



Frontispiece: Angkor prior to its “restoration”: Angkor Wat at the turn-of-the-century. Abandoned but not forgotten.

Photograph by Pierre Dieleffils, in P. Dieufiles and Louis Finot, *Indo-Chine pittoresque et monumentale: Ruines d'Angkor, Cambodge* (Paris: Paul, Vigier, 1909).

Ancient Ruins and their Landscape Settings

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William Chapman *

Abstract

The paper examines two major aspects of the history of ruins of Southeast Asia, noting that for the most part these are ruins of religious monuments. The first part explores the question of the landscapes—mostly urban—in which those monuments might have been set in their respective “golden ages,” and also the subsequent landscape histories of those sites as they were variously abandoned, destroyed, or forgotten, then subsequently rediscovered. The second area of review applies to the policies and practices that followed rediscovery or new interest, whether archaeological or touristic (and thereby economic). The finding here is that, seemingly invariably, there have been landscape “restorations” along Western lines, to create new, attractive settings to charm the tourist but with little regard for what might have been the historic landscapes and cultural practices of the sites in their own eras. The only alternative to this beautification seems to have been neglect. The suggestion is that management practices need reform to emphasize interpretation of site histories, thereby establishing an educative role for the sites; at best, there would be efforts to interpret the historic landscape practices of the societies that built and used these places at the climaxes of their histories.

Keywords: *Landscape, landscape history, ancient ruins, public policy, Southeast Asia*

* University of Hawai‘i at Mānoa, and Visiting Professor at the International Program in Architectural Heritage Management and Tourism, Faculty of Architecture, Silpakorn University.

Introduction

For over a century cultural geographers have emphasized the importance of landscapes for our analysis and understanding of heritage places. By landscapes they mean not just the so-called “natural environment”—mountains, fields, trees, streams, and forests—but also buildings, towns, cities, canal systems and all other products of human enterprise. An understanding of landscapes is now seen as preliminary to any study of a heritage site, including: their history; shifts in topography and land use; variations among types of plants and animals; and the profound ways than humans interact with their environment (Wallach, 2005; Taylor and Lennon, 2012).

The landscapes of ancient ruins, as landscape types, are especially problematical. Most of Southeast Asia’s famous ruins were once part of urban areas. In the past they were principally temples or related structures. Their immediate surroundings may have included gardens or other kinds of plantings, but these are not now known. What forests may have existed were well beyond the contexts of temples, palaces, and city walls. How these contexts have changed and how they might be reinterpreted are related concerns. To what degree existing landscapes possess significance in their own right requires yet another layer of scrutiny.

The Geographical Context

The present ruins of Southeast Asia fall within a range of landscape settings, from semi-arid deserts to agricultural fields and, at times, impenetrable forests and jungles. The region’s landscapes today are clearly not the landscapes of yesterday. Surviving ruins are typically away from modern population centers—certainly a factor in their survival. Once urban environments, they are now overgrown and neglected or, alternatively, managed and semi-managed parks. Rarely do these essentially archaeological sites give an indication of their former contexts.

Angkor was probably a city of upwards of a million people, spread over a vast urban and agricultural landscape¹. Recent

¹ Estimates have varied, at times reaching to 1.5 million and, more recently, downward to a few hundred thousand. See Ellen Callaway (2007).

archaeological studies suggest that Angkor Thom, the capital of Jayavarman II, displayed a grid-pattern of streets, much like a modern Western city (Gaucher, 2007). The large separate temple of Angkor Wat (and probably other monumental temples) similarly hosted a variety of residences and smaller shrines, each of them occupying discrete squares within the overall complex.

Similar patterns are evident among the temples of Thailand, Malaysia, and Vietnam. The temples of Sukhothai and Ayutthaya crowded near the centers of ruling city-states. The houses of commoners clustered at the periphery and outside the city walls. Ayutthaya had a population of at least 300,000 by the middle of the 16th century. By 1700, there may have been fully a million inhabitants in the city and outlying areas (Modelski, 2000; Garnier, 2004). The earlier kingdom of Sukhothai, with its remnants of nearly a hundred temples, also had a population of as many as a hundred thousand, within and without the city walls.²

The small temple platforms of Lembah Bujang on the Malay Peninsula are the remnants of a Hindu-Buddhist polity of Kedah, which served an important role in trade and regional power relations as early as the 7th century CE (Munoz, 2006: 143-45, 167-70). Mý Son was the center of political influence for the Cham from the late 4th century CE; what is now a collection of ruined temples was once an adjunct to a lively capital of Champapura (O'Reilly, 2007: 139-41; Po Dharma Quang, 2001: 14-27; Vickery, 2009: 45-60). Likewise, during its peak, the Burmese city of Pagan hosted approximately 1,000 major monuments, a further 10,000 small shrines and, possibly 3,000 monasteries over an area of 40 square miles (104 square kilometers). Its estimated population around 1210 CE was 1.5 to 2 million (Stadtner, 2005: 23-29; Strachan, 1989: 7-12). The Pyu city-states in northern Burma at Tagaung and Halin probably had population figures into the hundreds of thousands (Stargardt, 1990; Moore, 2007: 129-225). Even the smaller Mon states of Thaton and Pegu supported substantial populations in the early to mid part of the second millennium CE—all had been reduced by the time of British involvements in the region.

² Figures vary from as few as 30,000 to as many as 200,000. See Clarence Aasen (1998: 76-81).



Figure1: *Ayutthaya before its initial restoration in 1956-57.
View of Wat Phra Si Sanphet and Wat Viharn Phra Mongkhon Bophit.
Photograph by Peter Williams-Hunt, 1946.*

As with any urban developments, all of these places had roads, pathways, and open spaces. Notably, such sites also featured large numbers of ponds, “tanks” and other water features, all of which had both practical and ritual significance. Transportation was limited to horses, ox, and buffalo carts, and foot; elephants were a prerogative of the elite, used in warfare and for ritual purposes. The movement of goods throughout Southeast Asia typically depended upon water transport. Barges and small boats shuttled produce and craft goods from rural settlements to market areas. This remained evident notably in Thailand until relatively recent times, where the vestiges of water markets (*talaat nam*) still exist, unfortunately now largely as tourist attractions.

Rivers such as the Irrawaddy in Burma and the Mekong served as communication corridors and, thereby, constituted the figurative and actual centers of ancient city-states. Rivers historically allowed for

extensive agricultural production, especially of rice, which underlay the development of complex societies in the region. Also, waterways facilitated the movement of construction materials, such as stone and brick. There is little doubt that the moats of Angkor Thom and Angkor Wat functioned as a means of delivery of building materials, as well as answering more ritualistic and symbolic purposes.

Archaeologists Roland Fletcher and Christophe Pottier have emphasized that Angkor can best be understood as a vast cultural landscape that spread from present-day Siem Reap to parts south, east and west (*Buckley et al., 2010; Stone, 2009*). This was a world dominated by villages, larger settlements, and the production of rice and other crops and, especially, fishing. Jayavarman VII did much to extend Khmer ideas beyond Angkor. He improved roads leading directly to sites such as Prasat Phimai in modern-day Thailand, created or added to “hospitals”—temples devoted to both practical treatment and sacred expressions of wellbeing—and rest-stations for travelers. Urban centers were far from isolated but tied into a far more complex world than an encounter with contemporary ruins would suggest.



Figure 2: *Bagan as a park.* Dhammayangyi Phaya, 2010.
Photograph by Budsakayt Intarapasan.

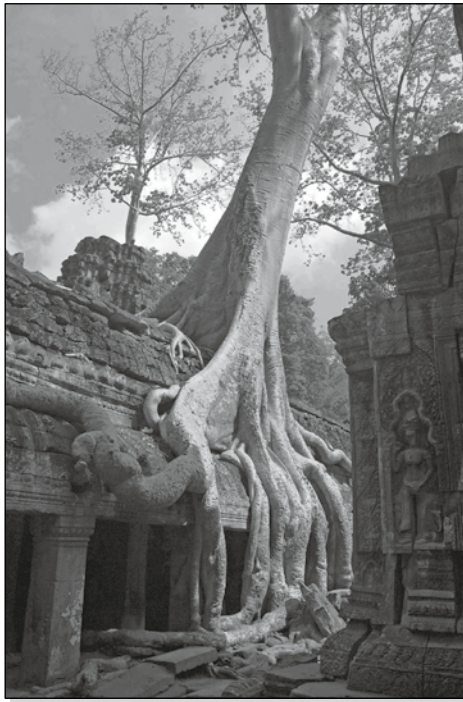


Figure3: *Ta Prohm Temple, Angkor, Parinya Chukaew, 2010.*
The romance of ruins at its best!

Houses, Plants, and Trees

Houses in Southeast Asia ranged historically from elaborate palaces to more modest wood and thatched structures. Houses of retainers, officials, soldiers, religious figures—Brahmins, Buddhist monks and, certainly in later Islamized parts of the region, Imams—generally resembled palaces, but at reduced scales and with less decoration. The same was no doubt true of the houses of merchants and artisans.

Although water markets were common throughout the region, there were terrestrial markets as well. The relief carvings at the Bayon temple in Angkor display a market, featuring animals and fish for sale, and examples of food preparation and the weighing of products. Architectural details include tile-roofed open areas, or galleries. Some of the vendors appear to be Chinese, who were active in trade in the Khmer kingdom by the 12th century.

Everyday people throughout the region lived in simple wood and bamboo dwellings, typically protected by thatched roofs. Grass, palm fronds, and other similar materials were stipulated, in fact, as an indication of lower status. Whether those of town-dwellers or rural residents, Southeast Asian houses generally sat on stilts, elevating living areas away from animals (both domestic and wild), and protecting inhabitants from periodic flooding. Even in the late 19th century, inhabitants of Cambodia cited protection from tigers as an advantage of elevated living areas. Houses typically clustered in villages, although individual farmsteads also existed historically as they do today.

Some buildings clearly broke with these traditions. Thailand's famous floating houses and similar dwellings in Cambodia and along the Malay Peninsula point to another approach, of large areas dominated by raft-like houses, connected by planks and covered promenades. Cambodia featured both floating houses and houses set on extremely high poles, to accommodate to the seasonally changing river levels. There were also ground-level dwellings throughout the region, notably in Champa and Java. The average poor inhabitant no doubt depended on rudimentary shelters or no houses at all.

Most of the region's early inhabitants were subsistence farmers. Rulers expected payments of rice from farmers, as did religious institutions. *Corvée* labor was another levy imposed by rulers. Only in mountainous, more remote parts of the region did inhabitants escape the requirements of civil societies. There, itinerant communities practiced swidden agriculture, moving from plot to plot, as crops such as yams, sugarcane, and taro depleted the soil (Li Peng et al. 2014).

With populations a bare fraction of their present levels—even in 1900, Thailand had barely 7 million people and Cambodia probably as few as a 2 million—large tracts of most modern Southeast Asian countries were still untouched. Depending upon their elevation, forests of the region included milk wood pine (*Alstonia scholaris*), margosa (*Azadirachta indica*), Kapundung (*Baccaurea wallichii*), red or common silk cotton (*Bombax ceiba*), golden shower (*Cassia fistula*), yellow cassia (*Cassia siamea*), apitong (*Dipterocarpus alatus*), beech (*Gmelina arborea*), gnemon (*Gnetum gnemon*), and especially

Borneo or Moluccan teak (*Instsia bijuga*) and common teak (*Tectona theka*). These trees served a wide variety of purposes, from building materials, through wood for furniture and agricultural implements, to gums, resins, and dyes. Leaves and pods also provided food for animals, limbs and trunks fuel for charcoal and cooking fires (Jensen, 1999).

In addition to forest resources, Southeast Asian populations enjoyed the production of numerous fruit-bearing trees, appearing both within individual house sites and probably as part of commercial orchards. Jackfruit, pomelo, tangerines and mandarin oranges, longan, water apple and rose apple (Malabar plum) were all common trees from an early period, as were durian, lychee, and mango (Jensen, 2001). Taro, breadfruit, bananas, and other starchy plants provided fiber and carbohydrates. There were also tamarinds for chutneys and other fruits for pickles. A variety of seeds, pods, berries and barks were sources for foods and medicines. Nutmeg and cinnamon added flavor, as did black pepper (*Piper nigrum*), long pepper (*Piper longum*) and Java pepper (*Piper cubeda*), a longstanding West African import (Turner, 2005). Sugar came from indigenous sugarcane (*Saccharum andropogoneae*), coconuts and from the sap of sugar palms, *Arenga pinnata*, the tall feather palm and *Borassus flabellifer*, the Palmyra palm—both ubiquitous features of the Southeast Asian rural landscape. There was also honey, seeds, and roots that provided sweeteners for local cuisines.

By the early 16th century, there were new imports from the Americas as well: cashew nuts (originally from Brazil), papaya, cacao, coffee, maize (corn), star apple, guava (known in Thai as *farang*, or “foreign”), and avocado—all originally from Central and South America. From closer-by came rambutan (*Nephelium lappaceum*), pomegranate (*Punica granatum*), gooseberry (*Phyllanthus acidus*) and carrots (*Daucus carota*). Most famously, Portuguese and later Dutch traders brought the hot chili pepper and other peppers of the genus *Capsicum*—varieties that soon supplanted the milder peppers of earlier times. (Only two common spices in fact originated in the New World: chili peppers and vanilla; the rest were of ancient Asian and African derivation and therefore were long available to the inhabitants of Southeast Asia; Shaffer, 2014.)

The landscapes of ancient Southeast Asia combined forests and agricultural areas. Vast swathes of land featured rice paddies, lined by sugar palms and other trees. Individual homesteads and clusters of houses punctuated open lands, as did rivers, artificial water channels and temple mounds. At the edges were forests, hills and mountains, all continuing sources of wild plants and animals, as well as of ingredients for traditional medicines and fuel for cooking fires. Coastal and riverine locations supported fishing and the production of dried and fermented fish products.

The Landscape of Ruins

By the time of European colonization and exploration, surroundings of many ancient sites had changed radically. Pagan still had a residual population, though its numbers had decreased drastically since its peak in the 13th century. The same was true of Angkor in Cambodia and Sukhothai and Ayutthaya in Thailand. Other ancient settlements, such as the early sites of Angkor Borei in the south of modern-day Cambodia or the Srivijaya-aligned polity of Lembah Bujang were almost forgotten.

Trees, vines, and shrubs covered Borobudur and Prambanan. The upper terraces of Borobudur supported a layer of soil, which encouraged opportunistic vegetative growth. Thomas Stamford Raffles, exploring the interior of Java in 1815, remarked that the “bushes here [at the ruins of the Hindu shrine of Prambanan] are so thick that we did not perceive till we came suddenly upon them” (Grabsby, 1999: 32-34; Miksic, 2004). At Borobudur he encountered a stone mountain, overgrown with shrubs and vines. Over a dozen deciduous trees—probably silk cottons (*Bombax ceiba*)—populated the surface of the structure, with many more around the base (Grabsby, 1999: 69. Only in the 1870s was the monument finally cleared of its vegetative overlay, though the larger trees were removed soon after Raffles’ visit (Miksic, 2004: 28-29).

Pagan by the 19th century was dry and barren. Visitors such as John Crawfurd and Henry Yule commented on the state of abandonment and neglect; a Captain Hanny remarked that the monuments “were covered with jungle on top” (Strachan, 1989: 3).

Captain Linnaeus Tripe, who accompanied Yule in 1855, produced a series of photographs (later converted to steel engravings) that show relatively desolate landscapes broken by stunted trees and shrubs (Yule: 1968). F.O. Oertel's photographs, taken in 1892, reveal a similar landscape, with dry hedges and untended turf, punctuated by occasional palms (Oertel, 1995: 10-11).

Never forgotten by Cambodian people—particularly those living near the ruins—the extensive ruins at Angkor first came to Western attention through the published account of French missionary Father Charles-Emile Bouillevaux (1823-1913), who visited the site in 1850 (Bouillevaux, 1858). His compatriot Henri Mouhot followed in his steps, recording his impressions ten years later. For Mouhot, the experience was that of penetrating the “jungle,” helping to establish a trope that continues to color visitors' impressions today. Mouhot's fanciful drawings provided a vivid backdrop to his descriptions of the sites; he shows monkeys swinging from branches, crocodiles in streams, and a morass of vines and other plant growth spreading over the monuments (Mouhot, 2000).

The Mekong Exploring Expedition of the 1860s provided a similar commentary on the remains. The expedition's artist Louis Delaporte (1842-1925) evoked a sense of mystery, abandonment, and decay. Delaporte's subsequent images, prepared for his publication of 1880, further established the site's reputation as one of mystery (Delaporte and Garnier, 1998). Subsequent scholars and adventurers continued this engagement, with periodic clearing of sites and the gradual completion of a comprehensive though not fully accurate map between 1901 and 1911, documented in Lunet de Lajonquière, *Monuments du Cambodge* (Chapman, 2013: 74-75).

Thailand's ancient monuments were also “discovery sites”. The ancient site of Ayutthaya, abandoned in 1767, gradually filled-up again with houses, shops, and other structures, some of them re-utilizing materials from the old city. King Mongkut, or Rama IV (1804-1868, reigned 1851-1868) took a personal interest in ruins, traveling to the old regional capital of Sukhothai and famously visiting the ruins of Wat Phra Pathom Chedi in Nakhon Pathom. Soon after the beginning of his reign, he ordered the clearing of the ruins at Ayutthaya, initiating a regular steamship route from Bangkok to the old city for foreign visitors (Fine Arts Department, Thailand, 1966).

20th - Century Developments

In 1908, the French Conservation d'Angkor began clearing of the monuments at Siem Reap. Among the department's tasks was to build a road for better access from Phnom Penh to Siem Reap and a second road from the provincial town to the monuments. The department also undertook responsibility for a forest management scheme initiated in Phnom Penh by French authorities there (Ang Choulean, Prenowitz and Thompson, 1998). Living in a straw house near the causeway to Angkor Wat, its first director, Jean Commaille (1868-1916), completed the first popular guide to the sites, establishing what would become prescribed routes through the area.

The French at Angkor were rather geniuses of landscape design. This involved government officers in the forestry service who contributed to the overall design and implementation of the park (Chapman, 2013: 75). The stands of trees, the broad avenues that draw the eye to historic features, and the partial recovery of the system of moats and canals were all part of a preconceived effort to make Angkor a beautiful and haunting place. The Conservation d'Angkor's second director, Henri Marchal (1876-1970), realized Commaille's notion of roads and "circuits" within the park—a "Petite Circuit" and a "Grand Circuit" designed to meet the relative time constraints of visitors (Marchal, 1928; 1955; 1961).

In Vietnam, Henri Parmentier (1871-1949), head of the Archeological Department for the École française d'Extrême-Orient (EFEO), directed the clearance and excavation of Cham sites, exposing original temple towers and the layouts of large complexes. With his assistant Charles Carpeaux (1870-1904), Parmentier established a standardized approach to the inventories of the Cham monuments (Baptiste, n.d.). The first step was clearing. He then drew up site plans, elevations and sections of individual features. During the process, he gathered fragments, inscribed stele and sculptures and shipped them into safekeeping, at first in storage and later in the several museums created to hold Cham and other art.

Although Dutch and later Indonesian efforts in Java hardly matched the level of sophistication of the French-managed archaeological park of Angkor, they too adopted some of the principles of European park design in the management of sites such as Borobudur and Prambanan. At Borobudur, clearance began as early as 1817 (Kempers, 1976: 193). By the mid 19th century, tourists could gaze upon a dilapidated, though essentially open site, surmounted by a thatched roof pavilion. The partial restoration of the monument after 1909, under the direction of Dutch engineer Theodoor Van Erp (1874-1958), improved its touristic value. Van Erp improved drainage both on the terraces of the monument and at the base (Kempers, 1976; Miksic, 30-31). Similar work would take place at Prambanan in subsequent years (Ambary, H.M., 1999). The Dutch colonial government eventually installed roads and pathways, laying the foundation of the monument's later park-like character (Dumarçay, 1989).

Thailand's gradual effort to expose and present its ancient monuments closely paralleled developments in Indonesia. Following passage in 1934 of the Act on Ancient Monuments, Art Objects, Antique Objects and National Museums (BE 2477), then prime minister Major-General Luang Phibun Songkhram (Plaek Phibulsongkram, 1897-1964) turned his attention to Ayutthaya, beginning a first inventory of sites and sketching out the beginning of a master plan.³ During the 1950s, he began a nationwide program of restoration, focusing on both "living temples" (wat) and on ancient ruins (FAD, 1998).

Phibun's initiative continued in the 1960s and 1970s, with the creation of master plans for Ayutthaya and later for Sukhothai. In its final form the Ayutthaya Historical Park would be a combination of preserved ruins and park-like spaces with formal tree-lined avenues and paths (Peleggi, 2002: 114-18; FAD, 1996: 92-96; Koompong, 2003: 257-61; Pinai, 2009). The park encompassed about 15 major monuments, several extant monastic complexes, and a number of

³ The Act on Ancient Monuments, Art Objects, Antique Objects and National Museums Fine Arts Department, BE 2477, <http://www.fabeta.finearts.go.th>; FAD, "The National Museum, Special Exhibits," webpage, <http://www.thailandmuseum.com>. Also FAD (1998); Sawang Lertrit (1996).

older buildings, notably the former palace and museum. Several other associated monuments and sites fell outside the parks' originally proposed boundaries. To create a more park-like setting, the plan called for the introduction of improvements to existing roads and several new roads. The plan's advisors also called for new water features to serve as an evocation of Ayutthaya's historic canals, most by then filled (FAD, 1968; Somkid, 1995, summarized in Corzo, 1995: 30-31). Completion of the project required the relocation of approximately 200 households; this was carried out in the 1980s at a cost of 30 million baht (approximately \$800,000) (Sunon, 1987: 69-87; Peerapun, 1991).

In 1987, the Thai government completed a new plan, supplemented by yet another plan in 1993 (FAD, 2003). The latter emphasized greater community involvement in the overall scheme and more recreational opportunities for visitors. Faced with recurrent flooding, in part the result of changes in land use in the surrounding area—from agricultural to industrial—some aspects of the plan have never been realized. The present site reflects these different periods of intervention, most of which have tended to beautify the site and create a more rural character. These include further improvements to the roads and paths and enhanced interpretation.

Efforts at Sukhothai closely followed the precedent of Ayutthaya. In 1976, the government passed a law to create a national archaeological and historical park at Sukhothai; laws establishing parks at Kamphaeng Phet and Si Satchanalai followed in 1980 and 1983 (Sekler, 1978; 1984: FAD, 1977; Vira, 1987a: 39-49; 1987b: 115-26). Around the same time, a team of international and Thai experts completed a master plan for the development of the extended park at Sukhothai (FAD and Ministry of Education, 1982; Ishizawa, Kono and Vira, 1988). The plan covered some 28 square miles (72 square kilometers) and included nearly 200 monuments. The Sukhothai plan included an analysis of land-use; formulated a scheme for community development; and outlined a tourism development program. Recognizing the presence of an existing community on the site, the plan set out steps for resettlement, including new housing infrastructure (FAD and Ministry of Education, *Sukhothai Master Plan*, in Ishizawa, Kono and Vira, 1988).



Figure 4: *Borobudur restored, in a now artificial landscape. Wikipedia Commons.*



Figure 5: *Wat Sa Si, Sukhothai Historical Park. The focus is more on “park” than “historical.” Parinya Chukaew, 2009.*

Other Thai parks would follow a similar course of development. Si Thep Historical Park in Petchabun; Phra Nakhon Khiri Historical Park in Phetchaburi; Prasat Phanom Rung Historical Park; Prasat Muang Sing (Singh) Historical Park; and Prasat Phimai Historical Park in Khorat are all variants on the Sukhothai and Ayutthaya models, featuring stabilized ruins—and in the case of Phra Nakhon Khiri, restored buildings—within park-like settings (Aymonier, 1901-04; Freman, 1998).

Efforts in Myanmar tended to combine Thai and Cambodian approaches. The principal ruin site was Pagan, though Pegu (Bago), Prome (Pyay), and Mrauk-U in Rakhine also possessed ruins, as did the ancient sites of Thaton, Ava, Amarapura, and Sagaing (Moore, 2007; Gutman, 2001; Daw Thin Kyi, 1970: 1-13). Ignoring the cautionary approach of British-period archaeologists, Burmese authorities began an ambitious program of restoring ruined temples and other structures to something resembling their original appearance (Nyunt Han, 1989). At Pagan, authorities relocated the approximately 6,000 residents to a new village. With international assistance, Burmese authorities also established the beginnings of an archaeological park (Chapman, 2013: 183). This would include, like at Angkor, a circuit for tourists, hotels, restaurants, and visitor attractions, notably a new museum.

Landscape treatments at Pagan ranged from the retention of traditional trees through the installation of turf lawns and ornamental flowering plants to frame views. Pathways and roads would eventually link the sites, following a prearranged itinerary. Although a few traditional practices remain, there is little now of the paddy rice fields that once interspersed the temples. Irrigation, in turn, has helped to support larger trees and allow for open grassed areas, further enhancing the park-like character of the site.

New Initiatives

The treatment of the landscapes within the parks has become an increasingly important topic among heritage managers. Keeping sites clear of vegetation, mowing open areas, and perhaps setting out a few rows of roses or other ornamental shrubs has been the typical practice at Thai sites especially. In Vietnam, park upkeep is at best ad

hoc and sporadic, but still a necessary part of each park's maintenance. Superintendents—or in the case of Vietnam, local committees and public works officers—typically make their own decisions on up-keep and sometimes initiate new installations: a walkway here, a row of trees or shrubs there, a seating area in another spot. Reflective in fact of European garden traditions, these choices have little to do with the history of the sites (discussed in Ronarit, 2002).

At a UNESCO-sponsored conference on cultural landscapes held in 2005, Indonesian scholars Titin Fatimah, Kanki Kiyoko and Laretna T. Adishaki looked in detail at the wider landscape of Borobudur (2006). They traced land-use and settlement patterns over a two hundred-year period, from a landscape dominated by rice paddies and scattered villages to the more recent period characterized by concentrated settlements and arterial roads. A key point of transition, the authors explained, had been the period of restoration of Borobudur in the 1970s and 1980s. Changes at the time meant that villagers were no longer dependent on agriculture but had turned instead to other ways of earning their livings. The development of the World Heritage site had in effect interrupted a pattern of meaning that had existed for centuries (Fatimah, Kiyoko and Adishakti, 2006).

Around the same time, UNESCO's Bangkok office, working with the then Sukhothai regional director Tharapong Srisuchat, initiated a program focused on the broader landscape patterns of sites such as Sukhothai and how this knowledge might be utilized to recall and interpret the past.⁴ Although participants recognized that the reconstruction of ancient field patterns might be unrealistic, they did agree that the parks needed to link more to the surrounding communities, many of which retain aspects of historic practice. They also stressed that the Fine Arts Department revise their interpretive programs to tell more of this story.

The UNESCO effort at Sukhothai ended with no clear outcome. The project had looked at historic field patterns, pollen and core samples and other data to begin what might have been a partial

⁴ UNESCO, Section II Period Report (2003); Montira Horayangura Unakul (n.d.); also interview with Montira Horayangura Unakul, UNESCO, Bangkok, Regional Unit for Culture in Asia and the Pacific, 12/9/09.

restoration of the historic environment of the city (UNESCO, Section II Period Report, 2003). The expert participants found proposals, such as the reintroduction of ancient gardens, orchards and crops, beyond the budget of the Thai park system. However, there is nothing to say this kind of research cannot continue in miniature and that reinterpreting aspects of the historic gardens and plants could not become a part of park planning and interpretation in the future. Moreover, what became particularly clear in the UNESCO and Sukhothai project was that many of the qualities of ancient agricultural practice still thrive outside the border of the park—beyond the view of park visitors, but just barely.

At Sukhothai, Ayutthaya and Pagan, development has pushed traditional uses away from the managed sites. At Borobudur, however, the boundary between the park and the surrounding mostly agricultural landscape is only a short distance from the monument. At Angkor, the largest, best-known and most ambitiously managed site, thousands of people still live within park boundaries. There the site's inhabitants continue to play an important part in the day-to-day upkeep of the park removing fallen branches for firewood, harvesting resin, nuts and fruits and allowing their animals to graze under the shadows of ancient temples. In some sections, they still grow rice just as their ancestors did a thousand years ago.

Anthropologist Keiko Miura estimates that, at Angkor, 80,000 people live within the over 155 square mile (400 square kilometer) greater park area (2002: 15-20). This population has now come increasingly into question in the future of the park. For park managers the concerns are obvious. The local inhabitants interrupt the effort to create a “natural” park and introduce an increasing number of new vehicles and houses into the park landscape. As of 2015, APSARA appears poised to move inhabitants from the site, offering new housing tracts outside of the park boundaries. This transition will mark an extraordinary turning point in the history of Angkor; for the first time the ancient site will be isolated completely from its historic context of villages and agriculture and the people who gave fundamental meaning to the monuments. Ways of managing this transition, both at Angkor and at other archaeological parks, remains one of the great challenges awaiting managers throughout the region.

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