be sanitized* (with too much restoration) – Dan, 25 England. Interview results made it clear that visitors forged emotional and philosophical connections to the combined setting without any formal interpretive explanation.

3. Some restoration is essential as many non-restored ruins are inscrutable and do not allow visitors to engage in learning and imagining on their own. Maya structures in the form of tree-covered mounds are spread throughout CAP. To the untrained eye, these mounds can easily be mistaken for natural hillocks and were less enjoyable. Here the setting itself does not evoke cohesive interpretive messages or establish strong emotional or intellectual connections without further interpretation. Gavin, 29, from the USA said:

> *I think that the least touched, the least developed, is the least interesting. I can't picture what this looked like. I look at that, and I know that there was something there, some kind of building, but I have no idea about the dimensions, or what it was used for. Who knows? So leaving it untouched, I understand that there are times when archaeologists choose to do that because it is the best way to preserve it, either for later restoration when we have better techniques or just because that keeps it underground and away from the elements. If archaeologists choose to do that, there needs to be lots of signs around or a lot of guides to explain. I feel like this needs the most educational infrastructure to help me interpret what this is.*

Restored ruins more readily convey information about a piece's original design and use and aid in establishing intellectual connections to the site. Some informants found that restored ruins were more comprehendible and revealed the design, artistry,

craftsmanship, and ingenuity of the Maya. *I think this one is very important* (totally restored). *We can't understand what the other ones are. We have no idea. But if first I see this one, then afterward we can appreciate more the other ones* (semi and non-restored). – Mary, 44, France. Another said, *I imagined walking during the time of the Maya—watching rituals and imaging the clothing. When I was standing on top of the large* (restored) *pyramid, I imagined everyday life.* – Wilmer, 21, Honduras.

Discussion and Recommendations

Most protected areas must sooner or later contend with increasing external and internal development pressures. At some level, development begins to deleteriously effect both resource protection and the visitor experience creating dissonance that interferes with the reception of the site's essential values, its messages, and its emotional and intellectual impact (Figure 5.4). Changes to a setting that guards the historical context of a site makes it difficult to imagine oneself in the time and place when the civilization thrived or when it began its decline. This is particularly true in the case of a small cultural site like CAP, which holds unique resources, and has both external pressure from urban expansion and the internal dilemma of how much restoration should take place and how many visitors should be accommodated.

Figure 5.4 Photo taken from inside Pizza Hut illustrates how the level of development on adjacent lands threatens experiences available at UNESCO World Heritage Sites like the Pyramids of Gaza, Egypt. Photo by Adam Bernstein, Reuters News Service.

CAP visitors appear to have motivations and desired experience outcomes that are closely tied to particular setting attributes that still exist but which are potentially threatened. The interpretive potential of the site itself or of the programs that might emanate from it may be diminished if the balance of restored and non-restored ruins is lost or if development intensifies adjacent to CAP. Setting attributes like those of the pastoral countryside separating the town and ruins can be seen as a form of interpretive media, especially if they are identified during the planning process, protected, and intentionally managed in a ways that communicate messages or themes that are in keeping with management objectives (Brochu, 2005). To do so will require that interpreters more actively in the planning process than has often been the case.

Broadening the view of interpretive planning

The International Council on Monuments and Sites Ename Charter: *New Principles for Interpreting Cultural Heritage Sites* calls for "integrated interpretive planning" that moves beyond the identification and presentation of artifacts or solely focusing on interpretive programs (Silberman, 2006). Visitors to Copán remind us that the setting itself must be planned for as it evokes feelings, implies messages, and provokes inquiry and is therefore a *de facto* medium of interpretation worthy of our attention. At the same time, setting integrity is the "from which" that programmatic interpretation emerges. *Interpretive potential* as we have used it herein, is the potential of setting to create emotional or intellectual impact either on its own or to serve as a point of reference for the themes and messages of programmatic interpretation. Some combination of setting attributes that optimize interpretive potential can be recognized and planned for.

Supporting the expanded view of interpretive planning as a process that begins during site and regional planning, the Visitor Experience and Resource Protection planning framework (VERP) asks that interpretive themes be identified early in the process of developing a park's VERP plan. Input from interpreters is then used to inform the description of desired conditions, management zones, and management actions (U.S. Department of the Interior, 1997). While this does expand the traditional notion of interpretive planning, we would go further and suggest that, for Copán and many other cultural sites, interpreters who wish to optimize long-term interpretive potential must provide input for both internal (site) planning as well as the local land use planning that ultimately determines adjacent land use. In doing so, they should preface any description of specific interpretive themes with information about the importance of settings known to

hold interpretive potential. One way to do this is to reveal setting preferences and the experience outcomes that visitors associate with different settings.

Feilden and Jokilehto (1998) speak of "the urgent necessity to take due care not only of specific monument, but also to provide sufficient planning tools for the control and balanced development of their wider context. Context is defined by Fagan (2003) as the relationship of an archaeological find in time and space to other things at a give site. It is essential to understanding the site (Smith, 2003) and loss of context diminishes a sites historic fabric and authenticity (National Park Service, 2002). If interpreters are not involved in site planning, managers may not understand context or the intangible values that they are charged with protecting. They may not see how protecting a site's interpretive potential expands experience opportunities and connects visitors with the site in ways that furthers their mission. Likewise, if interpreters fail to provide information to local government officials during planning that affects lands within a buffer zone or adjacent to a cultural site, they may not understand how zoning, permitted density, or uses will affect the quality of the visitor experience and how the continued attraction of visitors to the community depends on maintenance of setting integrity. This form of interpretive planning is proactive and might be thought of as "experience design" that is informed by visitor research. To illustrate, we will provide some examples of the concepts that interpreters might bring to the planning table at Copán and elsewhere.

External Setting and Interpretive Potential

CAP's external setting provides a valued transition zone between the town and the park that primes the visitor experience and is bound to the interpretive potential of the park. The buffering mix of agriculture and forest is the raw material for several interpretive themes that tie to the "extant" natural and cultural contexts that have existed since the time of the ancient Maya at Copán (Schlesinger, 2001). The pastoral setting holds the potential for visitors to better understand local history and traditional agricultural practices including maize production and agro-forestry, the origins of which reach back to ancient Copán. It also protects a natural soundscape and night sky that were at the center of Mayan cosmology. The walk through this setting permits one to better envision the scope and scale of the valley during the time when the ancient Maya flourished—thereby providing context and extending the experience. Were this landscape setting to give way to hotels, vendors, and the automobile, there would be a sharpening of both ecological and aesthetic gradients and a loss of context that would reduce the effective size of the area and the breadth of available experience opportunities (Wallace, Barborak, & MacFarland, 2005).

Interpretive potential also has to do with cognition, information processing, and the ability to attend to an experience (Ham, 2007). Visitors report how the tranquil walk through a non-motorized, non-commercial, agricultural/pastoral setting enhanced their experience within CAP by stimulating inquiry, reflection, geographic orientation, and an increased sense of anticipation. They also appreciated the current size, scale, and level of tourist infrastructure in *Copán Ruinas* and the fact that it is kept at a respectful distance from CAP.

If this setting is to be maintained, interpreters are called upon to be the "voice for the resource" and advocate on behalf of these visitor setting preferences and the economic benefits they sustain as local master plans, zoning regulations, and development proposals that affect lands in the buffer zone are developed and reviewed. Fortunately, the legal framework for cultural sites in Honduras enables both local government and protected area officials to participate in land use decisions (Wallace et al., 2005; *Ley para la Protección del Patrimonio Cultural de la Nación. Decreto,* 1997). Maintaining the mix of agriculture and forest or increasing reforestation may require the use of conservation easements, transferable development rights, or other incentives for landowners (Mayer & Wallace, in press). In many countries as governments decentralize planning functions to local governments, protected area staff will have the opportunity to become part of the newly forming local government land use planning decision process where private or communal lands near protected areas are concerned. This opportunity for interpreters to sit at the planning table and serve as the "voice for the resource" may not present itself again after decentralizing decision frameworks crystallize (Wallace et al. 2005). Proposals for development both inside and outside CAP will continue for years to come and require that CAP staff, including interpreters, to routinely participate in planning and review processes.

Internal Setting and Interpretive Potential

Maintaining the interpretive potential and the quality of the visitor experience, while complying with IHAH and World Heritage guidelines and the physical constraints of CAP can be achieved through careful visitor management and the use of distinct management zones within CAP. Both the 1984 and 2003 management plans call for zoning within CAP,

but these plans have yet to be fully implemented. Zoning can help maintain the integrity of multiple settings and ensure that a diversity of visitor experiences and interpretive opportunities are available. Visitors intuitively preferred settings that helped to preserve a rare history in its broadest context. To do this, site planners should consider a zoning strategy that distinguishes between intensive use, core archaeological, and natural archaeological zones that allows restored and non-restored ruins to exist in juxtaposition (Mayer & Wallace, in press).

Restoration creates interpretive potential and can also remove it. Restored and non-restored ruins work together as interpretive media that protect the spirit of the place and provide a wider diversity of possible interpretive messages and experience opportunities. Perspectives about the passage of time, the collapse of the Maya, their use of natural resources, and the future direction of our own civilization depend on visitors being able to ponder the mix of restored, partially restored, and non-restored ruins. Visitors described how this combination also promotes a quality aesthetic experience and stronger emotional connections to the site, introspection, meditation, and spirituality. Preserving intangible qualities such as enchantment, the mystery of the still undiscovered, charm, and perceived authenticity can be accomplished by protecting tangible setting attributes like the nature/ruins mix, the presence and sounds of wildlife, quiet corners, and unobstructed views between restored and non-restored ruins and the countryside beyond. Silberman (2006) states that increasing the number of annual visits is not a sound rationale for undertaking archaeological restorations and reconstructions at the expense of authenticity. As before, interpreters who are a voice for the resource – must now use that voice with archaeologists, area administrators, and maintenance staff

during the planning process and with day-to-day management decisions that affect setting and interpretive potential.

Study results also had implications for the programmatic interpretation made possible by the combined internal setting. Some visitors referenced the inscrutability of partially or non-restored ruins and needed help understanding what they were observing. Interpretation can subtly teach visitors "how to see" by comparing tree covered mounds to similar restored structures or through the use of artistic renderings that depict what the site may have looked like. Such interpretation can reduce the need for restoration and disturbances to the archaeological record and natural surroundings. Partial restorations are aesthetically pleasing and evocative and should be judiciously interpreted. In spite of a the rich potential to interpret the aesthetic qualities of partial restorations or philosophical questions of sustainability, the human nature relationship, and the recuperative powers of nature, many visitors perceived these things on their own from the "setting as media". As one informant urged, *"Do not over-interpret. Leave room for mystery and discovery"*. Complete restorations encourage an understanding the ancient Maya and their lifestyles at Copán. Visitors expect and seem comfortable with more programmatic interpretation in this setting where guided tours can emphasize appreciation for Maya artistry, architecture, and construction. As several visitors mentioned, replicas and reconstructions should be clearly identified in an unobtrusive manner so as not to mislead.

Final Thoughts

The interpretive potential of Copán Archaeological Park resides in a seamless landscape that is both within and adjacent to the park. The *genus loci*, or spirit of the place, resides in an optimal combination of valued internal and external setting attributes that

visitors have helped us to partially articulate and which deserves careful consideration during the planning process. An expanded view of interpretive planning asks interpreters to become more involved in site and regional planning and to provide a voice for the importance of setting and appropriate levels of internal and external development. When planned for and optimized, setting can serve as interpretive media in and of itself. This is not an entirely new idea. Tilden (1968) acknowledged that a preserved monument "speaks for itself" but does so partially in a language not understood by all visitors, thus requiring the help of interpreters to "give life to the ideas and images of material remains" (Silberman, 2006, p. 28). To suggest that the conscious planning for or design of setting is interpretation by no means reduces the importance of programmatic efforts. Conscious setting design based on information about the ruins experience is a logical response to internal and external development pressures but it also protects and enhances interpretive potential and sets the stage for programmatic efforts.

Additional research

The Experience-Based Setting Management conceptual framework employed by this study can be refined to more fully test theory associated with the relationship between setting attributes and their ability to facilitate desired outcomes. This study points out the need for scales that fit the unique experiences available at a cultural site. This research offers a new idea and challenge for applying ROS and zoning frameworks.

Cultural resource managers who recognize the significances of their resources can more effectively interpret them to their visitors. The expanded role for interpreters described herein raises the bar for professional responsibilities and skills required.

Training in social science, marketing theory, and even advocacy should be implemented into interpretive training at the university and professional levels.

This paper described CAP's interpretive potential and how preferred settings can be determined and used to improve visitor experiences. Interpreters must now work with unit managers and the local government to protect the integrity of valued setting attributes and desired experience outcomes during planning activities. Rapid development and predictions for attracting a third more visitors signal the need to consider how the setting must and can change without limiting the interpretive potential of the site. If CAP and adjacent lands are properly managed, CAP can provide visitors with a unique experience that will maintain or broaden the site's appeal.

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Appendix A: Definition Of Terms

For the purpose of offering a more clear understanding of this research, the following terms have been adapted and defined.

Activity-Based-Management (ABM): ABM emerged in the 1950's and 60's and "emphasized numbers and varieties of leisure experiences rather than the content of those experiences" (Dustin et al., 1999, p. 32). ABM did not help to explain why people elected to (or not to) participate, nor was it useful for explaining the benefits that accrued to the individuals and societies that supported recreation sites through fees and taxes.

Aesthetic: Sensitive to or appreciative of art or beauty; pleasing in appearance.

Authenticity: A heritage resource that has maintained its original integrity, as created or as it has evolved through its historical time line is said to be "authentic." Four components of authenticity are design, materials workmanship, and setting (Feilden & Jokilehto, 1998).

Benefits: come in many forms, such as an improved condition, the prevention of a worse condition through maintenance of a desired condition, and the realization of a specific satisfying psychological experience (also known as psychological outcomes) that accrue to individuals through participation (Mannell, 1999). Brown (1981) described psychological benefits as perceptions of enhanced well-being.

Benefits Approach to Leisure (BAL): BAL was developed to guide the management of recreation resources and focuses on net benefits and systematic determination of customer preferences. An outcomes approach urges managers to address stakeholders' preferences for satisfying psychological experiences (Driver, 1997).

Benefit types: BAL is made operational through three benefit types, an improved condition, the prevention of a worse condition (or maintenance of a desired condition), and the realization of a specific satisfying psychological experience (Driver, 1997).

Coding: A coding procedure, or schema (pre-determined according to the core research questions) is used to reveal categories and themes. New categories are allowed to emerge from the interview transcripts. An organizing system for the analysis of qualitative data (Tesch, 1990). When analyzing transcripts, codes are assigned to broad categories for data-labeling and data-retrieval (Miles & Huberman, 1984).

Open coding: A qualitative data analysis technique used to analyze interview transcripts was guided by the theoretical framework and assigns codes in a first attempt to condense the mass of data into conceptual categories. The transcripts are read first for impression and then re-read to identify major topics and 'unique topics' (Neuman, 2000)

Axial coding: A qualitative data analysis technique used to analyze interview transcripts where previously identified major themes are organized around several core generalizations (Neuman, 2000).

Selective coding: A qualitative data analysis technique used to analyze interview transcripts involving re-examining and re-organizing and elaborating themes from previous rounds of analysis (Neuman, 2000).

Free-form analysis: A qualitative data analysis technique used to analyze field notes. This technique consists of a thorough and systematic review of notes to uncover themes, contrasts, discoveries, and enumerations. Notes from each

interview are then coded and segregated by the pertinent study categories (McQuarrie, 1996).

Benefits-Based Management (BBM): Management that attempts to identify the benefits sought by individuals and groups, and then to provide leisure services that lead to those benefits (Dustin, 1999a; Lee & Driver, 1996). BBM acknowledges the sovereignty of the visitor by striving to offer and array of activity and experience options.

Context: The relationship of an archaeological find in time (chronological) and space (spatial) to all of the other finds made in the site (Fagan, 2003); the foundation of history and archaeology essential for clear understanding of the find (Smith, 2003); loss of context diminishes the historic fabric, authenticity, cultural information, and value of a find (Fagan, 2003; National Park Service, 2002).

Extant context: CAP's extant context is its still-existing tangible links to the history and culture of the ancient Maya.

Cultural Resources: The tangible material evidence of past human activities (U.S. National Park Service).

Cultural Resource Management (CRM): Conservation and general management of archaeological sites, artifacts, and tourism, as a means of protecting and promoting the past (Fagan, 2003).

Experience-Based Management (EBM): A consumer-oriented view of recreation as a psychological state that is inextricably linked to setting attributes and focuses on preferred experiences (Dustin et al., 1999). The development of EBM was strongly influenced by the expectancy valence model of human motivation (Haas, 1979). The model has two core expectancies—that effort will lead to performances, and that

performances will lead to positive psychological outcomes. EBM can facilitate planning by guiding allocation of human and natural resources in the provision of a spectrum of opportunities.

Experience-Based Setting Management (EBSM): Management that assesses how setting attributes contribute to or detract from leisure experiences and then seeks to provide rewarding psychological experiences to participants by managing the physical environments in which recreation occurs (Floyd & Gramann, 1997, p. 113).

Experience Opportunity: The bundle of satisfactions or psychological outcomes sought from participation in a recreation engagement. Examples include learning/discovery; one's relationship with nature; or introspection (Manfredo, 2002b).

Recreation experience: The psychological and physiological results from engaging in a specific recreation activity within a specific recreation setting (Perry J. Brown, Haas, & Driver, 1980). Participation in leisure activities can be likened to the pursuit of defined and undefined intrinsic rewards, or benefits.

Genius Loci: The *spirit of place*, the combined qualities of a place that make it unique and special. (Thornton, 1997); a complex and difficult to define amalgam of landscape, culture, experience, and psychology (Greene, 1996).

ICCROM: International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) is an intergovernmental body created by UNESCO in 1956 to provide expert advice on conservation of cultural properties and training activities. ICCROM is concerned with the extrinsic identity, educational, and social values of the cultural resources that justify its conservation (Feilden & Jokilehto, 1998).

ICOMOS: The International Council on Monuments and Sites (ICOMOS) was founded in 1965 to serve as UNESCO's principal advisor in matters concerning the conservation and protection of monuments and sites. ICOMOS advises UNESCO and the World Heritage Committee about the appropriateness of new sites for the World Heritage List. Its specialized scientific committees draw on the knowledge of experts worldwide to establish international standards for the preservation and management of the cultural milieu.

Instituto Hondureño de Antropología e Historia (IHAH): CAP's managing agency is the Honduran Institute of Anthropology and History.

Interpretation: The National Association for Interpretation defines this form of informal education as, "a communication process that forges emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource" (Brochu & Merriman, 2002, p. 16).

Interpretive Potential: The best possible physical, social, and cultural/historical milieu for transmitting and receiving the emotional and intellectual meanings of a place and is closely tied to the elements of setting. It is the "from which" that programmatic interpretation is derived.

Intrinsic values: An amalgam of a cultural resource's materials, design, and setting. Operational guidelines dictate the evaluation of a site for its universal value within the widest possible context (UNESCO, 1980).

Maya: A group of tribes culturally linked by common languages and religious beliefs, formed around 1,500 BC. Their world, known today as Mesoamerica, extended from

southeast Mexico on the north to Guatemala, Belize, Honduras, and El Salvador to the south (Fash, 2001).

Motive: An internal factor that arouses and directs human behavior (Mannell, 1999).

Resource Attributes: Elements of the biophysical environment that facilitate an experience (Brown, Haas, & Driver, 1980).

Recreation Experience Preference (REP) scales: REP scales were devised through hierarchical clustering to measure empirically-related psychological benefits or 'desired goal states' (Manfredo, Driver & Tarrant, 1996). Example REP scales include learning and discovery (learning about nature and the lay of the land), relationships to nature (enjoyment of and contact with nature), and introspection (to think about personal values) (Manning, 1999).

Recreation Opportunity Spectrum (ROS): Based on the propositions that recreation experiences are influenced by the settings in which recreation activities occur; that recreation settings are defined by environmental, social, and managerial conditions; and that alternative combinations of said conditions can be used to provide a diversity of recreation opportunities. (Manning, 1999). With ROS, the broadest spectrum of opportunity is accommodated because land is zoned to provide a continuum of settings (from primitive to urban) and recreational opportunities (from undeveloped to highly developed) (Ibrahim & Cordes, 2002).

Sense of Place: The collection of meanings, beliefs, symbols, values, and feelings that individuals or groups associate with a particular locality (Williams & Stewart, 1998, p. 19). Sense of place is socially produced and may encompass both natural and social history.

Setting opportunity: The entire environment in which a recreation opportunity occurs and comprises resource, social, and managerial attributes (Manfredo, 2002b). Williams et al. (1992), compared settings to consumer products that are often seen as a collection of features or attributes and that decision making is made easier by identifying each user group's optimal combinations of setting attributes.

Social setting attributes: Elements of the social environment that facilitate or constrain a recreation experience, such as crowding, noise, or traffic.

Managerial Attributes: Presence of management to facilitate or constrain experience attainment, such as the presence of modernity, the degree of development, or the degree of site hardening and archaeological restoration.

Activity Opportunity: The activity or mix of recreation activities that together facilitate the total recreation experience, such as self-guided discovery and learning, photography, experiencing nature, or meditation and moments of solitude.

Setting: The context within which recreations takes place; it can facilitate or hinder not only the activities that occur but also the quality of the recreation experience (Williams et al., 1992).

Soundscape: The natural sounds that characterize an area including its wildlife.

Stelae: Tall stone slabs carved elaborately with images of Maya gods, elite, rulers, and their history described with hieroglyphic symbols representing dates and other explanations.

UNESCO: The United Nations Educational, Scientific and Cultural Organization (UNESCO) emerged out of World War II (November 4, 1946) with a primary objective

is to "contribute to peace and security in the world by promoting collaboration among nations through education, science, culture and communication in order to further universal respect for justice..." The UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage, signed in Paris on November 16, 1972, is an international agreement that calls on all nations to preserve cultural and natural sites of outstanding universal value (Pedersen, 2003).

World Heritage Site (WHS): UNESCO defines these sites as "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" (Feilden & Jokilehto, 1998, p. 13).

Copán Ruins Archeological Park—Perspectives Survey

Date: _____/_____2002

By participating in this visitor survey, you can help the managers of Copán make several important management decisions and improve the quality of the experience provided to visitors. Your participation is voluntary and your answers will be kept strictly confidential.

1. Did you prepare for your visit by learning more about Copán or its history prior to your arrival? **YES**_____ **NO**_____

   If **YES**, then did you use any of the following to do so? (*Check all that apply*)

   - ☐ **I TOOK CLASSES IN SCHOOL**
   - ☐ **I HAD DISCUSSIONS WITH FRIENDS**
   - ☐ **I VISITED OTHER MAYA SITES**
   - ☐ **I READ GUIDEBOOKS**
   - ☐ **I READ BOOKS ABOUT MAYA CULTURE/HISTORY**
   - ☐ **I USED THE INTERNET**
   - ☐ **OTHER, PLEASE SPECIFY** _____

2. **Did you do any of the following?**

	YES	NO
IMAGINE A DAY IN THE LIFE OF THE ANCIENT MAYA		
TIME YOUR VISIT TO COINCIDE WITH LOW-VISITATION		
TIME YOUR VISIT TO COINCIDE WITH ASTRONOMICAL EVENTS		
TAKE TIME TO OBSERVE NATURE AS WELL AS THE RUINS		
OBSERVED A MOMENT OF SOLITUDE/SILENCE/CONTEMPLATION		
MEDITATE OR PRAY		

3. How important are each of the following possible reasons for visiting Copán Ruins for you personally? (*Mark with an "X"*)

	NOT IMPORTANT	SLIGHTLY IMPORTANT	IMPORTANT
TO LEARN ABOUT MAYA CULTURE AND HISTORY			
TO IMAGINE WHAT MAYA LIFE WAS LIKE			
TO RELAX AND REDUCE STRESS			
TO HAVE FUN			
TO BE WITH FAMILY AND FRIENDS			
APPRECIATE NATURE			
FOR SPIRITUAL REASONS			
FOR THE PERSPECTIVES THIS PLACE GIVES TO ONE'S OWN LIFE			

4. Please provide three words that help describe the ancient Maya culture at Copán.

   1. _____
   2. _____
   3. _____

5. In Copán, the ruins of an ancient culture are set in relatively natural surroundings. Which of the following statements best reflects your views about this setting.

   ☐ THE NATURAL SETTING GREATLY ADDS TO MY EXPERIENCE
   ☐ THE NATURAL SETTING ADDS TO MY EXPERIENCE TO SOME DEGREE
   ☐ THE NATURAL SETTING NEITHER ADDS TO NOR TAKES AWAY FROM MY EXPERIENCE AS THE RUINS WOULD BE GOOD IN ANY SETTING.

6. In Copán, parts of the ruins have been restored and parts are seen in the process of being reclaimed by nature. Please tell us which of the following statements best reflects your views about this aspect of the setting.

   ☐ SEEING BOTH IS A CONTRAST THAT GREATLY ADDS TO MY EXPERIENCE
   ☐ SEEING BOTH IS A CONTRAST THAT ADDS TO MY EXPERIENCE TO SOME DEGREE
   ☐ SEEING BOTH NEITHER ADDS TO NOR TAKES AWAY FROM MY EXPERIENCE
   ☐ SEEING BOTH TAKES AWAY FROM MY EXPERIENCE BECAUSE I WOULD PREFER THAT ALL RUINS BE RESTORED.
   ☐ SEEING BOTH GREATLY TAKES AWAY FROM MY EXPERIENCE BECAUSE I PREFER THAT ALL RUINS BE RESTORED

7. If on your next visit we could offer more information about some subjects, how interesting would you find the following subjects? (*Mark with an "X"*)

8. Of the topics listed above, please **circle** the one that you would be the most interested in.

	VERY INTERESTING	SOMEWHAT INTERESTING	NOT INTERESTING
MAYA ASTRONOMY/CALENDAR			
MAYA RELIGION AND RITUALS			
THE MAYA TODAY			
MAYA MEDICINE			
MAYA ARTISTS/WRITERS			
HIEROGLYPHS AND THEIR MEANINGS			
EVERYDAY LIFE OF THE MAYA			
MAYA USE OF NATURAL RESOURCES FOR SURVIVAL AND INSPIRATION			
THE MAYA BALLGAME			
THE COLLAPSE OF THE MAYA CIVILIZATION			
OTHER, PLEASE SPECIFY:			

9. The Copán Archeological Park and the town of Copán Ruins are located close together and the town has the potential to grow right up to the edge of the Park. Which of the following statements best reflects your view about the appropriate land uses around the Park:

- ☐ THE (PRIVATE) LAND SURROUNDING THE COPÁN ARCHEOLOGICAL PARK SHOULD BE KEPT IN SOME MIX OF NATURAL AND AGRICULTURAL USES.
- ☐ THE LAND SURROUNDING THE COPÁN ARCHEOLOGICAL PARK SHOULD BE RETURNED TO A NATURAL CONDITION LIKE FOREST.
- ☐ THE TOWN SHOULD BE ALLOWED TO GROW OUT TO MEET THE PARK.
- ☐ LANDS SURROUNDING THE ARCHEOLOGICAL PARK SHOULD BE DEDICATED TO TOURISM RELATED DEVELOPMENT LIKE RESTAURANTS, LODGING, OR RETAIL STORES.

10. Within the Archeological Park development choices must also be made. Which of the following would you prefer:

- ☐ ALL THE RUINS SHOULD BE RESTORED EVENTUALLY.
- ☐ ALLOW VISITORS TO SEE SOME RUINS BEING RECLAIMED BY NATURE.

11. Some archeologists propose removing the trees from the temples and cutting many more in the forest in order to protect the archeological remains. How can you see this affecting your visit?

- ☐ GREATLY ENHANCE/ADD TO MY EXPERIENCE
- ☐ ENHANCE/ADD TO MY EXPERIENCE
- ☐ NEUTRAL
- ☐ DETRACT/TAKE AWAY FROM MY EXPERIENCE
- ☐ GREATLY DETRACT/TAKE AWAY FROM MY EXPERIENCE

12. How many other Maya sites have you visited? (*Please circle one*)

0 1 2 3 4 5 6 7 8 More

13. How old are you? _____

14. Sex: _____ MALE _____ FEMALE

15. How many years of formal education have you completed? *(Please circle one)*

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

16. Do you attend church or practice a particular set of religious beliefs?

☐ YES_____ NO_____

If **YES**, please specify which church you attend or type of religious beliefs you practice?

_____

17. Please indicate what country you come from. Country _____

Thank You Very Much For Your Time and Opinions!

Parque Arqueológico de Copán Ruinas—Encuesta de las Perspectivas

Fecha: _____de _____2002

Al participar en esta encuesta usted puede ayudar a los directores del Parque Arqueológico a tomar algunas decisiones que mejorarán la calidad de su experiencia. Su participación es voluntaria y sus respuestas estrictamente confidenciales. ¡Gracias por su ayuda!

1. ¿Se preparó para su visita en términos de aprendizaje acerca de Copán y su historia?
   _____ SI _____ NO

   ¿Sí contestó **SI,** usó las siguientes maneras para aprender? (*Marque las que apliquen*)

   - ☐ **TOMÉ CLASES EN LA ESCUELA O EN LA UNIVERSIDAD**
   - ☐ **PLATICAS CON AMIGOS**
   - ☐ **HE VISITADO OTROS SITIOS MAYAS**
   - ☐ **HE LEÍDO GUÍAS TURÍSTICOS**
   - ☐ **HE LEÍDO LIBROS SOBRE LA CULTURA E HISTORIA MAYA**
   - ☐ **HE USADO INTERNET**
   - ☐ **OTRO, POR FAVOR ESPECIFIQUE:** _____

2. ¿Respecto a su visita a Copán, hizo usted algunas de las siguientes actividades?

	SI	NO
IMAGINARSE UN DÍA EN LA VIDA DE LOS ANCESTROS MAYAS		
PLANEÓ SU VISITA PARA COINCIDIR CUANDO HAY MENOS GENTE		
PLANEÓ SU VISITA PARA COINCIDIR CON EVENTOS ASTRONÓMICOS		
TOMÓ TIEMPO PARA OBSERVAR LA NATURALEZA CON RELACIÓN A LAS RUINAS		
TUVO UN MOMENTO DE SOLEDAD / SILENCIO / CONTEMPLACIÓN		
MEDITAR O REZAR		

3. ¿Qué tan importante son las siguientes razones por las que decidió venir a las Ruinas de Copán?

	NO IMPORTANTE	POCO IMPORTANTE	IMPORTANTE
APRENDER MAS SOBRE LA HISTORIA/CULTURA MAYA			
PARA IMAGINARSE COMO FUE LA VIDA DE LOS MAYAS			
PARA RELAJARSE			
PARA DIVERTIRSE			
PARA ESTAR CON SU FAMILIA/AMIGOS			
APRECIAR LA NATURALEZA			
RAZONES ESPIRITUALES			
POR LAS PERSPECTIVAS QUE DA EL LUGAR PARA SU VIDA PERSONAL			

4. Por favor provea tres palabras que describan la cultura ancestral de Copán.

1. _____ *2.* _____ *3.* _____

5. En Copán, las ruinas de una cultura ancestral esta en una ambiente natural. ¿Cuál de las siguientes proposiciones es la más acertada a su opinión?

- ☐ **EL AMBIENTE NATURAL MEJORÓ MUCHO MI EXPERIENCIA.**
- ☐ **EL AMBIENTE NATURAL MEJORÓ UN POCO MI EXPERIENCIA**
- ☐ **EL AMBIENTE NATURAL NO MEJORÓ NI EMPEORÓ MI EXPERIENCIA PORQUE LAS RUINAS SE VERIAN BIEN EN CUALQUIER AMBIENTE.**

6. En Copán las ruinas han sido restauradas y otras partes estan en proceso de ser tomadas por la naturaleza. ¿Cuál de las siguientes proposiciones es la más acertada de su opinión?

- ☐ **MIRANDO AMBOS ES UN CONTRASTE QUE AUMENTÓ MUCHO MI EXPERIENCIA**
- ☐ **MIRANDO AMBOS ES UN CONTRASTE QUE AUMENTÓ UN POCO MI EXPERIENCIA**
- ☐ **MIRANDO AMBOS NO AUMENTÓ NI DISMINUYÓ MI EXPERIENCIA**
- ☐ **MIRANDO AMBOS DISMINUYÓ MI EXPERIENCIA PORQUE PREFIERO VER LAS RUINAS RESTAURADAS**
- ☐ **MIRANDO AMBOS DISMINUYÓ MUCHO MI EXPERIENCIA PORQUE PREFIERO VER LAS RUINAS RESTAURADAS TOTALMENTE**

7. Si en su próxima visita se le ofreciera algún tipo de información acerca de los rasgos del área, ¿Qúe temas serían de mayor interés? Indique si cada tema le es **MUY INTERESANTE, MAS O MENOS INTERESANTE, o NO LE INTERESA**.

	MUY INTERESANTE	MAS O MENOS INTERESANTE	NO LE INTERESA
ASTRONOMÍA/CALENDARIO DE LOS MAYAS			
RELIGIÓN Y RITUALES DE LOS MAYAS			
LOS MAYAS HOY			
MEDICINA DE LOS MAYAS			
LOS ARTESANOS/ ESCRITORES MAYAS			
JEROGLÍFICOS			
VIDA COTIDIANA DE LOS MAYAS			
COMO USARON LOS MAYAS LOS RECURSOS NATURALES PARA VIVIR E INSPIRARSE			
JUEGO DE PELOTA			
EL COLAPSO DE LA CIVILIZACIÓN MAYA			
OTRA, FAVOR ESPECIFIQUE:			

8. ¿Cuál de los temas arriba mencionados es lo que más le interesa? *(Encierre en un círculo)*

9. El Parque Arqueológico de Copán y el pueblo de Copán Ruinas están ubicados cerca el uno del otro. El pueblo tendrá el potencial de crecer hasta las inmediaciones del Parque. ¿Cuales de las siguientes proposiciones es la mas acertada a su opinión sobre el uso apropiado de las tierras alrededor del Parque?

- ☐ **LA TIERRA ALREDEDOR DE LAS RUINAS DE COPÁN DEBERÍA MANTENERSE EN UNA COMBINACIÓN DE AGRICULTURA Y NATURALEZA**
- ☐ **LA TIERRA ALREDEDOR DE LAS RUINAS DE COPÁN DEBERÍA REGRESAR A SU ESTADO NATURAL COMO BOSQUE**
- ☐ **EL PUEBLO DEBERÍA PERMITIR A CRECER HASTA JUNTARSE CON EL PARQUE**
- ☐ **LA TIERRA ALREDEDOR DE LAS RUINAS DE COPÁN DEBERÍA DESARROLLARSE PARA SERVICIOS TURÍSTICOS COMO HOTELES, RESTAURANTES Y TIENDAS**

10. ¿Dentro el Parque, que nivel de desarrollo prefiere?

- ☐ **RESTAURAR TEMPLOS Y ESTRUCTURAS EVENTUALMENTE**
- ☐ **PERMITIR A LOS VISITANTES VER ALGUNAS ESTRUCTURAS TOMADAS POR LA NATURALEZA**

11. Algunos arqueólogos proponen quitar los árboles de los templos y talar muchos mas en el bosque para proteger los remanentes arqueológicos. ¿Como ve usted que esto puede afectar su visita?

- ☐ **MEJORARÁ MUCHO SU VISITA**
- ☐ **MEJORARÁ SU VISITA**
- ☐ **NO MEJORARÁ NI EMPEORARÁ SU VISITA**
- ☐ **EMPEORARÁ SU VISITA**
- ☐ **EMPEORARÁ MUCHO SU VISITA**

12. ¿Cuantos sitios Mayas ha visitado anteriormente? (Encierre una)

0 1 2 3 4 5 6 7 8 Mas

13. ¿Cuántos años tiene usted? _____

14. Sexo: _____ **HOMBRE** _____**MUJER**

15. ¿Cuántos años de educación formal tiene (años de escuela que ha completado)?

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

16. ¿Tiene usted una religión formal? _____ **SI** _____ **NO**

Sí contestó **SI**, por favor especifique cual: _____

17. Por favor, indique de qué país viene usted. **PAÍS** _____

¡ MUCHAS GRACIAS POR SU TIEMPO !

Appendix D: Condensed *Copáneco* Survey

Parque Arqueológico de Copán Ruinas—Encuesta de las Perspectivas (Copáneco) **Fecha: _____de _____2002**

1. En Copán, las ruinas de una cultura ancestral esta en una ambiente natural. ¿Cuál de las siguientes proposiciones es la más acertada a su opinión? (***Marque una***)

   - ❑ **EL AMBIENTE NATURAL MEJORÓ MUCHO MI EXPERIENCIA.**
   - ❑ **EL AMBIENTE NATURAL MEJORÓ UN POCO MI EXPERIENCIA**
   - ❑ **EL AMBIENTE NATURAL NO MEJORÓ NI EMPEORÓ MI EXPERIENCIA PORQUE LAS RUINAS SE VERIAN BIEN EN CUALQUIER AMBIENTE.**

2. En Copán las ruinas han sido restauradas y otras partes estan en proceso de ser tomadas por la naturaleza. ¿Cuál de las siguientes proposiciones es la más acertada de su opinión? (***Marque una***)

   - ❑ **MIRANDO AMBOS ES UN CONTRASTE QUE AUMENTÓ MUCHO MI EXPERIENCIA**
   - ❑ **MIRANDO AMBOS ES UN CONTRASTE QUE AUMENTÓ UN POCO MI EXPERIENCIA**
   - ❑ **MIRANDO AMBOS NO AUMENTÓ NI DISMINUYÓ MI EXPERIENCIA**
   - ❑ **MIRANDO AMBOS DISMINUYÓ MI EXPERIENCIA PORQUE PREFIERO VER LAS RUINAS RESTAURADAS**
   - ❑ **MIRANDO AMBOS DISMINUYÓ MUCHO MI EXPERIENCIA PORQUE PREFIERO VER LAS RUINAS RESTAURADAS TOTALMENTE**

3. El Parque Arqueológico de Copán y el pueblo de Copán Ruinas están ubicados cerca el uno del otro. El pueblo tendrá el potencial de crecer hasta las inmediaciones del Parque. ¿Cuales de las siguientes proposiciones es la mas acertada a su opinión sobre el uso apropiado de las tierras alrededor del Parque? (***Marque una***)

   - ❑ **LA TIERRA ALREDEDOR DE LAS RUINAS DE COPÁN DEBERÍA MANTENERSE EN UNA COMBINACIÓN DE AGRICULTURA Y NATURALEZA**
   - ❑ **LA TIERRA ALREDEDOR DE LAS RUINAS DE COPÁN DEBERÍA REGRESAR A SU ESTADO NATURAL COMO BOSQUE**
   - ❑ **EL PUEBLO DEBERÍA PERMITIR A CRECER HASTA JUNTARSE CON EL PARQUE**
   - ❑ **LA TIERRA ALREDEDOR DE LAS RUINAS DE COPÁN DEBERÍA DESARROLLARSE PARA SERVICIOS TURÍSTICOS COMO HOTELES, RESTAURANTES Y TIENDAS**

4. ¿Dentro el Parque, que nivel de desarrollo prefiere? (***Marque una***)
   - ❑ **RESTAURAR TEMPLOS Y ESTRUCTURAS EVENTUALMENTE**
   - ❑ **PERMITIR A LOS VISITANTES VER ALGUNAS ESTRUCTURAS TOMADAS POR LA NATURALEZA**

5. Algunos arqueólogos proponen quitar los árboles de los templos y talar muchos mas en el bosque para proteger los remanentes arqueológicos. ¿Como ve usted que esto puede afectar su visita? (***Marque una***)

   - ❑ **MEJORARÁ MUCHO SU VISITA**
   - ❑ **MEJORARÁ SU VISITA**
   - ❑ **NO MEJORARÁ NI EMPEORARÁ SU VISITA**
   - ❑ **EMPEORARÁ SU VISITA**
   - ❑ **EMPEORARÁ MUCHO SU VISITA**

6. ¿Cuántos años tiene usted? _____

7. Sexo: _____ **HOMBRE** _____**MUJER**

8. ¿Cuántos años de educación formal tiene (años de escuela que ha completado)?

   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

9. ¿Tiene usted una religión formal? _____ **SI** _____ **NO**

   Sí contestó **SI**, por favor especifique cual: _____

¡ MUCHAS GRACIAS POR SU TIEMPO !

Appendix E: Qualitative Interview Guide

Introduction

By participating in this visitor survey, you can help the managers of Copán Archaeological Park make several important management decisions and improve the quality of the experience provided to visitors. Your participation is voluntary and your answers will be kept strictly confidential.

Sense of place—meanings and perspectives

Interviewer: What are some of the reasons you came to Copán?

Interviewer: What do places like Copán represent or mean to you?

Interviewer: Why do you think we care about these places? Why do you think we care about old stones?

Interviewer: Do you think people gain perspectives from visiting places like this?

Interviewer: Do these places grant you some perspectives about your life?

Interviewer: Do you feel a connection between yourself and the Maya?

Internal setting management preferences

In Copán, parts of the ruins have been restored and parts are seen in the process of being reclaimed by nature. Please tell me which of the following statements best reflects your views about this aspect of the setting.

Interviewer: Do you gain anything in the sense of perspectives from seeing untouched ruins?

Interviewer: What do restored ruins give you?

Interviewer: When you come back in ten years do you want to see everything restored, or do you prefer that they leave a mix?

Interviewer: What level of restoration do you prefer to see in a site like this?

Interviewer: Do you think something would be lost if it were more developed?

Interviewer: Do believe that they need to restore more here?

Interviewer: What specifically contributed to your visit, in terms of the physical attributes of the site?

Interviewer: Some people come to these sites seeking some form of spiritual energy. Is that part of your visit?

Trees and restoration

Some archaeologists propose removing the trees from the temples and cutting many more in the forest in order to protect the archaeological remains. How can you see this affecting your visit?

Interviewer: What do you think of the trees that grow from the temples?

Interviewer: Do you feel like it adds something to your experience to see these giant trees growing from the temples?

Pedestrian trail

Interviewer: Did you walk to the ruins by the footpath? What did you think of the walk, not the physical path, but the walk from the town to here as part of the experience?

Interviewer: Do you think that the walk from town to here in any way helped to prepare you for your visit?

Adjacent land development

The Copán Archaeological Park and the town of *Copán Ruinas* are located close together and the town has the potential to grow right up to the edge of the park. Which of the following statements best reflects your view about the appropriate land uses around the Park? (accompanied by photo options):

1. The (private) land surrounding CAP should be kept in some mix of natural and agricultural uses.
2. The land surrounding the CAP should be returned to a natural condition like forest.
3. The town should be allowed to grow out to meet the park.
4. Lands surrounding the archaeological park should be dedicated to tourism related development like restaurants, lodging, or retail stores.

Interviewer: If you came back and saw that there were more houses and hotels up to the ruins—might that change or affect your visit somehow?

Interviewer: In 10 years, if the town does grow out, do you believe it will it affect the visit of the tourists?

Interviewer: Picture that you were to come back in 10 years. How would you like the area from the town to the ruins to look?

Interviewer: What level of development do you desire for this area in the future?

Appendix F: Qualitative Interview Summaries

Table F.1 Round one qualitative interview summary

Interview	Date	Gender	Name**	Age	Country of origin
1	05/09/2002	M	Thomas	52	USA
2	06/01/2002	M	Jack	29	USA
3a	06/01/2002	M	Luke	79	USA
3b*	06/01/2002	M	Timothy	63	Guatemala
4b	06/01/2002	M	Jim	25	USA
4b	06/01/2002	M	Dave	25	Australia
5a	06/03/2002	M	Craig	26	Canada
5b	06/03/2002	M	Bill	67	Canada
6	06/19/2002	M	Alex	27	Australia
7	07/02/2002	F	Lisa	31	Germany
8*	07/06/2002	M	Wilmer	21	Honduras
9*	07/07/2002	M	Oscar	31	Guatemala
10	08/08/2002	F	Rose	38	Honduras
11	08/18/2002	M	Jude	57	USA
12	08/18/2002	M	Arthur	59	USA
13	08/24/2002	M	Jorge	65	Mexico
14	08/27/2002	M	Steve	33	USA
15*	08/27/2002	F	Maria	25	Honduras
16*	08/28/2002	M	Javier	42	Honduras
17*	09/12/2002	M	Various	16-30	Guatemala
18*	09/12/2002	M	Alberto	38	Honduras
19*	09/13/2002,	M	Luis	56	Spain
20a	09/15/2002	M	Patrick	25	USA
20b	09/15/2002	F	Marcy	24	USA

* Translated from Spanish

** Names are fictitious to protect anonymity

Table F.2 Round two qualitative interview summary

Interview	Date	Gender	Name**	Age	Country of origin
1a	07/10/03	M	Paul	43	France
1b	07/10/03	F	Mary	44	France
2a*	07/10/03	M	Tony	18	Honduras
2b*	07/10/03	F	Emily	20	Honduras
3a	07/10/03	F	Jessica	21	USA
3b	07/10/03	M	Mike	24	Belgium
4a*	07/12/03	M	Brian	21	USA
4b*	07/12/03	M	Robert	20	Guatemala
4c*	07/12/03	M	Tim	20	USA
4d*	07/12/03	M	Brad	21	USA
5*	07/14/03	M	Javier	44	Ecuador
6*	07/14/03	M	Charles	25	Honduras
7a*	07/14/03	M	Nicholas	47	Italy
7b*	07/14/03	F	Phyllis	42	Italy
8a*	07/15/03	M	Don	60	Honduras
8b*	07/15/03	F	Pam	18	Honduras
8c*	07/15/03	F	Erica	16	Honduras
9a	07/15/03	F	Carin	57	Holland
9b	07/15/03	M	John	59	Holland
10	07/16/03	F	Ingrid	53	France
11a	07/16/03	M	Pete	27	Australia
11b	07/16/03	M	Carl	25	USA
11c	07/16/03	M	Dan	24	England
11d	07/16/03	M	Terry	27	England
12a	07/17/03	M	Ben	58	Belgium
12b	07/17/03	F	Samantha	42	Belgium
13*	07/19/03	M	Roland	21	Guatemala
14	07/19/03	M	Gavin	29	USA
15a*	07/19/03	M	Ted	21	Mexico
15b*	07/19/03	F	Susan	25	Mexico
16a*	07/22/03	M	Joe	33	Guatemala
16b*	07/22/03	F	Anna	28	Honduras
17	07/22/03	M	Sam	27	USA
18*	07/23/03	F	Rebecca	45	Argentina
19	07/24/03	M	Dave	21	France
20	07/25/03	F	Laura	47	USA
21a*	07/25/03	F	Carol	21	Spain
21b*	07/25/03	M	Fred	37	Spain
22*	07/25/03	M	Edward	31	Costa Rica
23	07/25/03	M	Roger	25	England

* Translated from Spanish

** Names are fictitious to protect anonymity

Appendix G: Maps and Photos of the Research Setting

Figure G.1. Relief map of Copán Valley including CAP and *Copán Ruinas*

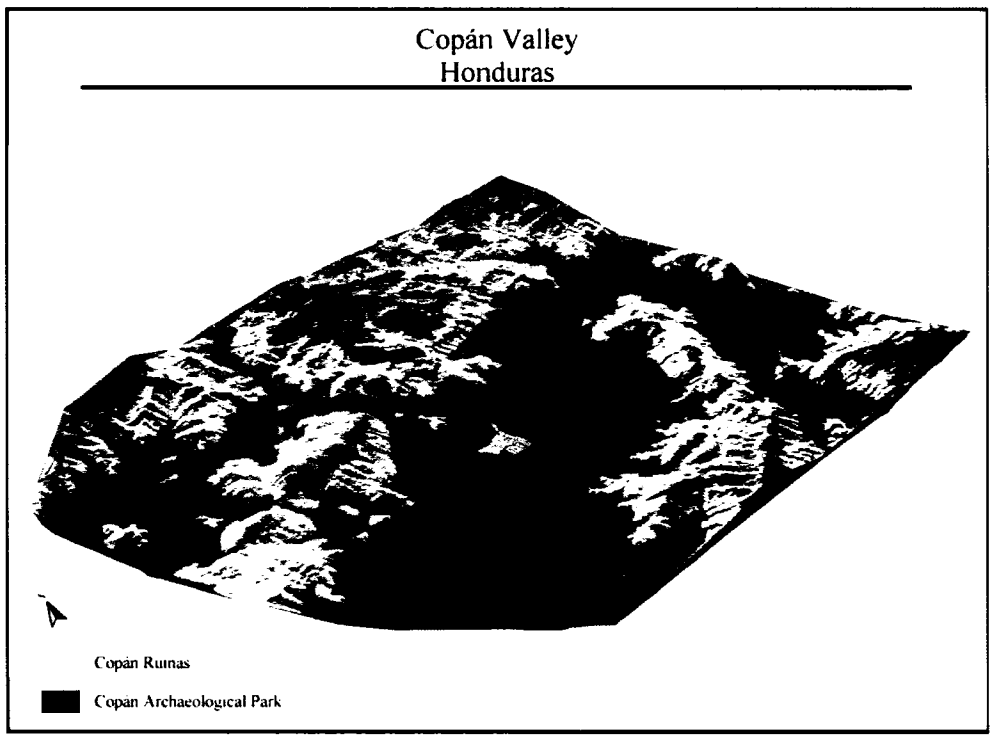

Figure G.2. Regional context.

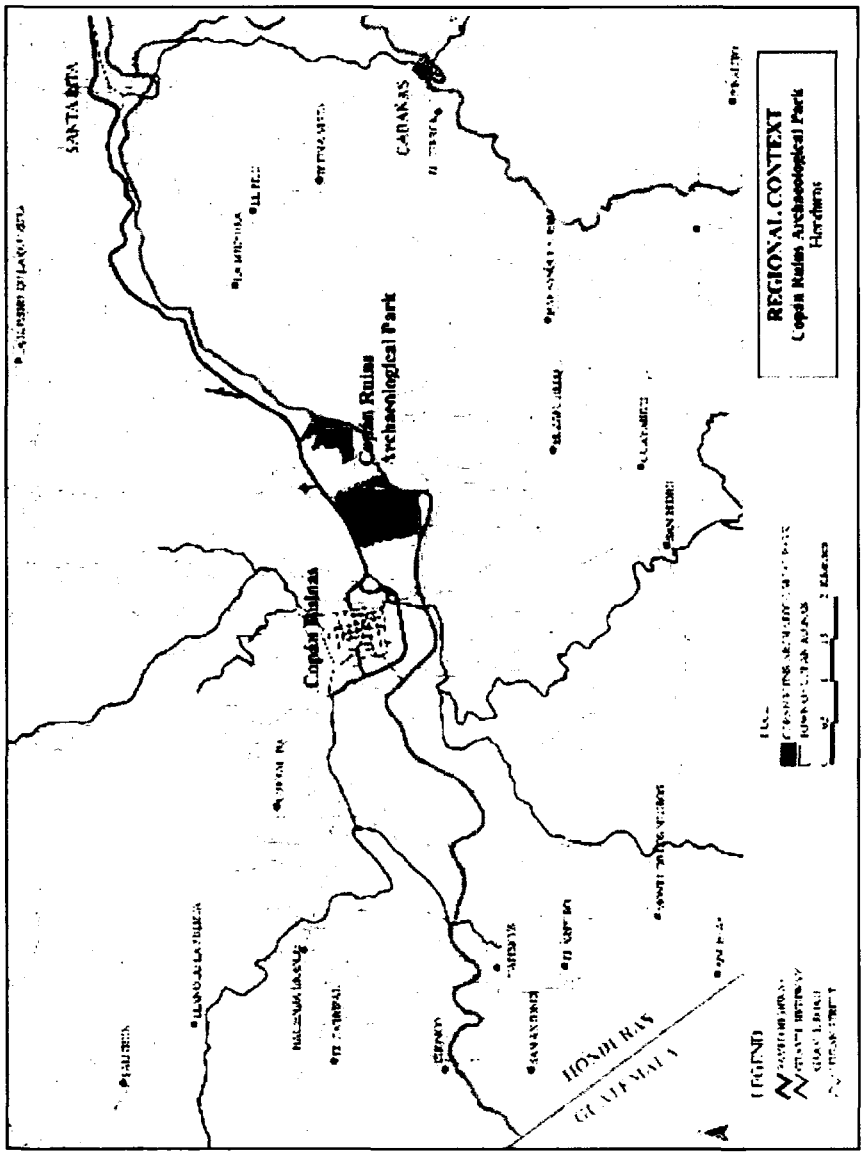

Figure G.3. The Copán River (foreground) flows behind the forested archaeological site. The town of *Copán Ruinas* can be seen in the near distance.

Figure G.4. The Copán Archaeological Park is surrounded by forest and the wide Copán River valley.

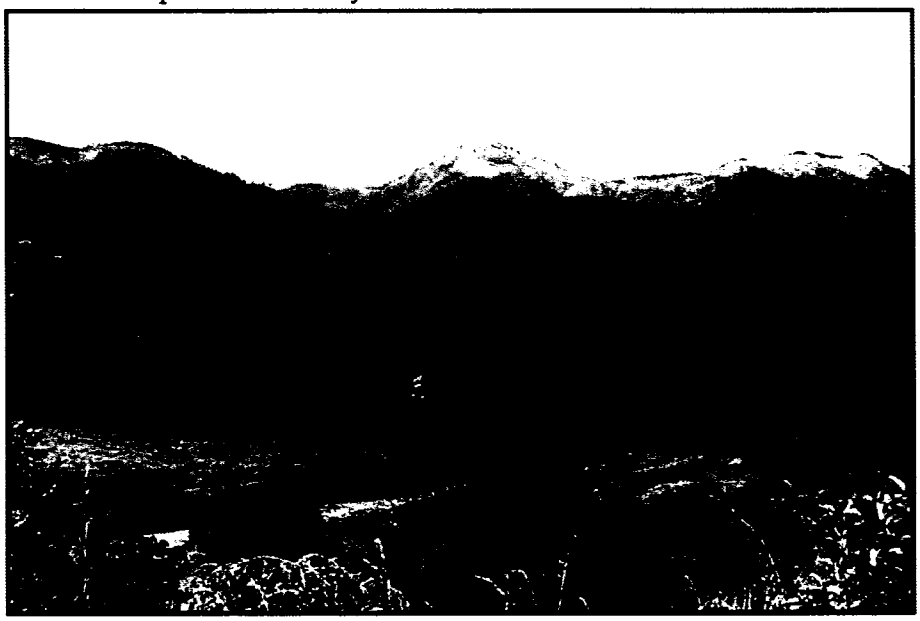

Figure G.5. The land adjacent to the archaeological park as seen in 2002.

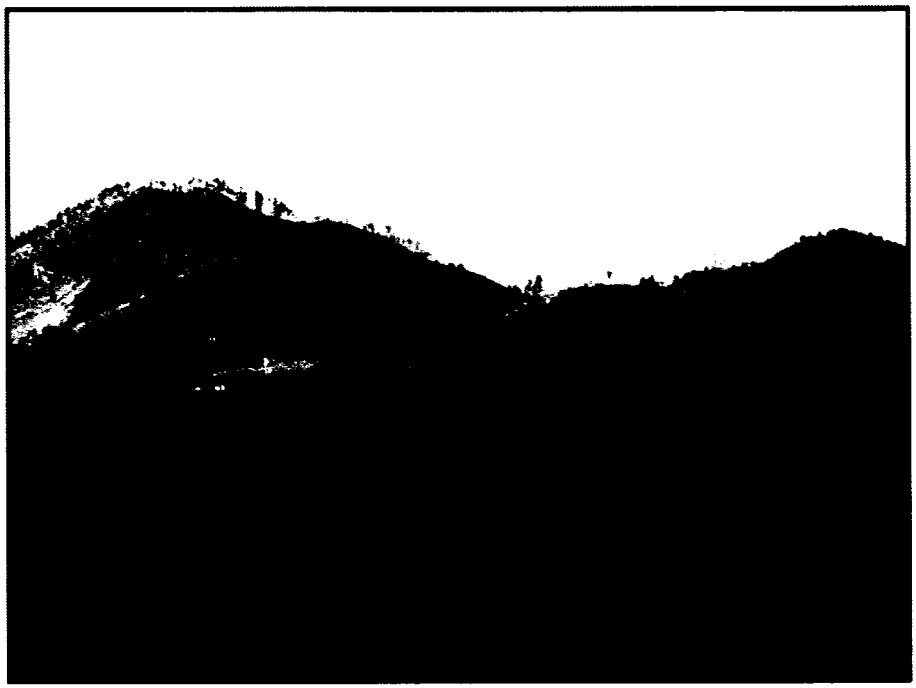

Figure G.6. Research setting--Copán Archaeological Park

Figure G.7. Restored ruins and the wider undeveloped landscape.

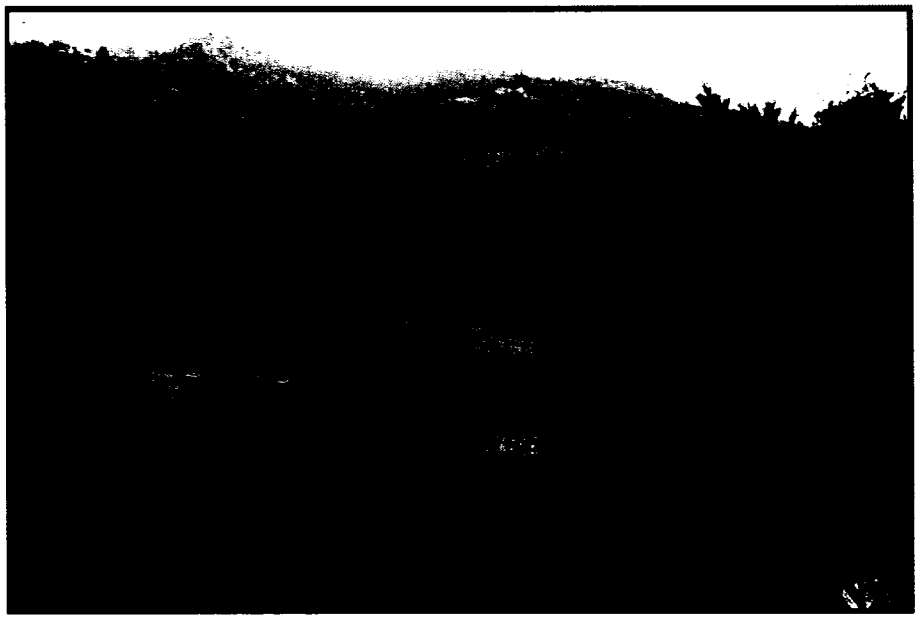

Figure G.8. Restored Temple 4 framed by nature.

Figure G.9. A visitor photographing a tree growing from a semi-restored temple.

Figure G.10. A restored ruin provides an interesting backdrop for photography.

Figure G.11. A group of visitors is dwarfed by a giant Guanacaste tree.

Figure G.12. The natural setting creates habitat for a variety of species. Butterflies are a common sight throughout one's visit.

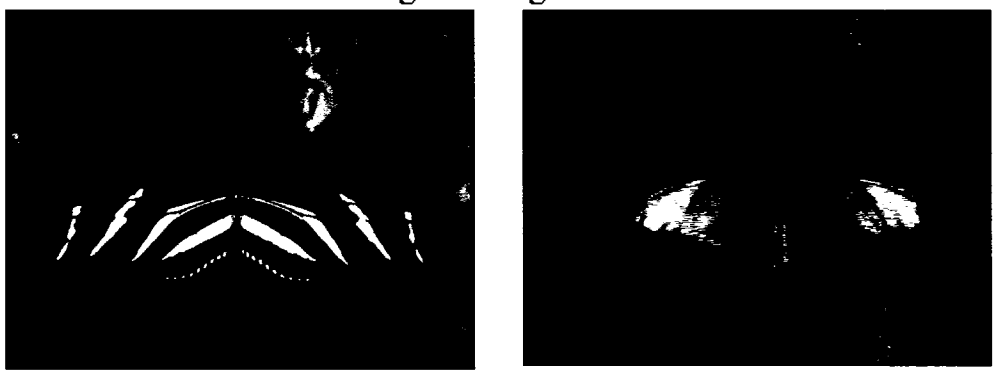

Figure G.13. Park mascots investigate the picnic area.

Figure G.14. Stela H

Figure G.15. The Great Plaza was built in alignment with the stars.

Figure G.16. A self-guided tour.

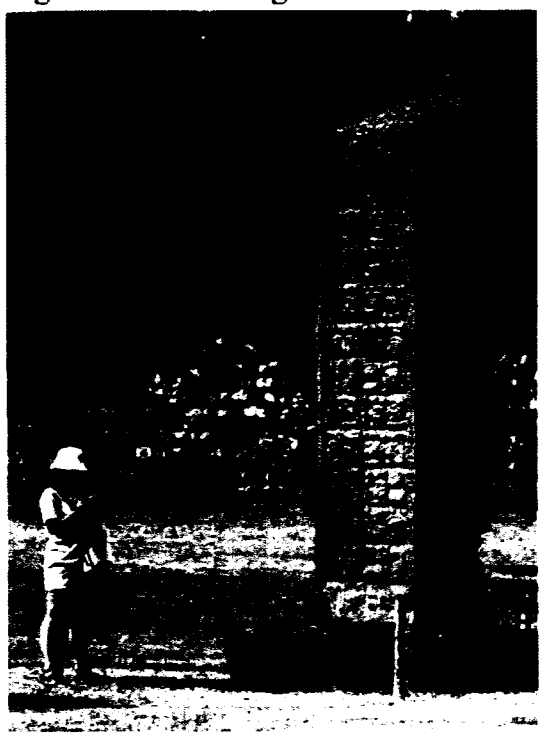

Figure G.17. A large group accompanied by a guide tours the Great Plaza.

Figure G.18. Nature has reclaimed the vast majority of the ancient Maya structures.

Figure G.19. Non-restored collapsed structures can easily be seen throughout one's visit.

Figure G.20. Tourists are drawn to the restored archaeology. The man is painting a picture of the stela as his friend reads and writes in her journal.

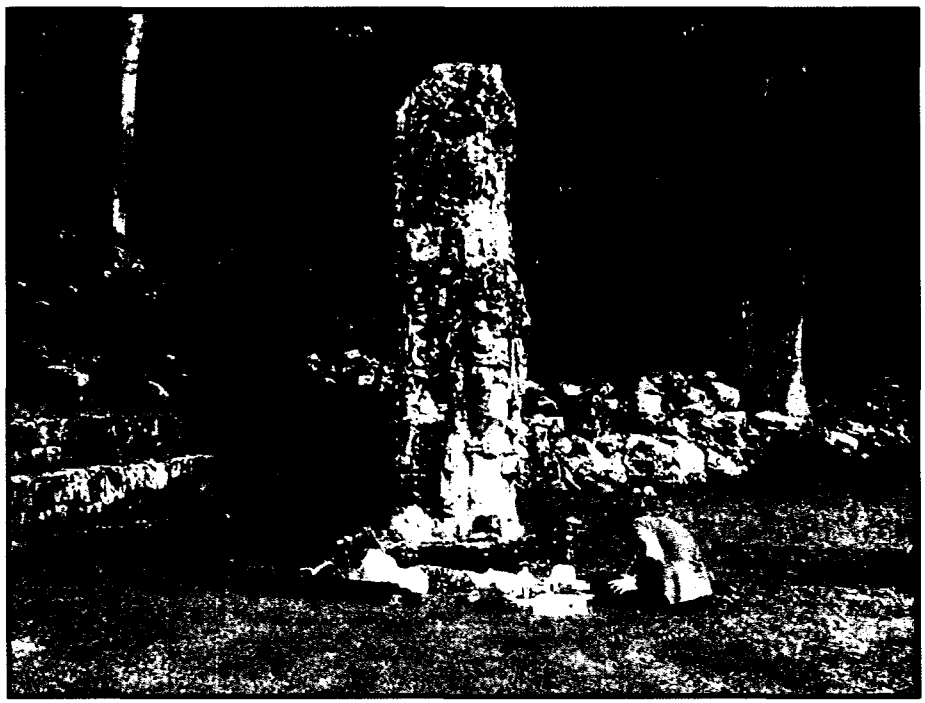

Figure G.21. Many come prepared to relax and spend time at the park.

Figure G.22. Visitors experience the immensity of ceiba tree.

Figure G.23. Visitors sit atop of a ruin to observe birds.

Figure G.24. Visitors relax in close proximity to one of Copán's famous stela.

Figure G.25. Visitors rest in the shade and contemplate the ancient Maya civilization at Copán.

Figure G.26. Scattered remnants punctuate the emotional impact of the experience.

Figure G.27. A "GOK" pile (God Only Knows) has interpretive potential.

Figure G.28. Art and ruins juxtaposed with nature.

Figure G.29. Tree covered temples juxtapose nature, art, and architecture.

Figure G.30. Many areas show a clear transition between restored and non-restored ruins.

Figure G.31. Tree roots conflate with ruins.

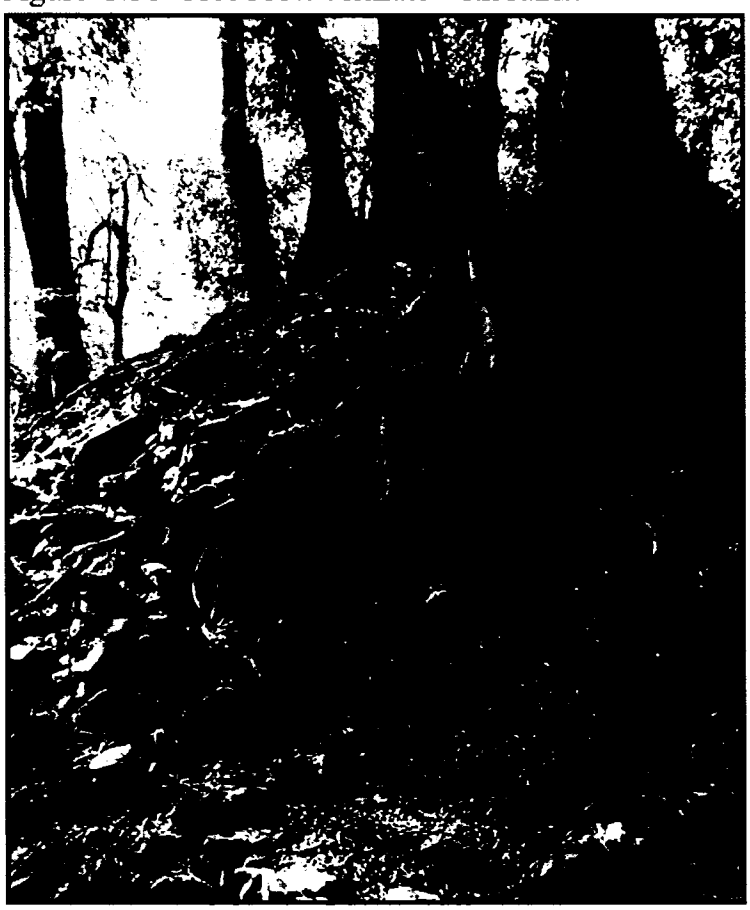

Figure G.32. This ceiba tree is the Maya "tree of life".

Figure G.33. Trees provide shade and protect ruins from direct sunlight and rainfall, but their roots can displace the stones.

Figure G.34. Semi-restored ruins.

Figure G.35. Semi-restored ruins.

Figure G.36. Semi-restored ruins juxtaposed with sacred ceiba tree.

Figure G.37. The combined setting.

Figure G.38. The restored ball court is a highlight to a visit to the ruins.

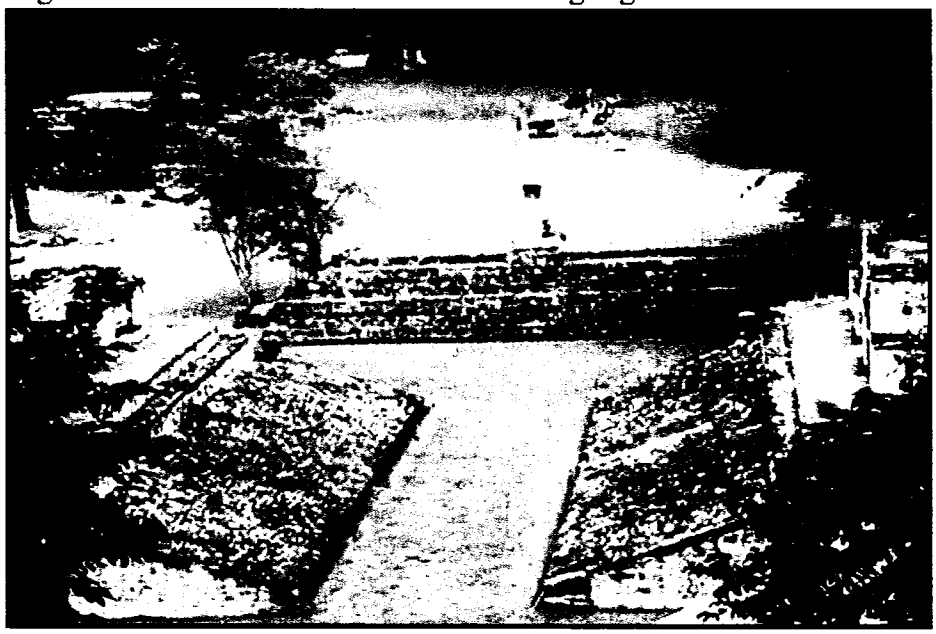

Figure G.39. Visitors can climb to the top of restored Temple 4.

Figure G.40. The ruins provide opportunities for solitude and contemplation

Figure G.41. An overlook of the restored Great Plaza.

Figure G.42. A restored down swooping scarlet macaw was a symbol of the sun.

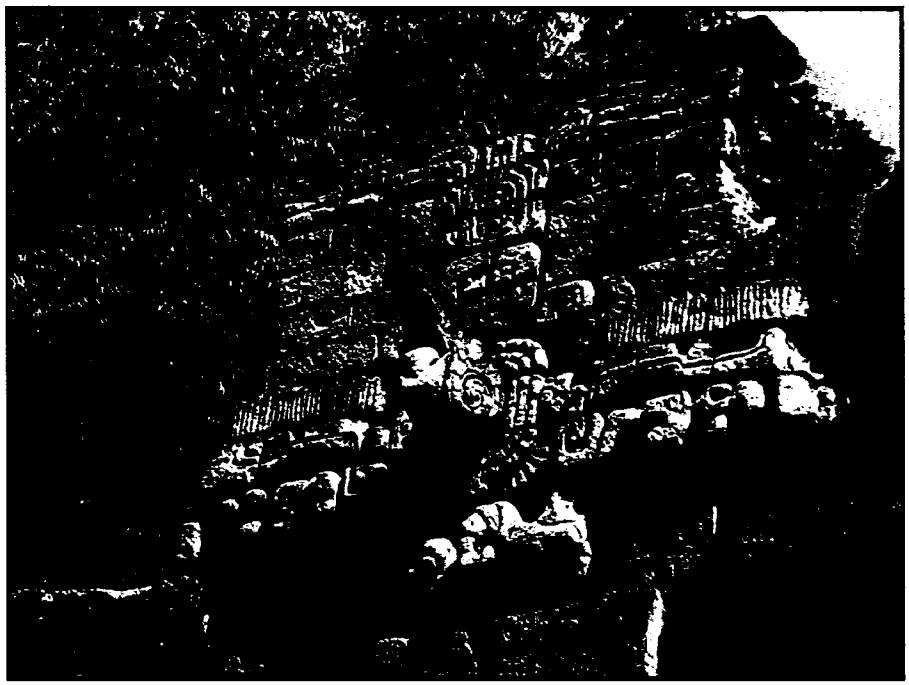

Figure G.43. The restored 'false arch' of Mayan architecture and scarlet macaw adornment.

Figure G.44. The Copán River (foreground) flows behind the forested archaeological site. The town of *Copán Ruinas* can be seen in the near distance.

Figure G.45. A stone pedestrian path leads from the town to the park.

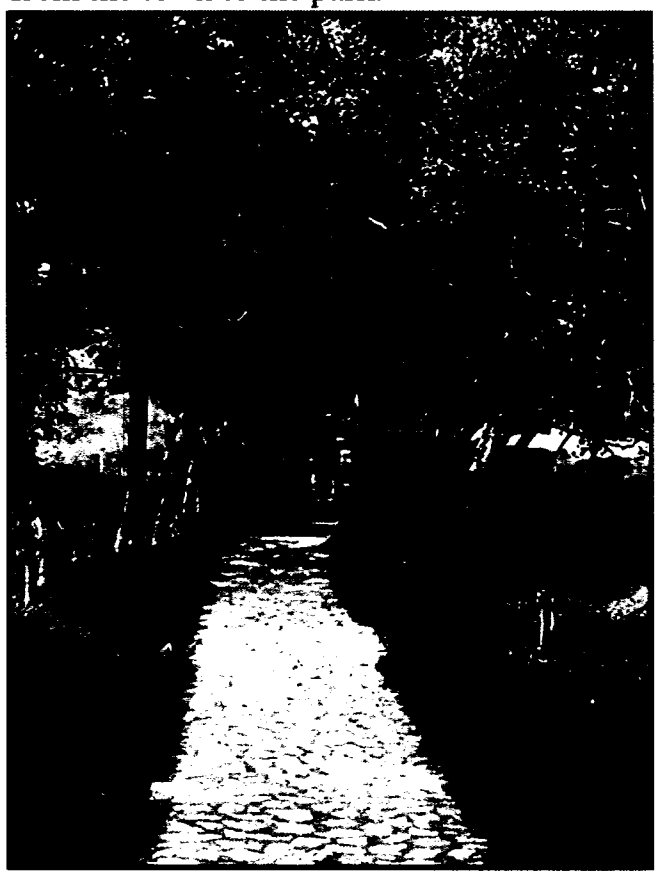

Figure G.46. The pastoral atmosphere affords opportunities for observation of livestock and traditional agriculture.

Figure G.47. A Copán stela depicting the important 'god of maize'.

Figure G.48. Maize production has gone on in the valley unabated since the time of the height of the Maya civilization.

Figure G.49. World famous tobacco is grown in the valley.

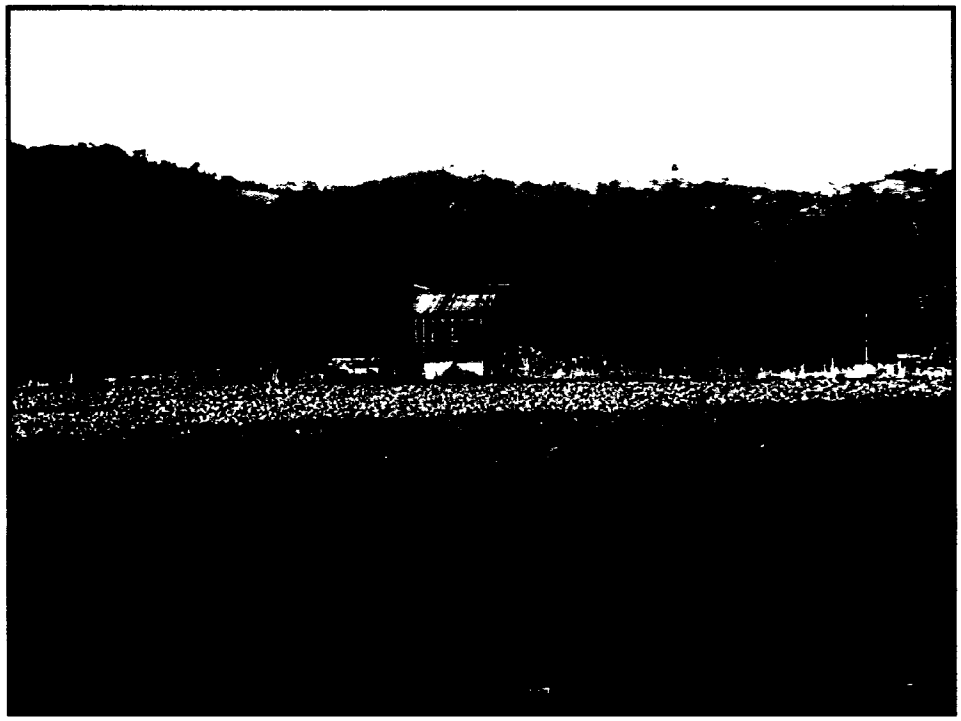

Figure G.50. Farming maintains open landscapes.

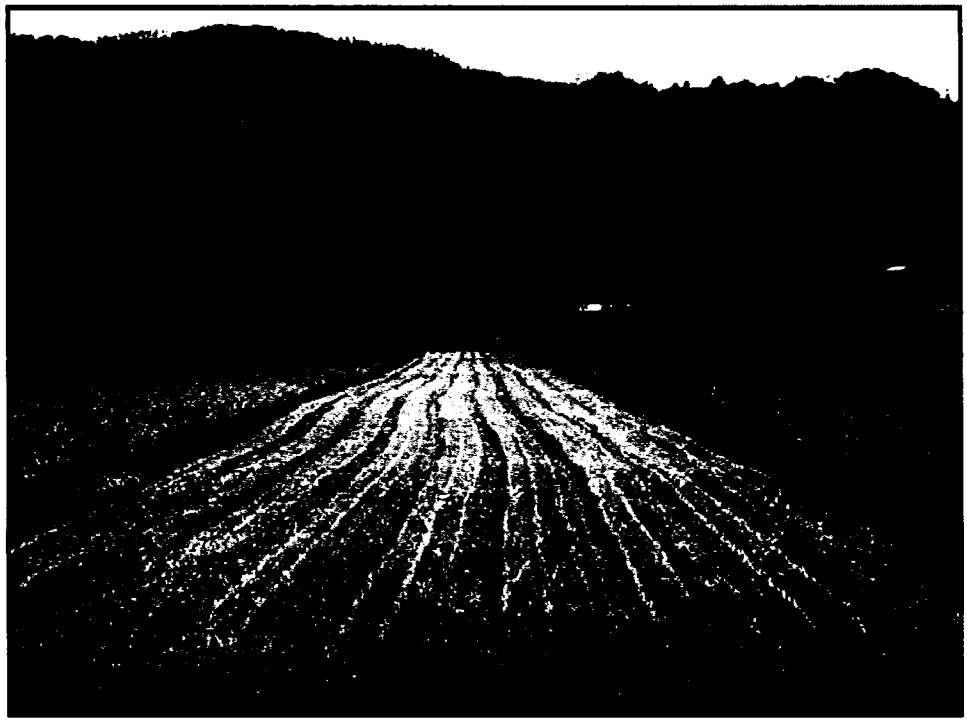

Figure G.51. A reforested external setting.

Figure G.52. A reforested external setting.

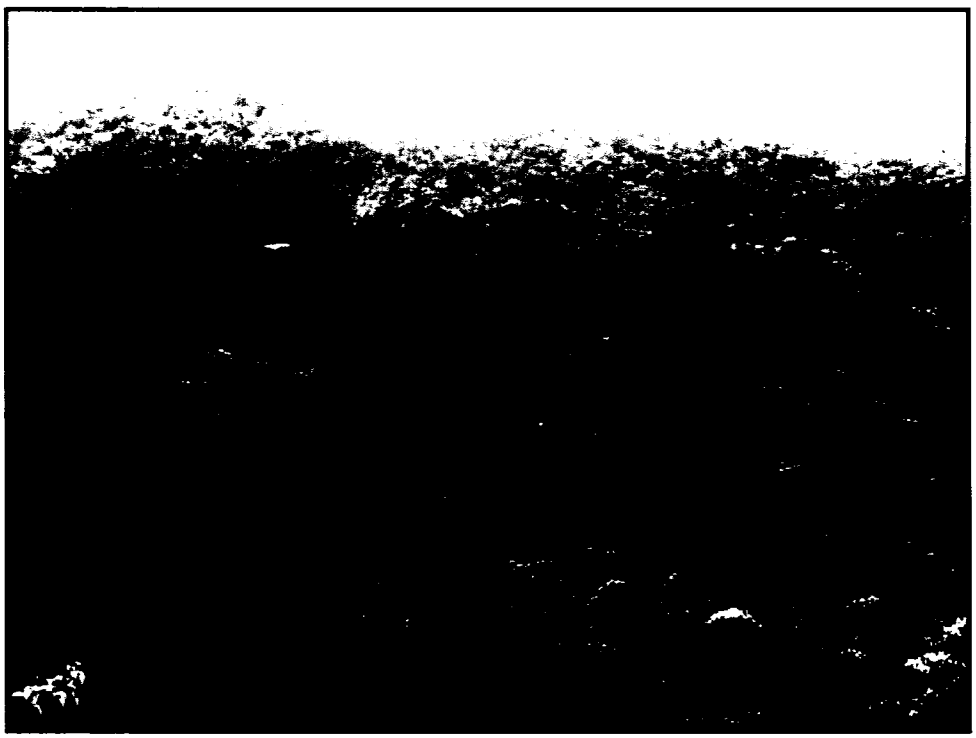

Figure G.53. The town of *Copán Ruinas*.

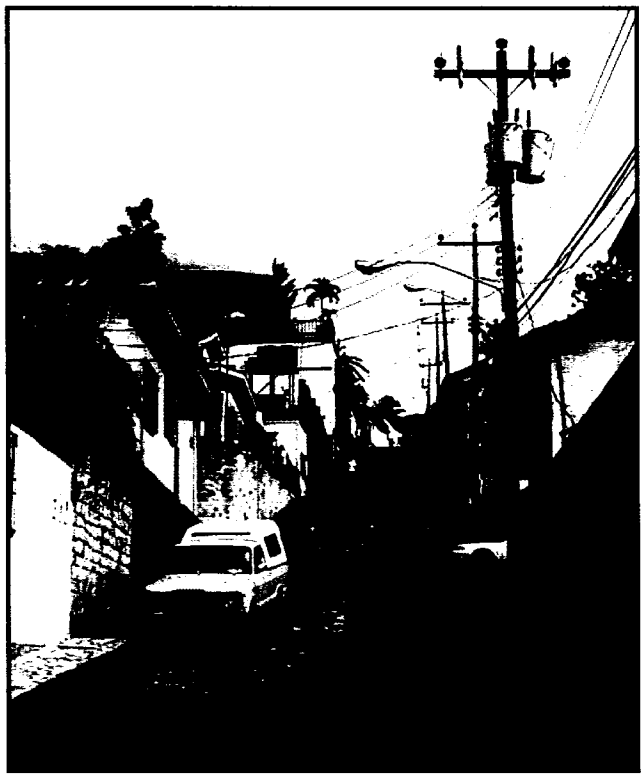

Figure G.54. A setting with traditional residences.

Figure G.55. A mid-priced hotel in the town of *Copán Ruinas*.

Figure G.56. Businesses like this internet café are plentiful within the town of *Copán Ruinas*.

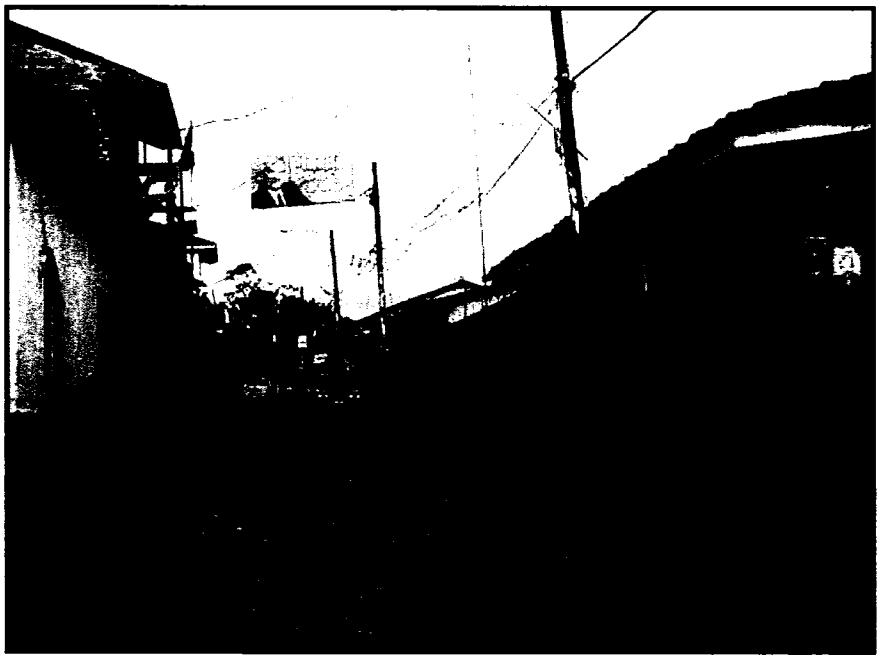

Figure G.57. The four-star Hotel Posada Real, was built outside of the town of *Copan Ruinas*.

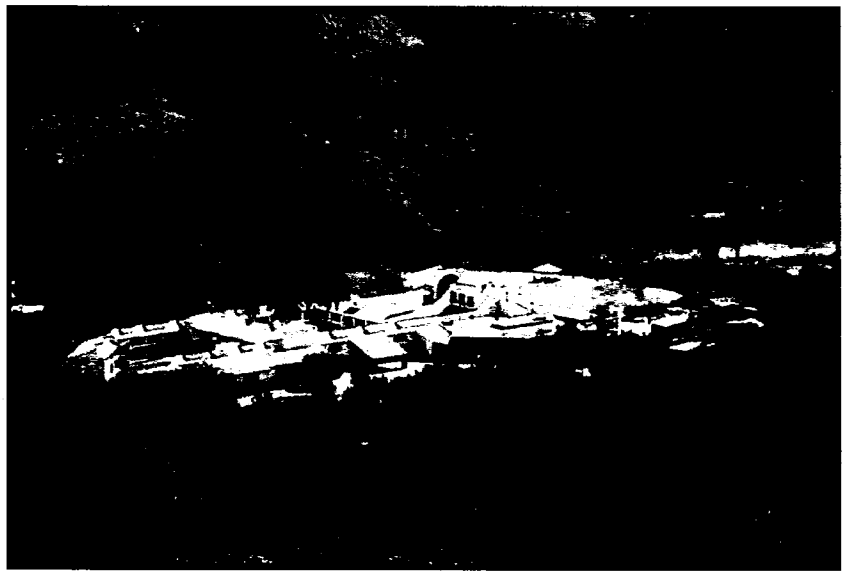

Figure G.58. A landscape view.

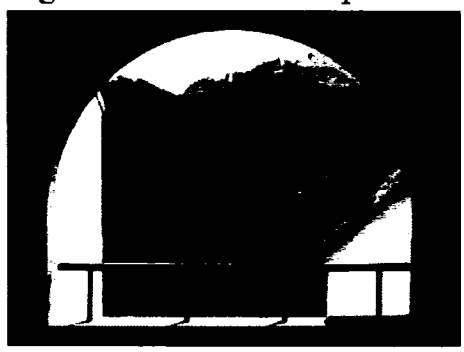

Figure G.59. Large international hotels may drain economic resources from local entrepreneurs.

Figure G.60. A bus parked on the pedestrian trail.

Figure G.61. A gas station built next to the archaeological park represents the potential encroachment of modernity.

Figure G.62. Proposed management zones for around and within CAP