

# The Evolution of Fragility: Setting the Terms

Edited by Norman Yoffee



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with contributions from Tom D. Dillehay, Li Min, Patricia A. McAnany, Ellen Morris, Timothy R. Pauketat, Cameron A. Petrie, Peter Robertshaw, Andrea Seri, Miriam T. Stark, Steven A. Wernke & Norman Yoffee Published by: McDonald Institute for Archaeological Research University of Cambridge Downing Street Cambridge, UK CB2 3ER (0)(1223) 339327 eaj31@cam.ac.uk www.mcdonald.cam.ac.uk



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# Contributors

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Department of Anthropology, Vanderbilt University, Nashville, TN 37325, USA Email: tom.d.dillehay@Vanderbilt.edu

### Li Min

Department of Anthropology, A210 Fowler Building/Box 951510, 308 Charles E. Young Dr. North, University of California, Los Angeles, CA 90095, USA. Email: limin@humnet.ucla.edu

### PATRICIA A. MCANANY

Department of Anthropology, University of North Carolina, Chapel Hill, 301 Alumni Bldg., Campus Box 3115, Chapel Hill, NC 27599-3115, USA. Email: mcanany@email.unc.edu

## Ellen Morris

Department of Classics & Ancient Studies, Barnard College, Columbia University, 3009 Broadway, New York, NY 10027, USA Email: emorris@Barnard.edu

### Тімотну R. Pauketat

Illinois State Archaeological Survey, 209 Nuclear Physics Bldg., MC-571, University of Illinois, 23 E. Stadium Drive, Champaign, IL 61820, USA Email: pauketat@illinois.edu CAMERON A. PETRIE Department of Archaeology, University of Cambridge, Downing Street, Cambridge CB2 3DZ, UK Email: cap59@cam.ac.uk

### Peter Robertshaw

Department of Anthropology, California State University, San Bernardino, 5500 University Parkway, San Bernardino, CA 92407, USA Email: proberts@csusb.edu

# Andrea Seri

History Department, Universidad Nacional de Córdoba, Pabellón España, Ciudad Universitaria, 5000 Córdoba, Argentina Email: andrea.r.seri@gmail.com

### MIRIAM T. STARK

Department of Anthropology, University of Hawai'i at Mānoa, 346 Saunders Hall, 2424 Maile Way, Honolulu, Hawai'i 96822, USA Email: miriams@Hawaii.edu

### Steven A. Wernke

Department of Anthropology, Vanderbilt University, Nashville, TN 37325, USA Email: steven.a.wernke@vanderbilt.edu

### Norman Yoffee

Departments of Near Eastern Studies and Anthropology, University of Michigan, Ann Arbor, MI 48109, USA (emeritus) Email: nyoffee@gmail.com

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Norman Yoffee, 2019

# Chapter 9

# Universal Rule and Precarious Empire: Power and Fragility in the Angkorian State

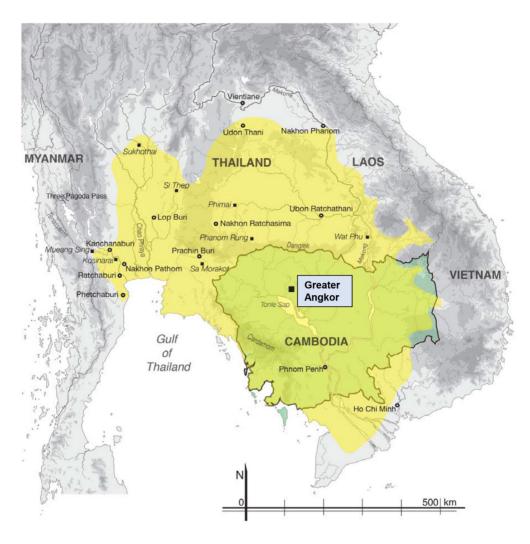
# Miriam T. Stark

The urban configuration we call Angkor (now in northwest Cambodia) was the epicentre of a polity that dominated mainland Southeast Asia's patchwork of Hindicized states by the early second millennium AD in both geographic and demographic scale. Perched at the northern edge of the great Tonle Sap lake, Khmer inhabitants expanded the state's capital to a 1000 sq. km area. Its massive state temples and royal reservoirs, built sequentially from the ninth through fifteenth centuries, reflect a physical durability that was rarely matched in Angkor's political sphere. Yet its monumentality belies the fragile web of patronage and factionalism that underwrote its operations. Successful kings integrated agrarian provinces into the broader Sanskrit cosmopolis through alliance-building and negotiation. They depended on religious institutions and the priestly elite who managed them; state and local temples required capital and labour from communities throughout the Angkorian world. So did the administrative apparatus whose residents populated its urban capital.

Like 'collapse' narratives elsewhere in the ancient world (e.g., Yoffee & Cowgill 1991), the capital's fifteenth-century 'collapse' has drawn more attention than has long-term pattern of cultural resilience, and archaeological research is key to understanding longterm cyclical patterning in the Khmer civilization. Angkorian state power was far-reaching: distributional patterning in both Angkorian monuments and artefacts suggest the polity intermittently controlled most of the lower Mekong Basin. Public display, monumentality, and collective ritual practice bound its population to their leaders and fuelled production to feed the state. Such pageantry and display was not empty theatre (contra Geertz 1980): Angkorian rulers had sovereign authority, and were considered semi-divine. They engaged large communities of subjects for oath-taking, military parades, and participation annual festivals that reproduced the Angkorian polity. Occasional public practices supplemented regular face-to-face patron-client transactions that circulated capital and royal favour within 'galactic polities' (*sensu* Tambiah 1977) whose Indic scaffolding provided identities and guided political practice (Mus 1937).

This chapter synthesizes conventional (historically driven) and recent (largely archaeological) findings to explore the anatomy of power in the Angkorian state. Internal documentary data (Khmer and Sanskrit inscriptions) provide models of power that archaeologists are now starting to study in the urban Angkorian core and in its provinces. Three premises structure this discussion. The first is that the state apparatus was intrinsically fragile through nearly 600 years of reign by at least 35 named rulers. Particular historical events challenge the apparent stability that long reigns (median of 22) years) suggests. Some rulers held the throne for 5-6 years, and others as much as half a century. Even the most powerful eleventh- to twelfth-century Angkorian rulers, however, confronted frequent internal revolt and wars with western neighbours (e.g. Hendrickson 2010, 482; Table 1). Some succumbed to the turmoil, and others transformed their polity into a true expansionist empire. A second premise is that Angkorian state fragility was rooted in the patronage structure that was its foundation. Each ruler's charismatic authority stemmed from his ability to nurture far-flung 'circles of kings' (Wolters 1999, 106 et passim) to integrate the state. The Angkorian state's ability to penetrate its civil society through collective action channelled revenues through patronage networks that supported its urban epicentre and its elite; large-scale public rituals also reproduced conditions of sovereignty (Smith 2011; 2015, 186-7; Yoffee 2016; see also Ando 2017 and Richardson 2012 for comparative examples).

This paper's third and final premise focuses on local responses to state efforts to control and asserts that



**Figure 9.1.** One view of twelfth-century Angkor in its broader Southeast Asian World (modified from Multzer-O'Naghten 2014, with permission).

rural settlement systems formed stable, basal elements of Khmer 'civilization' for more than a millennium (see also Sedov 1978, 118; Stark 2006a). Angkor exerted centripetal social force on its populace: rural populations visited the capital regularly to participate in seasonal religious festivals and political events. Local communities and their leaders engaged with, and perpetuated, political authority through economic and ritual activity. Yet rulers were deeply dependent upon their subjects, who collectively could and did resist state mandates as a form of infrastructural power (Mann 1984, 113; Yoffee 2016). Alliance formation and regular pilgrimages to rural temples to honour their resident gods were also part of each Angkorian ruler's contract with his subjects.

Archaeological research on Angkorian fragility is now in its nascent stage, and could benefit from comparative insights on fragile state superstructures vis-à-vis resilient cultural foundations that undergirded 'civilizations' elsewhere (Schwartz 2006; Schwartz & Nichols 2006; Baines & Yoffee 1998, 2000). The Lower Mekong Basin, where the Angkorian state rose and fell in the first and second millennia AD, provides a particularly effective case study because of the recent burst in research activity since the mid-1990s. The first Angkorian ruler, Jayavarman II, declared himself as *çakravartin* (universal ruler, Sanskrit) to begin the Angkorian state. Epigraphic, archaeological, and external documentary sources provide complementary perspectives on what this universal rule entailed – for individual leaders and for the polity they administrated – from the ninth through fifteenth centuries AD.

#### Universal rule and the Angkorian state

Angkor is an exemplar of state fragility. Nearly three dozen rulers ascended the throne through its 600-year

long history. Angkor was monumental: the largest polity across Southeast Asia, with a vast capital covered by nearly 1400 brick and stone temples, and an elaborate urban water management network that took centuries to construct and untold populations to maintain. Ample evidence now exists for the four logistical techniques that states use to develop infrastructural power (Mann 1984), and which archaeologists view as hallmarks of a competent state, namely: a well-developed bureaucracy, literacy, standardized exchange rates, and transportation route (see also Mackil 2017; Scott 2016; Yoffee 2016, 1058). But how this was done, and why Angkorian Khmers chose to participate in this state system remain a matter of debate. So, too, does the geographic reach of this polity (Fig. 9.1). From its sixthto eighth-century origins, the Angkorian state lived on and through ideological power that naturalized social stratification, semi-divine rulership, and – within a few centuries - the notion of a unified polity that persisted for centuries.

Angkor's conventional collapse narrative (Groslier 1979) involves fifteenth-century catastrophe in the face of environmental duress: pieces of Angkor's hydraulic infrastructure caved in under massive floods, some buildings buckled and others burned Buckley et al. 2010; Day et al. 2012; Penny et al. 2014, 2019). Conventional wisdom maintains that Thai military forces sacked the great city of Angkor Thom and hauled away the city's valuables, artisans and Angkorian elite to their capital of Ayutthaya (summarized in Coedès 1968, 236–7; see also Polkinghorne et al. 2013 for recent interpretation). Woven largely from documentary accounts, it's difficult to imagine a timelier story of political overshoot, ecological mismanagement, and climatic stress, and scholars have grappled with the relationship between climatic stress and political overshoot (e.g., Buckley et al. 2010; Fletcher and Evans 2012; Lucero et al. 2015). Archaeological work in the last two decades challenges most tenets underlying such unidirectional views of climate change and human action (e.g., Butzer 2012; Faulseit 2016; McAnany and Yoffee 2010; Middleton 2017).

The case for climate-driven Angkorian overshoot rests on a slim archaeological base, and requires more field-based empirical research. For one thing, Angkorian researchers are only now beginning to understand the nature of Angkorian urbanism. A growing archaeological record suggests both continuity in occupation in Greater Angkor and long-term settlement at localities to the south that became capitals after Angkor collapsed. Suppose what collapsed was as much social as it was environmental or physical? Angkorian statecraft centred on its complex hydraulic urban centre but depended on its rural hinterland to provision the capital with rice and subsistence goods, and interlocking and nested levels of patronage from the king to the countryside were key to this system (e.g., Mabbett 1978). A growing archaeological literature on Cambodia's archaeology supports a cyclical model of collapse and regeneration which began in the late fourteenth century AD and continued beyond the putative AD 1431 Thai sack of Angkor Thom (e.g., Penny et al. 2019).

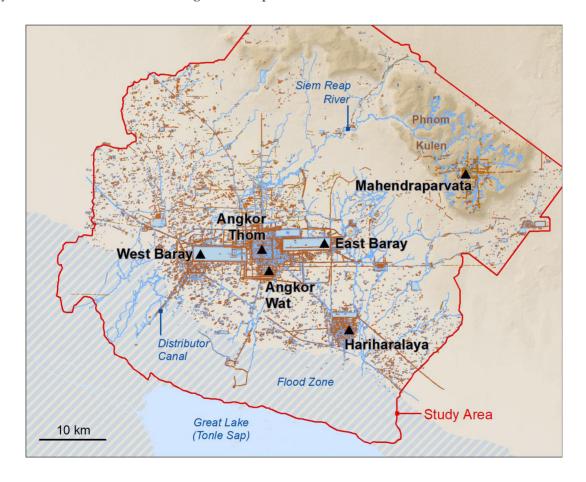
Specific details of these systemic death throes still elide historical explanation, but archaeological approaches shed light on what collapsed, and how the population reorganized, at the twilight of the Angkorian state. Here I marshal epigraphic and archaeological evidence to argue that the Angkorcentred state collapsed when negotiations with the periphery failed, and that Middle period Khmers re-located key cultural institutions that depended on knowledgeable religious specialists and highly charged rituals. Archaeologists are particularly well-equipped to document settlement continuity (and discontinuities); what seems clear from our work to date is that fragility in particular polities was counterbalanced by resilience in the local systems, based on an ideology of family. Nearly thirty years of archaeological research illustrated that collapse and regeneration characterized much of the premodern Khmer historical trajectory (Stark 2006b). Like other Old World examples (Baines and Yoffee 1998, 2000; but see Blackmore 2016 and Inomata 2016, 41–3), what made Angkor the Khmer civilization was a shared cultural web that revolved around an Indic ideology of gods and a god-king, a political structure that privileged a nobility with a priestly elite, and a reliance on patronage to link and fuel social relations.

Until recently, historiographic approaches characterized Angkorian research, and inscriptional (rather than archaeological) sources dominated, drawing from slightly more than 1,300 published Khmer and Sanskrit inscriptions. This corpus is modest in contrast to sources available for Mesopotamia: for example, Richardson (2017, 3) analyses 2,800 Old Babylonian texts, and at least 22,000 tablets from Kanesh alone deal with Old Assyrian trade (N. Yoffee, p.c., 2018). Even in the neighbouring and contemporary Chola state of South India, Talbot (1991) used 895 twelfth- to fourteenth-century inscriptions from Andhra Pradesh, and Stein (1960) drew from 1,000 inscriptions from the single shrine of Srī Vēnkatēśvara (Triupati Chittoor district, Andhra Pradesh state). Yet previous epigraphic research on the Angkorian documents has produced a complete dynastic history, and insights on topics from land tenure to slavery (e.g., Coedès 1968; Mabbett 1983; Stern 1951), and more recent research on of *c*. 628 Angkorian period Khmer and Sanskrit language inscriptions (Lustig 2009, 129) offers insights on economy, social status, and power (e.g., Lowman 2016; Lustig 2011; Lustig et al. 2007; Lustig & Lustig 2013). Archaeologists working at Angkor are now documenting an equally compelling and complementary history of Angkor: of both protracted and episodic urban landscape collapse, of substantial continued settlement across the Angkorian plain after the court moved south, and peaks and valleys in the nature of centralized control through time.

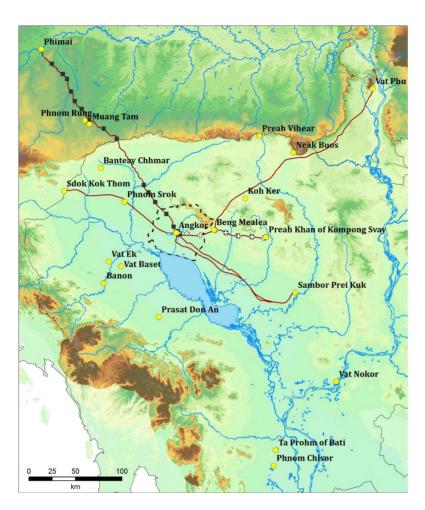
#### Context: place, structure and scale

The Angkorian state housed most of its ninth- to fifteenth-century capitals on the Tonle Sap plain in northwestern Cambodia (Fig. 9.2) (Evans et al. 2007, 2013; Fletcher et al. 2008). Documentary sources shape current understandings of Angkorian state, in the form of local inscriptions (in Khmer and Sanskrit) and Chinese dynastic histories (Coedès 1968). Dedicatory stelae in sandstone were lodged in temple doorways to mark royal and/or elite donations and record dynastic history, but these sources also inform on Angkorian economy, sociopolitical organization, ecology, and territory (e.g., Jacob 1993; Lustig 2011; Lustig et al. 2007; Lustig & Lustig 2013; Mabbett 1978; Wyatt 2001). Art and architecture (and particularly bas-reliefs, of which the Angkor Wat temple's Third Gallery alone has more than 1200 sq. m) offer insights on particular historical events and offer stylistic strategies for chronology-building. Chinese sources (both tribute-trade records and a thirteenth-century Chinese account) offer information on trade goods and Angkorian urban live. Middle Khmer (fifteenth-eighteenth century) chbap texts, a genre of moral didactic poetry, also offer insights on Angkorian culture (Ebihara 1984). Archaeological data, late to the Angkorian scholarship table for largely geopolitical reasons, are key to understanding Angkor's emergence and political collapse, and complement current understandings of this polity.

Angkor and its preceding states emerged in the Lower Mekong river basin (in current-day Cambodia, southern Vietnam, northeast Thailand, and southern



**Figure 9.2.** Greater Angkor region (NW Cambodia) (courtesy of Christophe Pottier, Damian Evans, Pelle Wijker, Sarah Klassen and Kong Leaksmy).



**Figure 9.3.** *Mapped roads in the Angkorian network (courtesy of Mitch Hendrickson).* 

Laos) as pulses in a 2,000-year period of state formation, collapse and regeneration. The Lower Mekong basin comprises a single analytical unit through its topography of alluvial lowlands and fringing mountain ranges that restrict settlement and through its hydrology (the Mekong and its tributaries, including the Mun and Chi River valleys on the Khorat Plateau) that facilitated movement from one end of the basin to the other. Chinese documentary accounts and archaeological research describes first millennium AD states, tinged with Indic traditions, that arose in this region. The Angkorian period, conventionally begun in AD 802, marked the Lower Mekong's third iteration of urbanism and coalesced statehood.

The Angkorian state was a largely rural world, but its political life revolved around a megalopolis that depended on rural largesse (or at least compliance) for economic support. Angkorian scholarship conventionally distinguishes between the urban epicentre (Angkor or Greater Angkor), periurban/suburban areas surrounding the city, and a provincial and largely rural hinterland that held multiple secondary centres, each marked by a state temple whose structure and iconography closely mirrored contemporary temples in the capital. Administrative divisions included the *pramān* (Khmer)/*visaya* (Sanskrit) (province) or *deśa* (region or district) in Sanskrit, and *srok* (Lewitz 1967, 405–7), and *phum* or *grama* (village/hamlet). Meanings of these administrative units may have shifted from the earlier to the later Angkorian periods (Sahai 1977b, 36–7), and the geographic reach of the Khmer state varied by ruler, and influence, rather than direct control, likely characterized provincial relations with the centre.

Angkor and its secondary centres experienced a high degree of network integration and interdependence in what some have called a form of 'system stability' for much of the ninth through thirteenth centuries (Hall 2017, 191; Hendrickson 2012). The relative degree of localized power in provincial centres varied considerably, from provincial capitals that were resource extraction zones to others like Phimai that were sources of dynastic lineages and exercised more independence. Beyond these provincial centres were more distant areas which sent missions to the Song Chinese court; they may have been viewed as outlying districts (e.g., Wyatt 2001, 13).

Roads and waterways wove rural and urban communities into Angkor's social cartography, and mediated social relations between the capital and its provinces (see Ando 2017, 129 for Roman parallel). Formal Angkorian roads connected the capital to its secondary centres (Fig. 9.3), facilitating tax collection (as did the French colonial constructions some centuries later: Edwards 2006, 427-32) and contact between the capital and its hinterland. Jayavarman VII was the last Angkorian king to inscribe the state through large public works projects within and beyond his capital. He founded and supported monastic universities at several state temples to instruct young elites in Buddhist religion and medicine (e.g., Chhem 2007). He upgraded extant roads with bridges and resthouses to facilitate regular movement between provincial and urban spaces, sponsored annual Buddhist festivals that required rural-urban pilgrimage, and patronized temples in the four corners of his realm. That Khmers envisioned themselves as part of a polity was clear by the tenth century, when an inscription used the term 'world of Kambu' (Lowman 2016, 96-8). The transportation systems made this state legible to its inhabitants and neighbours in a characteristic state strategy that ensured some modicum of control (Scott 2017).

Social and political integration throughout the Angkorian state was generally fragile, despite the

resilience of the Angkorian capital and its surrounding provinces. Angkor's grand epicentre (called variously Greater Angkor or Angkor) required huge labour inputs for its construction and maintenance, but was rarely hegemonic in economic or political (Lustig 2009, 180). Figure 9.4 uses 683 Angkorian period texts to illustrate the kind of foundation inscription, found in religious structures, relative to the structure's straight-line distance from Greater Angkor. Royal inscriptions (blue) include the ruler's name; rājakāryya inscriptions (green) represent royal service inspectors who administered 'royal service', which included state taxation and/or corvée labour (Sahai 1977a, 124-9). As extensions of the state, these inscriptions are another indicator of the state's economic and political reach. The (red) non-royal inscriptions were made by Angkorian elites. This data set includes almost the same number of royal as non-royal texts, and suggests that effective royal power may have been concentrated within 50 km of the capital: and perhaps even closer (see also Lustig 2011, 42–3).

Two periods in Angkorian history (the early tenth century and later twelfth century) are distinctive for their high numbers of inscriptions, suggesting competition between the ruler and powerful elite families to consolidate power through by establishing religious foundations with non-royal inscriptions,

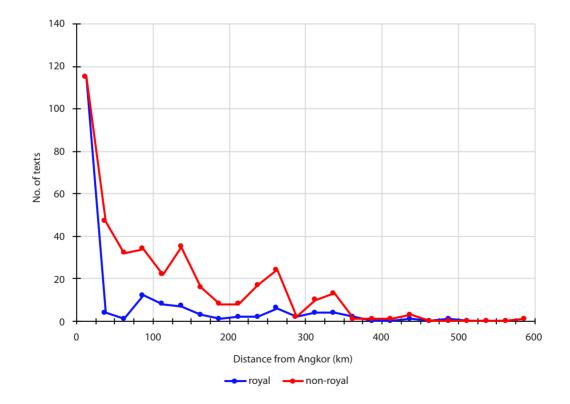


Figure 9.4. Angkorian-period inscriptional data: royal vs. non-royal (courtesy of Eileen and Terry Lustig).

thereby challenging centralized royal power (Lustig et al. 2007, 16, 22; Vickery 1985). Angkorian rulers used patronage to forge alliances with the landed elite throughout the historical trajectory, culminating in Jayavarman VII's embrace of Buddhism as a state religion to unify his state. His attempts to make twelfth- to early thirteenth-century Angkor legible – by adopting a new state religion, undertaking monumental construction programmes, and implementing new civic responsibilities – may well have led to the gradual disintegration of the Angkorian state.

As premodern Southeast Asia's largest inland agrarian state, Angkor's location on the Tonle Sap plain was ideal for a complex mix of rice farming strategies that Khmers employed until the mid-twentieth century AD to make Cambodia a rice granary for the region: at least three kinds of rice (rain-fed, recession, floating) for year-round cultivation. No convincing evidence exists for intensified agricultural strategies (like canal-fed irrigation systems) in Angkor's capital, although its plentiful ponds and massive reservoirs (baray) provided drinking water during annual monsoon season droughts. The thirteenth-century Chinese visitor Zhou Daguan described daily markets in the capital (Zhou 2007, 70–1). No formal market areas have been identified archaeologically, although Bayon temple bas-reliefs illustrate markets and their vendors. Angkorian records, moreover, contain no references to a common currency (Lustig 2009, 172), although Angkorian Khmers valued Chinese goods (from porcelains, lacquerwares and silks to copper dishes and glass balls [Zhou 2007, 71]) and may have colonized several provinces to improve their access to trade routes.

# The structure of sovereignty: Angkorian landscapes

Scholars since Henri Parmentier (1916) have recognized that the Angkorian polity's geographic boundaries varied through time. At its peak, the 'Khmer Empire' covered the entire Cambodian lowlands, much of central and all of NE Thailand and southern Laos (Hendrickson 2010, Figure 5; 2012; Figure 6.3). Its maximal scale, in the late twelfth – early thirteenth centuries, exceeded c. 70,000 sq. km, during the reign of Jayavarman VII. Too little archaeological research has been done to estimate the population of the Angkorian state, but Greater Angkor Project work on the capital has proposed a carrying capacity of up to 750,000 people at its peak (Fletcher et al. 2015, 1398). Scholars are still working to chart the geographic extent of its urban epicentre that is glossed as Greater Angkor (Fig. 9.2). Inspection of this map indicates the arbitrariness of two edges (NW, SE), and patterning might continue in both directions. Two areas beyond this urban core also housed capitals briefly and populations for longer periods: an area on Phnom Kulen known as Mahendraparvata that served as a ninthcentury royal palace, and the site Koh Ker (120 km northeast of the capital), where tenth-century kings Jayavarman IV and Harshavarman II ruled for years; Harshavarman II had only three years on the throne. As the polity's undisputed primate centre, Greater Angkor housed three capitals through time (Groslier 1979): (1) ninth-century Hariharâlaya, which Jayavarman II founded and two successive rulers inhabited; (2) Yaśodhapura, which Yasovarman I established in AD 889 with Phnom Bakheng as his new capital and which remained important until the city's fifteenthcentury collapse; and (3) Angkor Thom, the crown jewel of Jayavarman VII's reign that he consolidated after his ascension to power in AD 1181.

Khmer was likely the prevailing ethnicity in the capital and throughout the Cambodian lowlands, but other ethnic groups also inhabited Angkorian space. Mon, Karen, Pearic- and Kuay-speaking peoples and Kuay inhabited uplands that fringed the Khmer-speaking plains (Pryce et al. 2014; Tambiah 1976, 79; Wyatt 2001, 4–7). A Khmer cultural package – architectural, iconographic, and artefactual – united these peoples. So did myriad dyads of patron-client relationships which, in aggregate, produced the dense social web that inhabitants recognized as the land of Kambuja [*kamvujadeśa*] (Coedes and Dupont 1943, 109) or the land of the Khmer (K. 1158 Sab Bak inscription; Chirapat 1990, 12).

Khmers generally did not have a formalized cartographic tradition until the mid-nineteenth century (Lewitz 1967, 367), and the Angkorian state lacked precise geographical edges for most of its 600-year long existence (Lowman 2016, 103, 109). By the tenth century AD, what Smith (2015) describes as 'state assemblages' filled the Angkorian polity: architecture and accoutrements in village-level shrines (*prasats*), at state-sponsored hermitages (Estève and Soutif 2010–2011), and in temples at secondary centres. Four sanctuaries (to the north, west, and south of the capital) were founded to house the sacred linga (*Sūryavarmeśvara*) during the early years of the reign of eleventh-century Suryavarman I (du Bourg 1970, 305–6; Vickery 1985, 239–40, Footnote 60).

By the twelfth century, at least 40 brief Sanskrit and Khmer inscriptions, carved doorframes and pillars of the Bayon temple list divinities associated with localities across the Angkorian polity, from the capital itself to points south in the Mekong Delta (like Phnom Chisor), west into the Khorat Plateau, and east along the Mekong River (Maxwell 2007, 128–30). These gods required royal patronage and pilgrimages on a prescribed cycle (Groslier 1973, 369). Continuous inputs of labour and resources from local communities produced and sustained sovereign spaces (following Payne 2017, 181–4; Smith 2003). The engine that fuelled this process was power as patronage, and intricate social webs of relationship that bound elites together across the political landscape that was Angkor.

# The structure of sovereignty: Angkorian power and patronage

Power - its manifestations and its origins - is a recurrent theme in the study of state societies (e.g., Ando and Richardson 2017; Mann 2008; Richardson 2012; Routledge 2013; Yoffee 2005, 22–41), and has occupied Southeast Asian anthropologists (Durrenberger 1996; Ebihara 1984; Geertz 1980; Hanks 1972; Leach 1964; O'Connor 1997; Tambiah 1976, 1985) and historians (e.g., Anderson 1972; Aung-Thwin 1991; O'Connor 1996; Reid 1988; Reynold 1995; von Heine-Geldern 1941; Wolters 1999) for a very long time. Three key elements undergird such understandings of the Indicinfluenced states: (1) power accrued differentially to individuals, giving some individuals moral superiority over others; (2) power was not absolute; and (3) authority was contingent. Leaders (or 'men of prowess' following Wolters 1999) cajoled more than they coerced, and used display as much as military might to legitimize their rule. Their polities had centrifugalizing tendencies, and boundaries shifted with the fortunes of neighbouring polities. Acquiring labour, rather than land, was the impetus for most military action (Andaya 1992; O'Connor 1997; Reid 1988).

Archaeologists working outside Southeast Asia have embraced Southeast Asian models of power that link leadership with the sacred, and emphasize transformative qualities of public display and ritual (following Demarest 1992), and increasingly challenge Geertz' (1980) model of ritual display as weak state power. Their explorations of ways in which public and ritual performance in states (e.g., Inomata and Coben 2006; Ristvet 2015; Smith 2003, 2015) have revised the model, but few Southeast Asian archaeologists studying the region's Classical states cite this literature. Power in Angkorian power was an immanent quality that rulers possessed or lost, depending on both fate (and spirits) and charisma. Khmers today recognize this 'transcendent sovereignty' (Lowman 2016, 99) as 'omnaich (influence or authority over others), and it is required for effective leaders (neak thom or neak mean omnaich) to remain in power (Jacobsen and Stuart-Fox 2013; Ledgerwood and Vijghen 2002). Charisma generates networks of social relationships called *khsae* (strings, connections); *'omnaich* does more work for Cambodian leaders than does *komlang* (forced compliance). This is not to suggest historical stasis: fourteenth- to fifteenth-century Khmers replaced their Hindu/Buddhist pluralistic religious systems with a full-fledged embrace of Theravada Buddhism, and the earliest documented written reference to *omnaich* appears in eighteenth-century Middle Khmer inscriptions (Pou 1974, 187). Yet Old Khmer inscriptions and bas relief imagery suggest more continuity than rupture in Khmer cultural traditions.

#### Patronage

Angkorian rulers dealt with factions, ethnic groups, and religious leaders through elaborate structures of patronage, from the court to the countryside. Historians have long suggested that patron-client relations characterized Angkorian rulers in a kind of patrimonial bureaucracy (e.g., Mabbett 1978; Wolters 1999, 29–31) whose roots extend into the first centuries AD and resonates in cultures across the region (e.g., Davis 1973; Jacobsen and Stuart Fox 2013; Scott 1972). Patronage could, however, also be an institutional vulnerability. This was particularly true in the capital, and during times of severe environmental and political stress. Identifying who comprised Angkorian rulers' 'clientele' is the first step to understanding how the system worked within an Indic-tinged cultural tradition.

Angkorian rulers were *primus inter pares* (fewer than a third followed a parent or sibling to the throne [de Bernon 1997, 346]) whose elite royal entourages were fundamental to effect rule.<sup>1</sup> At the centre of the entourage was a hereditary priestly class (priests/ teachers/ministers/counsellors) who instructed young royalty, provided ritual support for state-sponsored Vaisnavite and Saivite ritual state ceremonies, and founded religious establishments like hermitages (*asramas*). Some priestly elite were also royal descendants: as one example, Yajñavarāha (Jayavarman V's first guru) and his brother established the temple of Banteay Srei. Figure 9.5 illustrates one portion of a Banteay Srei inscription.

Also in the entourage was a range of nobility, including the ruler's extended royal families (*préas vongsa*) & officials related by marriage. We know several titles for chief ministers (or *mratān khloñ*), including the prime minister, the minister of justice, the minister of the palace and finances, the minister of transport by land and for war, and the minister of waterborne transport. Additional counselors/advisors safeguarded the royal foundations, coronated new rulers, and served as envoys with neighbouring polities. Below this 'inner circle' was an outer-inner circle of junior officials (du Bourg 1970, 294 et passim; Sahai 1978, 30-32; Zhou 2007, 51).

**Figure 9.5.** Banteay Srei inscription, a tenth-century temple constructed by the guru of Prince Jayavarman V (courtesy of Charmaine Wong).

Just beyond this core elite was the greater network, including provincial elite. Village-level administration was headed by a village chief or headman (*khloñ srok*), who was responsible for collecting revenue, managing economic affairs of temples (which needed both supplies and labour). A council of village elders (*grāma-vṛdda*) also adjudicated disputes, and these villages may have been aggregated into districts. At least two categories of mostly male civil servants operated at the local level: (1) the *khloñ víṣaya*, who managed property and represented central government in all villages except those that provided certain commodity directly to the state; and (2) the *tamrvāc*, inspectors were also in charge of various administrative affairs

for central government (Lustig and Lustig 2013, 67; Sahai 1977b, 45-47). Figure 9.6 presents a schematic hierarchy of the Khmer sociopolitical world.

Most Angkorian Khmers, however were not elites. Commoners and slaves built and maintained the state: farmers and artisans, and other workers contributed corvée labour, occasional military service, and tribute as part of their daily lives. Most did not own land; many likely worked on estates of elite landholders; and almost none their names are not recorded. Dedicatory inscriptions in temple foundations concentrate instead on the many varieties of slaves (*khñum* or *khñom*) who were donated to temples for royal service. The term *khñum* (or *khñom*) encompasses many roles: indentured servants,

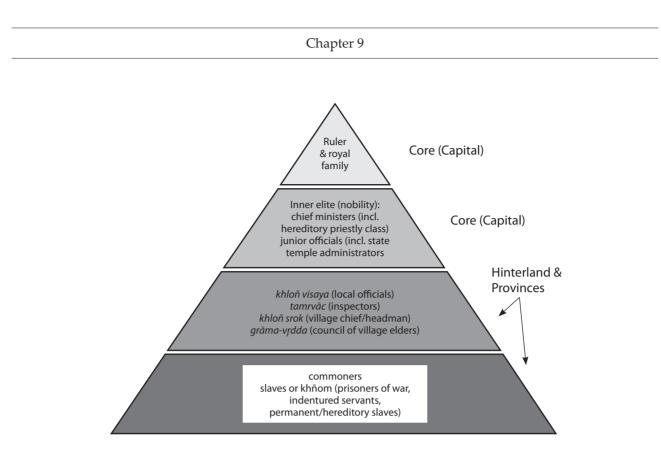


Figure 9.6. Angkorian hierarchy, derived from epigraphic sources (supplied by the author).

permanent slaves (some from ethnic minorities, and others descended from criminals), prisoner of war slaves, and 'temple slaves' who worked half-time for temples, and may have been peasant farmers (e.g., Lustig and Lustig 2013; Mabbett 1983, 44–54; Sahai 2012, 233–9).

Angkorian Khmers, from high nobility to provincial commoner, viewed their ruler both their universal sovereign (*cakravartin*, Sanskrit) and the mouthpiece of *dharma* (Mabbett 1978, 41). Like contemporary rulers elsewhere in mainland Southeast Asia, the Khmer monarch as ultimate father and benefactor, was responsible for the kingdom's welfare (Tambiah 1976, 30–1). Khmer rulers were mortal, not divine: they had sovereignty of the earth, while the gods ruled the universe or cosmos. Brahman elite, working with their rulers, made offerings to the gods and managed the royal cult of the *kamraten jagat ta rāja* and its sacred objects to ensure the future of their kingdom. The Khmer ruler was the most sacred of humans, but only became divine upon his death (Pou 1998).

All Angkorian rulers were responsible for the welfare of their subjects, which included making freshwater available year-round. Suryavarman II, for example, was metaphorically portrayed as the god Indra on the walls of Angkor Wat (Figure 9.7). Angkorian rulers were even responsible for the rain. Upon ascension to the throne, each ruler sponsored the construction of a giant reservoir (*baray*) whose waters simultaneously reflected the Indic universe and buffered the capital

and the neglected (Coedès 1932, 99). Three of these hermitages were established close to the capital and flanking the baray: one each for followers of Siva, Vișnu, and Buddha. The twelfth- to thirteenth-century ruler Jayavarman VII took this responsibility just as seriously, and he founded 102 hospitals across his kingdom and provisioned them with medicine (e.g., Chhem 2007, 106–14). Rulers were broadly responsible to commoners, and (from the late thirteenth century, at least) also engaged with them face-to-face to adjudicate disputes (Zhou 2007, 83–4), a practice that continued into the sixteenth century (Groslier 1958, 155). Subjects, in turn, were responsible to their ruler. But how did this work? At the highest level, the Angkorian monarch was a client to his deity patrons: the gods required regular rituals, care, and capital

against periodic droughts. Angkorian rulers had several

physical means of establishing their political control

(Stern 1951). In AD 889 or 890, Yasovarman I commis-

sioned the construction of 100 asramas (hermitages)

throughout his domain to house, feed, and care for

priests and needy commoners: the aged, the infirm,

in their spirit homes (in the form of statuary) lodged in massive state temples. The twelfth-century AD Ta Prohm temple, for example, was the centre for a two-week annual Bhagavatī spring festival, in which processions made offerings to three *guru* and 1000 divinities, 619 of which were housed at Ta Prohm (Coedes 1906, 77–8). Such temple complexes housed



Figure 9.7. Image of Sūryavarman II from South gallery of Angkor Wat (courtesy of Marie L. A. Sioco).

huge numbers of support staff (from religious specialists to dance troops, musicians, and gardeners), goods, and cultivable land for fields and temple gardens. By the late twelfth and early thirteenth centuries, inscriptions list 12-14,000 residents at Preah Khan and Ta Prohm. Rulers were the temple's patrons, and hereditary Brahman specialists in their court directed temple and public ceremonies (Mabbett 1969, 204–6]).

Angkorian rulers depended on their entourage of royal elite in the capital, a dense web of social relations that they built and maintained assiduously. They married their sons and daughters to provincial elites (who in turn sent daughters to the court to serve as concubines). Kings made land-grants to elites in the capital, who founded villages of serfs to farm agricultural lands whose products ultimately served the state. Kings granted titles and ceremonial positions in the court (even sinecures), like fan-bearing, barber, and wardrobe keeper (Mabbett 1978, 28; Sahai 1978; Wolters 1973, 24). In turn, the ruler required loyalty from his subjects, occasionally through public performance.

The east gate of Phimeanakas, in Angkor Thom, includes an inscription that records an oath-swearing by 4,000 members of the *tamrvāc* corps from 200 different districts in service of their king Suryavarman I in AD 1011. Violation of their allegiance was punishable by rebirth in thirty-two hells (du Bourg 1970, 299–300; Sahai 1978, 25–6; Vickery 1985). Suryavarman II also memorialized oath-taking in the southern gallery of mid-twelfth-century Angkor Wat temple (Figure 9.8). Here we find eight lists of oath-takers with *c*. 400 names, and one scene of the king and his entourage atop Mount Sivapada, as his followers swear an oath to their sovereign (Brown 2004, 359–63).

Three Angkorian rulers were responsible for the polity's greatest pulses of territorial expansion, and sponsored a disproportionate amount of monumental construction. The first, Suryavarman I (AD 1002–1049), first consolidated the Angkorian polity from the Mekong Delta to southern Laos. A second, Suryavarman II (AD 1113–1150), whose ancestry from NE Thailand represented a dynastic shift to what some scholars have called the Mahīdharapura dynasty (e.g., Briggs 1951, 178–80). He reunited the empire, bringing what is now central and NE Thailand even more firmly under Angkorian control and expanded eastward toward Champa (in central Vietnam). Suryavarman II not only constructed Angkor Wat; he consolidated royal authority at the expense of royal officials through pageantry and monumentalism (like the oath-swearing ceremonies mentioned previously).

Jayavarman VII (AD 1180–1218) fashioned the deepest local entourage and the broadest bonds of patronage ever experienced in Angkor by formalizing transportation systems to facilitate state-directed movement: from the capital to provincial areas to battle outside invaders (Cham, Dai Viet), to quell internal rebellions (Hendrickson 2010, 485, Table 1), and to knit the polity



**Figure 9.8.** Oath-swearing to Sūryavarman II on Mount Sivapada, southern Gallery of Angkor Wat (courtesy of Noel Tan).

more tightly into an integrated whole. All Angkorian Khmers relied on the major river networks (Tonle Sap and Mekong) to move people and goods through parts of the kingdom. But Jayavarman VII also renovated, consolidated and – where necessary – constructed new road segments that radiated out from Angkor (Hendrickson 2010, 2011, 2012). These renovated routes facilitated communication between the centre and its periphery, which encouraged closer relations between the king and his provincial clients. Funnelling goods and services to clients (and requiring their presence and tribute in the capital) was made easier, so was stripping provinces of political and economic autonomy.

Jayavarman VII's walled city of Angkor Thom (9 sq. km) enabled him to support a super-entourage: its walls offered protection against potential outsiders, and its interior area held abundant public space, replete with viewing terraces for ritual and pageantry. One north-south swath of open space from the Bayon to the North Gate was ideal for such activity: the Terraces of the Elephants and of the Leper King face east into an open area free of grid lines that could have accommodated either onlookers, performers, or both. Large and small temples housed deities who required daily and seasonal care: sacrifices, baths, food and floral offerings, song, and dance. Rituals performed on the Bayon's upper platform were clearly visible to an audience surrounding the temple. Pageantry involved in annual pilgrimages, like that in public processions, reproduced the Angkorian polity and celebrated the ruler under whose patronage these displays took place (Groslier 1973; Stark 2015).

Founding multiple state temples in and near Angkor Thom, all to the elite cult of Mahāyana Buddhism (devoted to the *Lokeśvara Bodhisattva*), enlarged the notion of state. Jayavarman's capital was a centripetal force that pulled clients inward annually to collectively celebrate the state. At the capital's centre was the Bayon temple, whose 439 niches were designed to hold individual statues. Scholars suspect these statues were *Jayabuddhamahānātha* images (statues of the Bodhisattva *Avalokiteśvara*), distributed by the king at least 23 provincial centres named in inscriptions; their caretakers were required to bring the images to Angkor for annual consecration (Coedès 1941, 264–6).

Patronage, bound up in an Indic ideology of rulership, was thus key to cohering the Angkorian state: but it was insufficient without force. Successful Angkorian rulers forged compliance through a combination of patronage and public display of might, and who negotiated near-constant tensions within and beyond the court. Only a few outright rebellions were recorded in stone (though one occurred in Malyang, the rice basket of Battambang). Angkor as a state, however, was commonly fragile. Within 150 years of its founding on the banks of the Tonle Sap, King Jayavarman IV felt it necessary to relocate the capital c. 80 km to the northeast, in Koh Ker (Ghok Gargyar), for 16 years before the next Angkorian ruler (Rājendravarman) returned the seat of royal power to Angkor. Managing Angkor required the king and his entourage to engage in continuous adjustments and accommodations within the capital and with provincial centres to the west and south.

Few rulers succeeded in their militaristic expansionist efforts. Suryavarman I was Angkor's first expansionist king, and his military expeditions expanded the polity into modern-day Thailand. Other clashes, like Sūryavarman II's 13-year war with both Dai Viet and Champa, ended badly. Other rulers were decidedly weaker (or in Dillehay's and Wernke's terminology, vulnerable). One, Tribhuvanādtavavarman, ruled the Angkorian capital of Yaśodharapura until neighbouring Cham forces sacked the city and killed him in AD 1177. Four years of anarchy followed, and then the last strong Angkorian ruler, Jayavarman VII assumed the throne. Approximately sixteen rulers after Jayavarman VII's death in AD 1220 presided over a slowly disintegrating Angkorian state. The late thirteenth-century Chinese emissary Zhou Daguan (2007, 79) listed 90 'prefectures' in the Angkorian state, suggesting post-mortem continuity (with political fragmentation) in the state that Jayavarman VII had built.

Webs of patronage endured for centuries after Angkor collapsed, and into the Middle Khmer period. By the sixteenth century, all free Cambodians 'had to be registered as clients of a particular patron who might be an official with jurisdiction over a certain region, a member of royalty, or a person with local prestige and power' (Ebihara 1984, 288). What collapsed in mid-fifteenth-century Cambodia was a hyper-urban hydraulic capital and a god-kingship, sustained through webs of patronage. What continued, through settlement shifts and a political movement south, was the cultural institution of patronage and understanding of an Indic king: in slightly modified forms.

#### Collapse, resilience and patronage

khlaeň hoer tpit khyal' nây thkoeň tpit bal raksa oy sukh draby gaň' tpit srï ceh samcai duk man phdah sranuk tpit bhariyâ já

The kite flies away thanks to the wind

- The officer is successful if his soldiers surround him safely.
- The goods are well guarded if the woman is economical The entire house is happy if the wife is endowed with virtue.

*Cpâp Rajaneti or Cpàp' Brah Râjasambhâr* (Pou-Lewitz & Jenner 1978, 370 [Khmer], 379 [Khmer transliteration], 387 [French translation]; see also Chandler 1984, 273))

Colleagues continue to debate the causes and timing of the Angkorian capital's collapse (e.g., Lucero et al. 2015; cf. Evans 2016, 172–3) in more detail than is

possible here. What matters, for the purpose of this volume, is that the Angkor-anchored political system (with its extraordinarily high demands for labour and resources) collapsed by the mid-fifteenth century AD. Our understanding of the environmental history surrounding collapse is coming into focus through the efforts of many colleagues (e.g., Buckley et al. 2010; Day et al. 2012; Penny et al. 2014, 2019). Droughts and floods are intrinsic to Monsoon Southeast Asia, but the intensity and length of both increased at a point when Angkorians reached the technological limits of their hydraulic engineering experiments: canals, embankments, and re-routed rivers modified their water sheds and demanded too much maintenance and repair. Not even the most charismatic ruler could persuade enough people to fix this system.

One might consider King Paramaraja's historically documented 'sack' of Angkor, allegedly in 1431, as the crowning blow. His forces burned Angkor Thom and took Angkorian literati and artists back to his ascendant capital of Ayutthaya (from Tambiah 1976, 132). Ayutthaya, once a Khmer-speaking city, was now on the rise (Baker 2003). Most scholars agree, however, that the same public works that made Angkor's twelfth-to thirteenth-century king (Jayavarman VII) so great may have stimulated the decline by overtaxing the polity's resources and bolstering local power networks that ultimately challenged political centralization (see also De Bernon 1997).

Documentary sources provide evidence used in the foregoing summary of Angkorian structure, scale and function, and underscore the essential value of epigraphic and external historical documents for interpreting the history of the Angkorian state. Angkorian research is perhaps unusual in its fundamental interdisciplinary nature: archaeologists read and talk with historians, and art historians read and debate ideas with archaeologists (e.g., Green 2007; Polkinghorne et al. 2013). Still, historiographical approaches dominate Angkor narratives, building on more than a century of primarily French scholarship and using a very small sample of Khmer and Sanskrit inscriptions (c. 9 per cent of those found in contemporary Chola India, for example [Lustig 2009, 129]). Problem-driven archaeological research (i.e., not conducted in conjunction with architectural conservation work) is still young in the Angkorian world, but progress has been made.

#### Fragility, resilience and regeneration

Examining fault lines and cleavage planes in Angkorian society requires a richer documentary record than is available; archaeological approaches ofer insights on both short-term fragility and long-term resilience. What

collapsed was the political and urban core for a political elite, whose labour-intensive state system crumbled under repeated droughts and floods that strained the capital's water management system (Buckley et al. 2010, 6750). As the elite network disintegrated, so did linkages between Angkor and its secondary centres of Koh Ker and Preah Khan of Kompong Svay where land-use around temples halted (Hall et al. 2016). State-sponsored activities, from monumental construction to water management, disappeared from the material record by the time Thai forces entered the gates of Angkor Thom in AD 1431. Perhaps most elites had moved south to the new capital of Longvek by then to participate in Southeast Asia's early modern maritime trade network. Analysis of airborne laser scanning (lidar)data from Longvek suggests it lacked the dispersion and population density that characterized ninth- to fifteenth-century Angkor, and may have housed little more than c. 50,000 inhabitants (Evans 2016, 172): less than a tenth Angkor's projected peak population.

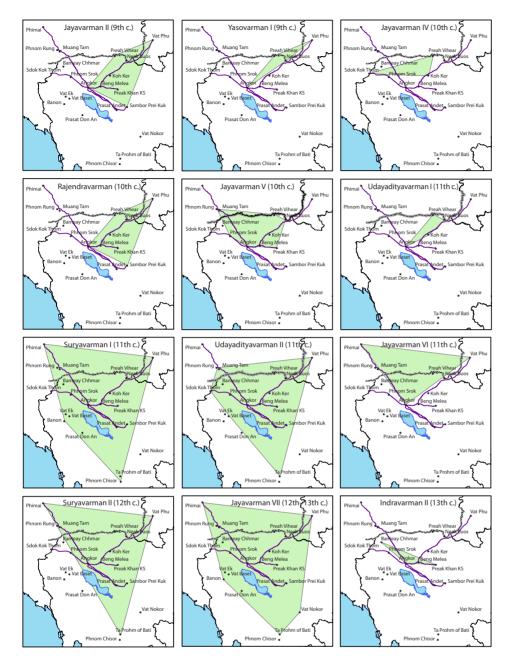
We increasingly suspect, however, what did not collapse at Angkor – or in fact, in most places throughout the Lower Mekong Basin – was the rural agrarian system of hamlets and small towns whose farmers and artisans continued to pursue their livelihoods: perhaps with less direct state intervention. Archaeological evidence exists for continued occupation across Greater Angkor, from the walled enclosures of Angkor Wat (Brotherson 2015; Penny et al. 2007, 391; Stark et al. 2015), Preah Khan (Penny et al. 2007, 391–2) and points eastward as far as Chau Srei Vibol (Penny et al. 2007, 391–3). Acknowledging the role of rural resilience as a counterbalance to urban fragility is not to suggest that rural-based bottom-up collective action provided checks on, and resistance to, top-down power (sensu Carballo 2013, 16). No empirical evidence supports such a model, whose roots in rational choice theory run counter to anthropological understandings of power in Southeast Asian cultures (Anderson 1972; Errington 1989, 5–9).

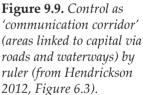
Traces of this post-Angkorian Buddhism are found across Greater Angkor (and clustered in Angkor Thom) as broad stone terraces that served as foundations for pagoda complexes built of wood and housing great Buddha images (Desbat 2009, 45; Penny et al. 2007, 391–3; Polkinghorne, in press). Some Khmers moved south to build a series of pagoda communities along the re-routed Siem Reap river (Vitou 2012). A sixteenth-century royal-sponsored renaissance brought the court briefly back to Angkor for 'restorative' programmes at temples across the core: at Angkor Wat, Preah Khan, Phnom Bakheng, and at several monuments within Angkor Thom (Polkinghorne et al. 2013, 597–600). Most non-elite Khmers, organized at the local level, never left Angkor.

Pan-Khmer beliefs drawn from both indigenous and Indic sources cohered populations into collectives, and patron-client relationships offered linkages. The Theravadā Buddhism that fifteenth- to eighteenth-century AD Khmers embraced after the 'collapse' of Angkor provided a different kind of social and political anchor at the local and state levels than characterized the Brahmanic-driven Angkorian period. Post-Angkorian populations throughout the Khmer polity reconfigured communities around Buddhist pagodas, as did populations in neighbouring Thailand and Burma/ Myanmar. Hierarchy still structured social relations, as the emergent Buddhist monastic order or sangha (with monks, nuns, and laypersons) drew from local sources to structure political and economic lives. Even as the *sangha* gained influence in subsequent centuries (e.g., Harris 2005, 44-5, 228), its organizational apex lay in the Khmer state.

Recent archaeological work supports a model of systemic resilience in the face of state collapse, as one point along a trajectory of collapse and regeneration whose earliest polity arose in the mid-first millennium AD (Stark 2006b). The Angkorian capital's slow but inexorable collapse spelled the end of a particular political regime: the kind of political collapse and cultural transition that may have characterized many ancient states (see Middleton 2017 for review). The demographic consequences of this process are currently under study, although archaeological research has already demonstrated that Angkorian 'collapse' was also not end of Angkor as an urban centre (e.g., Penny et al. 2007; Stark et al. 2015). How can we better understand the meaning of 'collapse' in the Angkorian example? What archaeological approaches strengthen the case that patronage mattered as much as prolonged drought? Basic archaeological research is needed on Angkor's scope, scale, and historical sequence. The urban epicentre called Greater Angkor reflects heritage management decisions, not archaeological boundaries (occupation continues beyond its 1000 sq. km area to the NW and SE). Angkorian land-use needs study across Greater Angkor, and temple catchments (identified in Hawken's [2013] dissertation) should be circumscribed.

Building chronologies of linkages between the capital and its peripheries is necessary, and Hall's (2017) research at Koh Ker and Preah Khan of Kampong Svay offers an ideal methodology. Almost nothing is known about previously identified provincial capitals (like in NE Thailand/Buriram and Surin) and in non-core areas that likely housed large Angkorian populations because of their agricultural productive





potential like the western Tonle Sap basin (especially Banteay Meanchey and Battambang) and the Mekong Delta [particularly Takeo, Prey Veng and Svay Rieng). Epigraphic accounts suggest that provincial Angkorian administrators likely funnelled agricultural produce and other goods from these areas to the core; it is also possible that Greater Angkor's growth was the product of eleventh- to twelfth-century emigration from provincial areas to the burgeoning capital (Mitch Hendrickson, p.c.). Developing occupational histories (through sediment coring or excavation) is critical to building a polity-wide history. Some commodities, like stoneware ceramics, were produced in multiple locations throughout the polity and distributed to smaller consumer populations (Grave et al. 2015). Others, like twelfth- to thirteenth-century Bayon style statuary, used Triassic sandstone which may have originated near the secondary Angkorian centre of Preah Khan of Kompong Svay (Carò & Douglas 2013).

Tracking the types and timing of commodity movement between the capital and its peripheries is also central to determining the physical extent of state control. Hendrickson's (2012) work on 'communication corridors' (i.e., the maximal area linked by state temples and transportation routes) illustrates the utility of this approach. By presenting 'communication corridors' by ruler, Figure 9.9 illustrates changing scales of political control through time. These corridors do not reflect the full Angkorian cultural reach at any given point in time; archaeologists find stonewares throughout the Lower Mekong that span the ninth- to fifteenth-century Angkorian period, and suggest continued use of state temples after their dedication for centuries.

In quantifying the total area included in each ruler's 'communication corridor' (except the one-year rule by Udayadityavarman from AD 1001–1002), Figure 9.10 suggests two interesting trends. One is that the first great kings of Angkor controlled very little territory relative to the eleventh- to thirteenth-century rulers. The fact that Jayavarman II, founder of Angkor, had at least eight wives whom hailed from ruling families of neighbouring polities to the south and east (Jacobsen 2008, 28–31), underscores the importance of linkages rather than control. The second is that centralized power at any size, transcended individual rulers but occurred in pulses that were interrupted by foreign invasion and political upheaval.

Lexicostatistical analysis of epigraphic terminology indicates that the Angkorian economy was not monetized (Lustig 2009), yet the evidence for sophisticated economic interactions within the polity and with China is growing. Current characterization studies that target iron and stoneware ceramic production (e.g., Hendrickson et al. 2017; Grave et al. 2015) are establishing baseline information for future comparative work. Developing distributional maps of Chinese 'tradewares' in the Angkorian capital, work now underway, will yield insights on about the relative importance of international trade at different points from the ninth to fifteenth centuries.

Angkorian rule was brittle, but Khmer civilization has been remarkably resilient across much of the Lower Mekong. Cultural practices and traditions that made ninth- to fifteenth-century people Khmer required detailed ritual knowledge, a shared language, and particular paraphernalia. Recent archaeological study of these materials deepens and extends knowledge of the Khmer polity that epigraphic data reported, and some Angkorian practices and beliefs, like kinship, remain structuring metaphors today. Angkorian archaeologists, perhaps like their Chinese colleagues (von Falkenhausen 1993), are constrained by a historiographical tradition that both enriches inquiry and stifles research. Finding archaeological proxies to study alliances has never been easy. Nor has talking sensibly about collective action and coercive enterprise, both of which require better control of the time-space systematics than is currently available.

Such discussions also demand more nuanced understandings of collective action that do not stem

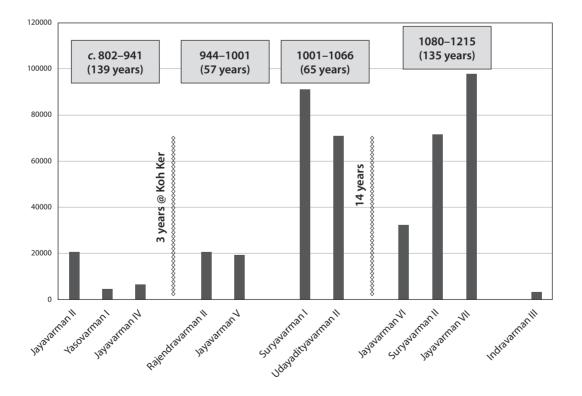


Figure 9.10. Total area under Angkorian 'control' from c. 802–1308 (supplied by the author).

from 'evolutionary' assumptions of self-interest, in which cooperation reflects more than competitive advantage (following Stanish 2013, 85). In providing an increasingly rich archaeological resouce, Angkorian archaeology offers a critical counter-balance to elite claims to power, control and stability. Local groups ignored in the documentary records may be visible in archaeological space, and cleavage planes that inscriptions mask may materialize in chronologies and settlement patterns. Deciphering these processes is fundamental to grasping how personal relations, writ large, built and sustained the Khmer civilization for two millennia. Such knowledge will also deepen our archaeological understandings of global change.

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### References

- Andaya, B. 1992. Political development between the sixteenth and eighteenth centuries. In *The Cambridge History* of Southeast Asia, Volume One (From Early Times to c. 1800), ed. N. Tarling, pp. 402-459. Cambridge (UK): Cambridge University Press.
- Anderson, B. O'G. 1972. The idea of power in Javanese culture. In *Culture and Politics in Indonesia*, ed. C. Holt. Ithaca (NY) & London (UK): Cornell University Press, 1-69.
- Ando, C. 2017. The ambitions of government: territoriality and infrastructural power in ancient Rome. In *Ancient*

States and Infrastructural Power: Europe, Asia, and America, eds. C. Ando & S. Richardson. Philadelphia (PA): University of Pennsylvania Press, 115-148.

- Ando, C. 2017. Introduction: states and state power in antiquity. In Ancient States and Infrastructural Power: Europe, Asia, and America, eds. C. Ando & S. Richardson. Philadelphia (PA): University of Pennsylvania Press, 1-16.
- Ando, C. & S. Richardson (eds.), 2017. Ancient States and Infrastructural Power: Europe, Asia and America. Philadelphia (PA): University of Pennsylvania Press.
- Aung-Thwin, M. 1991. Spirals in early Southeast Asian and Burmese history. *Journal of Interdisciplinary History* 21, 575-602.
- Baines, J. & N. Yoffee. 2000. Order, legitimacy and wealth in Ancient Egypt and Mesopotamia. In Archaic States, eds. G. Feinman & J. Marcus. Santa Fe (NM): School of American Research Press, 199-260.
- Baines, J. & N. Yoffee. 2000. Order, legitimacy and wealth: setting the terms. In Order, Legitimacy and Wealth in Ancient States: New Directions in Archaeology, eds. J. Richards & M. Van Buren. Cambridge (UK): Cambridge University Press, 13-17.
- Baker, C. 2003. Ayutthaya rising: from land or sea? *Journal* of Southeast Asian Studies 34, 41-62.
- Blackmore, C. 2016. Ancient states and ordinary people: a feminist re-imagining of ancient Maya power and the everyday. *Critique of Anthropology* 36, 103-21.
- Brotherson, D. 2015. The fortification of Angkor Wat. *Antiquity* 89 348, 1456-72.
- Brown, R. 2004. Ritual and image at Angkor Wat. in *Images in Asian Religions: Texts and Contexts*, eds. P. Granoff & K. Shinohara. Vancouver (BC, Canada): UBC Press, 350-68.
- Buckley, B. M., K. J. Anchukaitis, D. Penny, R. Fletcher, E. R. Cook, M. Sano, L. C. Nam, A. Wichiendeeo, T. T. Minh, & T. M. Hong. 2010. Climate as a contributing factor in the demise of Angkor, Cambodia. *Proceedings of the National Academy of Sciences* 107, 6748-52.
- Butzer, K. W. 2012. Collapse, environment, and society. *Proceedings of the National Academy of Sciences* 109(1), 3632-39.
- Carballo, D. M. 2013. Cultural and evolutionary dynamics of cooperation in archaeological perspective, in *Cooperation and Collective Action: Archaeological Perspectives*, ed. D. M. Carballo. Boulder: University Press of Colorado, 3-33.
- Carò, F. & J. G. Douglas. 2013. Nature and provenance of the sandstone used for Bayon style sculptures produced during the reign of Jayavarman VII. *Journal of Archaeological Science* 40, 723-34.
- Chandler, D. P. 1984. Normative poems (*chbap*) and precolonial Cambodian society. *Journal of Southeast Asian Studies* 15, 271-9.
- Chhem, R. 2007. La médecine au service du pouvoir angkorien: Universités monastiques, transmission du savoir et formation médicale sous le règne de Jayavarman VII (1181–1220 AD). *Canadian Journal of Buddhist Studies* 3, 95-124.
- Chiripat, P. 1990. The Sab Bāk inscription: evidence of an early Vajrayana Buddhist presence in Thailand. *Journal* of the Siam Society 78, 10-14.

- Coedès, G. 1906. La stèle de Ta-Prohm. Bulletin de l'École Française d'Extrême Orient 6, 44-86.
- Coedès, G. 1932. IV. Etudes cambodgiennes. XXX, A la recherche du Yaçodharaçrama. *Bulletin de l'École Fran-çaise d'Extrême Orient* 32, 84-112.
- Coedès, G. 1941. IV. La stèle de Práh Khan d'Ankor. Bulletin de l'École Française d'Extrême Orient 41, 255-302.
- Coedès, G. 1968. *The Indianized States of Southeast Asia* (ed. W. F. Vella; transl S. B. Cowing). Honolulu: East-West Center Press.
- Coedès, G. & P. Dupont. 1943. Les stèles de Sdök Kăk Thom Phnom Sandak et Práah Vihār. *Bulletin de l'École Française d'Extrême Orient* 43, 56-154.
- Davis, W. G. 1973. Social Relations in a Philippine Market: Self-Interest and Subjectivity. Berkeley: University of California Press.
- Day, M. B., D. A. Hodell, M. Brenner, H. J. Chapman, J. H. Curtis, W. F. Kenny, A. L. Kolata, & L. C. Peterson. 2012. Paleoenvironmental history of the West Baray, Angkor (Cambodia). *Proceedings of the National Academy* of Sciences 109, 1046-51.
- De Bernon, O. 1997. Note sur l'hyrdaulique théocratique angkorienne. *Bulletin de l'Ecole française d'Extrême-Orient* 84, 340-348.
- Demarest, A. A. 1992. Ideology in ancient Maya cultural evolution: the dynamics of galactic polities. In *Ideology* and Pre-Columbian Civilizations, eds. A. A. Demarest & G. W. Conrad, pp. 137-157. Albuquerque (NM): University of New Mexico Press.
- Du Bourg, H. de Mestier. 1970. La première moitié du XIe siècle au Cambodge: Suryavarman Ier, sa vie et quelques aspects des institutions à son époque. *Journal Asiatique* 258, 281-314.
- Durrenberger, E. P. 1996. The power of culture and the culture of states in Thailand. In *State Power and Culture in Thailand*, ed. E. P. Durrenberger. Monograph 44. Yale Southeast Asia Studies, New Haven, 1-21.
- Ebihara, M. 1984. Societal organization in sixteenth and seventeenth century Cambodia. *Journal of Southeast Asian Studies* 15, 280-95.
- Edwards, P. 2006. The tryanny of proximity: power and mobility in colonial Cambodia, 1863-1954. *Journal of Southeast Asian Studies* 37, 421-43.
- Errington, S. 1989. *Meaning and Power in a Southeast Asian Realm.* Princeton (NJ): Princeton University Press.
- Estève, J. & D. Soutif. 2010-11. Les Yasodharāsrama, marqueurs d'empire et bornes sacrées. Conformité et spécificité des stèles digraphiques khmères de la région de Vat Phu. *Bulletin de l'École Française d'Extrême Orient* 97-98, 331-55.
- Evans, D. 2016. Airborne laser scanning as a method for exploring long-term socio-ecological dynamics in Cambodia. *Journal of Archaeological Science* 74, 164-75.
- Evans, D., C. Pottier, R. Fletcher, S. Hensley, I. Tapley, A. Milne, & M. Barbetti. 2007. A comprehensive archaeological map of the world's largest preindustrial settlement complex at Angkor, Cambodia. *Proceedings* of the National Academy of Sciences 104, 14277-82.
- Fletcher, R. & D. Evans. 2012. The dynamics of Angkor and its landscape. Issues of scale, non-correspondence and

outcome. In Old Myths and New Approaches: Interpreting Ancient Religious Sites in Southeast Asia, ed. A. Haendel. Melbourne (AU): Monash University Publishing, 49-62.

- Fletcher, R., D. Evans, C. Potter, & R. Chhay. 2015. Angkor Wat: an introduction. *Antiquity* 89, 1388-1401.
- Fletcher, R., D. Penny, D. Evans, C. Pottier, M. Barbetti, M. Kummu, T. Lustig & Authority for the Protection & Management of Angkor & the Region of Siem Reap (APSARA) Department of Monuments & Archaeology Team. 2008. The water management network of Angkor, Cambodia. *Antiquity* 82/317, pp. 658–70.
- Geertz, C. 1980. *Negara: The Theatre State in Nineteenth-Century Bali.* Princeton (NJ): Princeton University Press.
- Grave, P., M. T. Stark, D. Ea, L. Kealhofer, B. S. Tan & T. Tin. 2015. Differentiating Khmer stoneware production: an NAA pilot study from Siem Reap Province, Cambodia. *Archaeometry* https://doi.org/10.1111/arcm.12220
- Green, G. 2007. Angkor vogue: sculpted evidence of imported luxury textiles in the courts of king and temples. *Journal of the Economic and Social History of the Orient* 50, 424-51.
- Groslier, B.-P. 1958. Angkor et le Cambodge au XVIe siècle d'aprés les sources portugaises et espagnoles. Presses Universitaires de France, Paris, 1958.
- Groslier, B.-P. 1973. Pour une Géographie historique du Cambodge. *Les Cahiers d'Outre-Mer* 104/26, 337-79.
- Groslier, B.-P. 1979. La cité hydraulique Angkorienne: exploitation ou surexploitation du sol? *Bulletin de I'* École Française d'Extrême-Orient 66/1, 161–202.
- Hall, T. 2018. A broader view of collapse: Using palaeo-ecological techniques to reconstruct occupation dynamics across a networked society undergoing transformation. Unpublished Ph.D. thesis, School of Geosciences, Faculty of Science, University of Sydney.
- Hall, T., D. Penny, M. Hendrickson, C. Cooke & H. Quan. 2016. Iron and fire: geoarchaeological history of a Khmer peripheral centre during the decline of the Angkorian Empire, Cambodia. *Journal of Archaeological Science: Reports* 6, 53-64.
- Hanks, L. M. 1962. Merit and power in the Thai social order. *American Anthropologist* 64, 1247-61.
- Heine-Geldern, R. 1942. Conceptions of state and kingship in Southeast Asia. *The Far Eastern Quarterly* 2, 15-30.
- Hendrickson, M. 2010. Historic routes to Angkor: development of the Khmer road system (ninth to thirteenth centuries AD) in mainland Southeast Asia. *Antiquity* 84, 480–96.
- Hendrickson, M. 2011. A transport geographic perspective on travel and communication in Angkorian Southeast Asia (ninth to fifteenth centuries AD). *World Archaeology*, 43, 444–57.
- Hendrickson, M. 2012. Connecting the dots: Investigating transportation between the temple complexes of the medieval Khmer (9th–14th centuries cE). In *Old Myths and New Approaches: Interpreting Ancient Religious Sites in Southeast Asia*, ed. A. Haendel. Melbourne: Monash University Publishing, 70-88.
- Hendrickson, M., S. Leroy, H. Quan, K. Phon, and V. Voeun. 2017. Smelting in the shadow of the Iron Mountain: preliminary field investigation of the industrial

landscape around Phnom Dek, Cambodia (ninth to twentieth centuries AD). Asian Perspectives 56, 55-91.

- Inomata, T. 2016. Theories of power and legitimacy in archaeological contexts: the emergent regime of power at the Formative Maya community of Ceibal, Guatemala. In *Political Strategies in Pre-Columbian Mesoamerica*, eds. S. Kurnick & J. Baron. Boulder (CO): University Press of Colorado, 37-60.
- Inomata, T. & L. S. Coben. (eds), 2006. Archaeology of Performance: Theaters of Power, Community, and Politics. Lanham (MD): AltaMira Press.
- Jacob, J. J. 1993. Ecology of Angkor: evidence from the Khmer inscriptions. In *Nature and Man in South East Asia*, ed. P. A. Stott. London: School of Oriental and African Studies, University of London, 109-127.
- Jacobsen, T. 2008. Lost Goddesses: The Denial of Female Power in Cambodian History. Copenhagen (DK): NIAS Press.
- Jacobsen, T. & M. Stuart-Fox. 2014. *Power and Political Culture in Cambodia*. Working Paper Series No. 200. Singapore: Asia Research Institute, National University of Singapore.
- Leach, E. 1964. Political Systems of Highland Burma: A Study of Kachin Social Structure. London: The Athlone Press.
- Ledgerwood, J. & J. Vijghen. 2002. Decision-making in rural Khmer villages. In *Cambodia Emerges from the Past: Eight Essays*, ed. Judy Ledgerwood. DeKalb (IL): Center for Southeast Asian Studies, Northern Illinois University, 109–150.
- Lewitz, S. 1967. La toponymie khmère. *Bulletin de l'Ecole française d'Extrême Orient* 53, 375-451.
- Lewitz, S. & P. Jenner. 1978. Les cpâp' ou «Codes de conduite» khmers. IV. Cpâp Rajaneti ou Cpàp' Brah Râjasambhâr. Bulletin de l'Ecole française d'Extrême-Orient 65, 361-402.
- Lowman, I. 2016. The land of the Kambu: political space and myth in Angkorian Cambodia, *in Le passé des Khmers: langues, textes, rites,* eds. N. Abdoul-Carime, G. Mikaelian, & J. Thach. Bern, Gerlin, Bruxelles, Franfork, New York, Oxford & Wien: Peter Lang, 95-114.
- Lucero, L. J., R. Fletcher & R. Coningham. 2015. From 'collapse' to urban diaspora: the transformation fo low-density, dispersed agrarian urbanism. *Antiquity* 89, 1139-1154.
- Lustig, E. 2009. Power and pragmatism in the political economy of Angkor. PhD thesis, University of Sydney.
- Lustig, E. 2009. Money doesn't make the world go round: Angkor's non-monetisation. In *Economic Development*, *Integration and Morality in Asia and the Americas*, ed. D. C. Wood. Research in Economic Anthropology Volume 29. Bingley, West Yorkshire (UK): JAI Emerald Publishing, 165-199.
- Lustig, E. 2011. Using inscription data to investigate power in Angkor's empire. *Aséanie* 27, 35-66.
- Lustig, E., D. Evans & N. Richards. 2007. Words across space and time: An analysis of lexical items in Khmer inscriptions, sixth–fourteenth centuries ce. *Journal of Southeast Asian Studies* 38, 1-26.
- Lustig, E. & T. Lustig. 2013. New insights into "les interminables listes Nominatives d'Esclaves" from numerical analyses of the personnel in Angkorian inscriptions. *Aséanie* 31, 55-83.

- Mabbett, I. W. 1969. Devarāja. Journal of Southeast Asian History 10, 202-23.
- Mabbett, I. W. 1978. Kingship in Angkor. *Journal of the Siam Society* 66, 1-58.
- Mabbett, I. W. 1983. Some remarks on the present state of knowledge about slavery in Angkor. In *Slavery, Bondage and Dependency in Southeast Asia*, ed. A. Reid. New York (NY): St. Martin's Press, 44-63.
- Mackil, E. 2017. Property claims and state formation in the Archaic Greek world. In *Ancient States and Infrastructural Power: Europe, Asia, and America,* eds. C. Ando & S. Richardson. Philadelphia (PA): University of Pennsylvania Press, 63-90.
- Mann, M. 1984. The autonomous power of the state: its origins, mechanisms and results. *European Journal of Sociology* 25, 185-213.
- Marchal, H. 1918. Monuments secondaires et terrasses bouddhiques d'Ańkor Thom. *Bulletin de l'Ecole française d'Extrême-Orient* 18, 1-40.
- Maxwell, T. S. 2007. The short inscriptions of the Bayon and contemporary temples. In *Bayon: New Perspectives*, ed. J. Clark. Bangkok (TH): River Books, 122-35.
- McAnany, P. A. & N. Yoffee. 2010. *Questioning Collapse: Human Resilience, Ecological Vulnerability, and the Aftermath of Empire*. Cambridge (UK): Cambridge University Press.
- Middleton, G. D. 2017. The show must go on: collapse, resilience, and transformation in 21st century archaeology. *Reviews in Anthropology* 46, 78-105.
- Multzer-O'Naghten, H. 2014. The organisation of space in pre-modern Thailand under
- Jayavarman VII. In *Before Siam: Essays in Art and Archaeology*, eds. N. Revire & S. Murphy. Bangkok (TH): River Books, 397-419.
- Mus, P. 1937. Angkor in the Time of Jayavarman VII. *Indian* Art and Letters XI, 65–75.
- O'Connor, R. A. 1996. Rice, rule, and the Tai state. In *State Power and Culture in Thailand*, ed. E. P. Durrenberger. Monograph 44. New Haven (CT): Yale Southeast Asia Studies, 68-99.
- O'Connor, R. 1997. Review of *Siam Mapped: A History of the Geo-Body of a Nation,* by Thongchai Winichakul. *Journal of Asian Studies* 56, 279-81.
- Parmentier, H. 1916. Cartes de l'Empire Khmèr: d'après la situation des inscriptions datées. *Bulletin de l'École française d'Extrême-Orient* 16, 69-73.
- Payne, R. 2017. Territorializing Iran in late antiquity: autocracy, aristocracy, and the infrastructure of empire. In *Ancient States and Infrastructural Power: Europe, Asia, and America,* eds. C. Ando & S. Richardson. Philadelphia (PA): University of Pennsylvania Press, 179-217.
- Penny, D., J.-B. Chevance, D. Tang, & S. De Greef. 2014. The environmental impact of Cambodia's ancient city of *Mahendraparvata* (Phnom Kulen). *PLOS ONE* 9, e84252.
- Penny, D., T. Hall, D. Evans & M. Polkinghorne. 2019. Geoarchaeological evidence from Angkor, Cambodia, reveals a gradual decline rather than a catastrophic 15th-century collapse. *Proceedings of the National Academy of Sciences* 116, 4871-6.
- Penny, D., Q. Hua, C. Pottier, R. Fletcher, & M. Barbetti. 2007. The use of AMS 14C dating to explore issues of

occupation and demise at the medieval city of Angkor, Cambodia. *Nuclear Instruments and Methods in Physics Research* B 259, 388-94.

- Polkinghorne, M. In press. Seventeenth and eighteenth century images of the Buddha from Ayutthaya and Lan Xang at Angkor Wat. In *The Emergence of Theravāda Buddhism in Cambodia: Southeast Asian Perspectives*, eds. A. Thompson & H. W. Woodward. Singapore: National University of Singapore Press.
- Polkinghorne, M., C. Pottier & C. Fischer. 2013. One Buddha can hide another. *Journal Asiatique* 301, 575-624.
- Pou, S. 1974. The word AC in Khmer: a semantic overview. In South-East Asian Linguistic Studies, ed. D. L. Nguyen. Canberra, Australia: Linguistic Circle of Canberra, 175-91.
- Pou, S. 1979. Subhāsit and Cpāp' in Khmer literature. In Ludwick Sternbach Felicitation Volume, Part One, ed. J. P. Sinha. Lucknow, India: Akhila Bharatiya Sanskrit Parishad, 331-348.
- Pou, S. 1998. Dieux et rois dans la pensée Khmère ancienne. Journal Asiatique 286, 653-69.
- Pou-Lewitz, S. & P. N. Jenner. 1978. VIII. Les cpâp' ou «Codes de conduite» khmers. IV. Cpâp Rajaneti ou Cpàp' Brah Râjasambhâr. Bulletin de l'Ecole française d'Extrême-Orient 65, 361-402.
- Pryce, T. O., M. Hendrickson, P. Kaseka, S. Chan, M. F. Charlton, S. Leroy, P. Dillmann & Q. Hua. 2014. The Iron Kuay of Cambodia: tracing the role of peripheral populations in Angkorian to colonial Cambodia via a 1200-year old industrial landscape. *Journal of Archaeological Science* 47, 142-63.
- Reid, A. Southeast Asia in the Age of Commerce, 1450-1680, Volume One: The Lands below the Winds, 1988. New Haven (CT) & London: Yale University Press.
- Reynolds, C. 1995. A new look at Old Southeast Asia. *Journal* of Asian Studies 54, 419-46.
- Richardson, S. 2012. Early Mesopotamia: the presumptive state. *Past & Present* 215, 3-49.
- Richardson, S. 2017. Before things worked: a 'low-power' model of early Mesopotamia. In Ancient States and Infrastructural Power: Europe, Asia, and America, eds. C. Ando & S. Richardson. Philadelphia (PA): University of Pennsylvania Press, 17-52.
- Ricklefs, M. C. 1967. Land and the law in the epigraphy of tenth-century Cambodia. *The Journal of Asian Studies* 26, 411-20.
- Ristvet, L. 2015. *Ritual, Performance and Politics in the Ancient Near East*. Cambridge (UK): Cambridge University Press.
- Routledge, B. 2014. Archaeology and State Theory: Subjects and Objects of Power. New York, London, New Delhi & Sydney (AU): Bloomsbury.
- Sahai, S. 1977a. Fiscal administration in ancient Cambodia. The South East Asian Review I, 123-38.
- Sahai, S. 1977b. Territorial administration in ancient Cambodia. *The South East Asian Review* II, 35-50.
- Sahai, S. 1978. Central administration in ancient Cambodia. The South East Asian Review III, 17-40.
- Sahai, S. The Hindu Temples in South East Asia: Their Role in Social Economic and Political Formations. New Delhi: Aryan Books.

- Schwartz, G. M. 2006. From collapse to regeneration. In After Collapse: The Regeneration of Complex Societies, eds. G. Schwartz & J. Nichols. Tucson (AZ): University of Arizona Press, 3-17.
- Scott, J. C. 1972. Patron-client politics and political change in Southeast Asia. *The American Political Science Review* 66, 91-113.
- Scott, J. C. Against the Grain: A Deep History of the Earliest States. New Haven (CT) & London, Yale University Press, 2017.
- Sedov, L. 1978. Angkor: society and state. In *The Early State*, eds. Henri J. M. Claessen & Peter Skalnik. The Hague: Mouton Publishers, 111-30.
- Smith, A. T. 2003. The Political Landscape: Constellations of Authority in Early Complex Polities. Berkeley (CA): University of California Press, 2003.
- Smith, A. T. 2011. Archaeologies of sovereignty. *Annual Reviews in Anthropology* 40, 415-32.
- Smith, A. T. 2015. The Political Machine: Assembling Sovereignty in the Bronze Age Caucasus. Princeton (NJ): Princeton University Press.
- Stanish, C. 2013. The ritualized economy and cooperative labor in intermediate societies. in *Cooperation and Collective Action: Archaeological Perspectives*, ed. David M. Carballo. Boulder (CO): University Press of Colorado, 83–92.
- Stark, M. T. 2006a. Early mainland Southeast Asian landscapes in the first millennium AD. Annual Review of Anthropology 35, 407–32.
- Stark, M. T. 2006b. From Funan to Angkor: collapse and regeneration in ancient Cambodia. In *After Collapse: The Regeneration of Complex Societies*, eds. Glenn Schwartz & John Nichols. Tucson (AZ): University of Arizona Press, 144-67.
- Stark, M. T. 2015. Southeast Asian urbanism: from early city to classical state. In *Early Cities in Comparative Perspective*, 4000 BCE–1200 CE. The Cambridge World History, Volume III, ed. Norman Yoffee. Cambridge (UK): Cambridge University Press,74-93.
- Stein, B. 1960. The economic function of a medieval South Indian temple. *The Journal of Asian Studies* 19, 163-76.
- Stern, P. 1951. Diversité et rythme des fondations royales khmères. Bulletin de L'Ecole française d'Éxtreme Orient (XLIV), 649-55.
- Talbot, C. 1991. Temples, donors, and gifts: patterns of patronage in thirteenth-century South India. *The Journal of Asian Studies* 50. 308-40.
- Tambiah, S. 1976. World Conqueror and World Renouncer: A Study of Buddhism and Polity in Thailand against a Historical Background. Cambridge (UK): Cambridge University Press.
- Tambiah, S. 1985. The galactic polity in Southeast Asia. In *Culture, Thought, and Social Action: An Anthropological Perspective.* Cambridge (MA): Harvard University Press, 252-286.
- Vickery, M. 1985. The reign of Sūryavarman I and royal factionalism at Angkor. *Journal of Southeast Asian Studies* 16, 226-44.
- Vitou, P. 2012. The Study of Archaeological Sites South of Angkor: Observation on Archaeological Features and

Surface Artifacts. BA Thesis. Faculty of Archeology, Royal University of Fine Arts: Phnom Penh.

- von Falkenhausen, L. 1993. On the historiographical orientation of Chinese archaeology. *Antiquity* 67, 839-49.
- Wolters, O. W. 1999. *History, Culture and Region in Southeast Asian Perspectives*. Southeast Asia Program Publications. Ithaca (NY): Cornell University Press, 1999.
- Woodward, H. H. & J. G. Douglas. 1994/1995. The *Jayabuddhamahānātha* images of Cambodia. *The Journal* of the Walters Art Gallery, 52/53, 105-11.
- Wyatt, D. K. 2001. Relics, oaths and politics in thirteenthcentury Siam. *Journal of Southeast Asian Studies* 32, 3-66.
- Yoffee, N. *Myths of the Archaic State*. Cambridge (UK): Cambridge University Press, 2005.
- Yoffee, N. 2016. The power of infrastructures: a counternarrative and a speculation. *Journal of Archaeological Method and Theory* 23, 1053-65.
- Yoffee, N. & G. L. Cowgill. Eds. 1991. *The Collapse of Ancient States and Civilizations*. Tucson (AZ): University of Arizona Press.
- Zhou, D. 2007. *A Record of Cambodia: The land and its people,* Translated by P. Harris. Chiang Mai (TH): Silkworm Books.

#### Notes

1 Interestingly, it is the 'post-Angkorian' inscriptions that best inform on the structure of Cambodian bureaucracy. King Javajetthadhiraj, who returned to Angkor Wat in 1579 (then called Bisnulok) to restore the temple's roof and its enclosure walls, and to consecrate relics (Pou 1970, 106), left an inscription that listed his immediate entourage which included: his women ('harem'), his rajaguru or teacher, Brahmin advisors ministers of his council of 4 ministers, functionaries, poets and sages and the royal court (Pou 1970, 117-18). Whether Cambodia's embrace of Theravada Buddhism as a state religion altered its fundamental political organization remains unclear, but the Khmer portion of an early fourteenth-century inscription suggests continuity (see also Polkinghorne 2018; Pou 1979).